



VNIVERSITAT D VALÈNCIA

**Evaluation of metacognitive
regulation skills in writing tasks
in L1 and EFL in pre-service
teachers**

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"I've seen this happen in other people's lives, now it's happening in mine"

This Joke Isn't Funny Any More, The Smiths

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Summary of dissertation in CATALAN AND SPANISH

RESUM EN CATALÀ

Aquesta tesi doctoral s'inscriu dins del programa de Doctorat en Didàctiques Específiques de la Facultat de Magisteri de la Universitat de València i, en concret, en el Departament de Didàctica de la Llengua i la Literatura.

L'objectiu principal de la present investigació és dur a terme un diagnòstic del control metacognitiu en l'escriptura de l'alumnat de Magisteri. En aquest cas, la recerca se centra en la revisió diferida de dues tasques de redacció de textos amb diferent càrrega cognitiva (dir el coneixement i transformar el coneixement) en dues llengües*. D'aquesta manera, amb els resultats obtinguts s'han formulat diverses recomanacions didàctiques per a millorar o perfeccionar aquells aspectes que s'identifiquen a partir dels estudis que s'han realitzat per a tindre en compte en la formació dels futurs i les futures mestres.

Els objectius específics fixats han sigut:

OB1. Estudiar i analitzar la literatura internacional dedicada a la recerca en habilitats d'escriptura i metacognició, incloent-hi llengües primeres (L1) i llengües estrangeres (LE), per a explicar la fonamentació teòrica d'aquesta investigació mitjançant l'ús de models validats.

OB2. Definir i validar descriptors relacionats amb el control metacognitiu en textos escrits en anglés com a llengua estrangera, així com dissenyar les tasques adequades a partir dels esmentats descriptors que avaluen aquestes habilitats.

OB3. Avaluar el control metacognitiu dels futurs i les futures mestres en les tasques de revisió diferida en la seua llengua materna i en anglés, tot i fent servir tasques amb diferents exigències cognitives (tasques de "dir el coneixement" i "transformar el coneixement").

* Les persones participantss han escrit els sus textos en la llengua que han considerat primera (L1), bé català bé espanyol. Els textos en llengua estrangera (LE) s'han redactat en anglés.

OB4. Analitzar la influència del nivell de domini de l'anglès en el control metacognitiu i la qualitat dels textos en el procés de revisió diferida.

OB5. Comparar l'ús que fan els escriptors i les escriptores experts/es i els futurs i les futures mestres de primària de les estratègies de regulació metacognitiva en el procés de revisió diferida en L1 i LE.

OB6. Proposar recomanacions didàctiques per a incloure la regulació metacognitiva en l'ensenyament i aprenentatge de l'escriptura d'acord amb els resultats d'aquesta investigació.

A partir dels objectius plantejats, s'han formulat les següents preguntes d'investigació:

PR1. Com es pot avaluar la regulació metacognitiva dels futurs i les futures mestres en la revisió diferida de les tasques d'escriptura en la seua L1 i LE? Quin tipus d'estratègies de regulació metacognitiva fan servir els futurs i les futures mestres en revisar els seus textos? Quin és l'efecte de la tasca d'escriptura (assaig o resum) sobre l'ús de les accions reguladores i la qualitat dels textos?

PR2. Quin és l'efecte de la competència en llengua estrangera? Hi ha una transferència de regulació metacognitiva de la L1 a la LE?

PR3. Quines són les diferències entre els textos produïts en L1 i LE? Com es poden explicar aquestes diferències?

PR4. Quins contrastos s'aprecien entre experts/es i futurs/es mestres en l'ús d'estratègies metacognitives en la revisió diferida? Com és aquesta regulació en relació a les propietats textuais?

Per tal d'aconseguir el nostre propòsit s'han dissenyat dos estudis exploratoris que ens han aportat diferents visions de l'esmentat procés de revisió diferida. El primer estudi, de tall quantitatiu, analitzarà les accions de regulació metacognitiva dels subjectes durant una tasca de revisió de l'escriptura i l'impacte en la qualitat dels textos produïts en L1 i en anglès com a llengua estrangera (LE). El segon estudi, de caire qualitatiu, aprofundirà sobre els comportaments i patrons seguits pels subjectes en el procés de revisió diferida en totes dues llengües.

2. MARC TEÒRIC

Els models cognitius d'escriptura més citats (Berninger i Swanson, 1984; Flower i Hayes, 1981; Kellogg, 1996; Scardamalia i Bereiter, 1987) en els últims quaranta anys d'investigació distingeixen diverses fases en el procés d'escriptura. D'una banda, la planificació, d'altra la textualització i, finalment, la revisió. Els models han patit modificacions posteriors i diversos aspectes han sigut emfasitzats en cadascuna de les fases i les seues implicacions en l'eficàcia del procés d'escriptura i la qualitat dels textos.

Quant al procés de revisió dels textos, Hayes et al. (1987) van identificar les accions que els escriptors i les escriptores duïen a terme en realitzar la revisió. Scardamalia i Bereiter (1987), en una línia semblant a l'assenyalada pels autors i les autores anteriors, van proposar el procediment CDO: comparar, diagnosticar i operar. En aquests models els escriptors i les escriptores contrastaven la representació mental del text que havien escrit fins al moment amb la del text que volien escriure i trobaven els aspectes que no convergien. A partir d'ací introduïen els canvis que consideraven oportuns per a reduir la distància entre els dos textos: l'escrit fins al moment i el que es pretén escriure.

Les revisions del text poden tindre lloc en diversos moments del procés (Chanquoy, 2001): durant el procés de redacció (online), en completar la tasca (immediates) o temps després d'acabar la tasca (diferides). Alamargot i Chanquoy (2001) fan la distinció entre els tipus de revisions en funció de la visibilitat i l'impacte en el text. Així doncs, distingeixen entre revisió interna, aquella que comporta un examen mitjançant un diàleg intern de la persona que redacta, i externa, quan s'inclou l'edició del text; així com la revisió autònoma, que es realitza sense cap ajuda o referència externa; i la revisió recursiva aquella que avalua el text dins de les altres fases del procés d'escriptura.

Respecte a la metacognició en l'escriptura, el procés de redacció ha sigut definit com a metacognició aplicada, de manera que escriure suposa l'explicitació del pensament a través d'uns símbols externs: les grafies (Hacker et al., 2009). El coneixement metacognitiu abasta el que l'autor/a sap de si mateix/a com a escriptor/a,

sobre les característiques de la tasca a escometre i les particularitats de les estratègies a utilitzar durant el procés de redacció (Karlen, 2017). El control metacognitiu està relacionat amb els aspectes procedimentals de la metacognició. Es refereix a la regulació de les activitats cognitives, metacognitives i conductuals. El control metacognitiu fa referència a aspectes metacognitius del procés d'escriptura com la planificació, les estratègies, la supervisió (monitoring) i la revisió (Knospe, 2017).

El control metacognitiu és l'objecte d'estudi de la present tesi doctoral, és a dir, aquelles estratègies que s'utilitzen per a construir, memoritzar, recordar i controlar el coneixement d'acord amb Tönshoff (2003) citat en Knospe (2017) durant el procés de revisió diferida en l'escriptura.

La recerca suggereix que un alt grau de competència en el control metacognitiu es relaciona amb una major qualitat textual i eficiència en l'escriptura en diverses etapes del sistema educatiu tant en L1 (Harris et al., 2010; López et al., 2018) com en L2/LE, generalment anglés, en diversos contextos (Bui i Kong, 2019; Dülger, 2011; Kodituwakku, 2008; Ruan, 2005, 2014; Silva, 1993; Xiao, 2007). En aquests estudis, en línies generals, els resultats indiquen que els escriptors i les escriptores amb major coneixement metacognitiu duen a terme una major planificació; revisen de manera més eficient els textos que escriuen; se centren en aspectes més globals del text; i s'allunyen de les correccions d'aspectes superficials, com l'ortografia, o formals, com els errors gramaticals.

En relació a la revisió, Allal (2000) va establir que les modificacions que els escriptors i les escriptores introdueixen en els seus textos suposen el vessant visible del procés que guia l'evolució de la representació mental del text i la seua redacció real. D'aquesta manera, les modificacions introduïdes pels escriptors i les escriptores suposen "transformacions" dels textos i la regulació metacognitiva d'aquests. Allal i Chanquoy (2004), en el seu manual sobre la revisió, encunyen aquest terme que altres estudis anteriors havien qualificat com a "canvis" (Sommers, 1980), o "modificacions" (Chanquoy, 2001) i uns altres posteriors denominaran "revisions" (Stevenson et al., 2006). Aquest últim estudi inclou la comparació entre L1 i anglés com a LE mentre que la resta només se centren en l'anglès com a L1 (Faigley i Witte, 1981; Monahan, 1984; Sommers, 1980) i francès com a L1 (Allal, 2000; Chanquoy, 2001).

Les dimensions en què Allal (2000) classifica l'impacte de les "transformacions" estan en la línia de models anteriors (Faigley i Witte, 1981; Monahan, 1984; Sommers, 1980). No obstant això, la seua taxonomia cobreix la relació de les revisions textuais amb les convencions lingüístiques. A més, divideix les seues transformacions de regulació metacognitiva en l'anticipació, el control i l'ajustament.

L'anticipació té a veure amb la concepció de la transformació com a canvi relacionat amb les normes lingüístiques o el contingut del text. Aquelles que tenen relació amb el contingut del text i suposen una representació més dinàmica del mateix que pot indicar un canvi en la concepció de la tasca. El control suposa l'extensió de la transformació en la llengua, des de la paraula al paràgraf o text. També, el nivell d'afectació, des dels aspectes formals al significat global del text. Finalment, l'ajustament correspon als tipus d'accions dutes a terme per a reduir la distància entre el text escrit i el text que es vol escriure, i es divideix en addició, supressió, substitució i reubicació.

Amb anterioritat, Sommers (1980) va observar que hi havia diferències entre les revisions realitzades per persones expertes i per l'alumnat universitari en la redacció d'assajos en l'anglès com a L1. Les persones expertes es van centrar en aspectes que afectaven el significat global del text, i afegien o suprimien més informació que l'alumnat universitari. Per contra, l'alumnat es va concentrar en aspectes formals com ara la gramàtica o el vocabulari, de nivell més superficial.

En una línia semblant, Faigley i Witte (1981) van comparar la revisió de textos descriptius i assajos d'alumnat universitari, amb diferents nivells de competència en escriptura, i persones expertes. Les persones menys experimentades en escriptura que hi participaren revisaven els aspectes més superficials dels textos (paraules a nivell gramatical o ortogràfic) i deixaven de costat el significat global del text. No obstant això, en tots dos casos les substitucions, bé de paraules, bé de grups de paraules o oracions eren predominants. Monahan (1984) també va observar l'absència de revisions de nivell més profund, és a dir, de contingut i organització, en els textos de l'alumnat de secundària.

Per la seua part, Allal (2000) va trobar que l'alumnat amb major rendiment acadèmic feia revisions més profundes, tenia representacions mentals més dinàmiques i usava canvis, "ajustos", més complexos (substitucions i reubicacions).

Chanquoy (2001) va investigar la millora de la qualitat dels textos que l'alumnat de tres cursos de primària va dur a terme després de revisar-los en diferents moments del procés d'escriptura. Els seus resultats indicaven que la revisió en acabar de fer la tasca (revisió immediata) incrementava més la qualitat dels textos que les revisions online i diferides. Així mateix, va trobar que l'alumnat del curs més baix també duia a terme una quantitat significativa d'accions de regulació metacognitiva en els textos. Stevenson et al. (2006) van comparar les revisions online d'assajos en neerlandés i anglés com a LE d'alumnat de secundària amb diversos nivells de competència en escriptura. Les revisions en anglés eren més freqüents que en L1 i l'alumnat amb menor competència escrita realitzava major nombre de revisions. No obstant això, aquestes estaven centrades en paraules, amb un impacte en els aspectes formals dels textos, especialment en anglés. En totes dues llengües predominaven les substitucions.

D'altra banda, un altre grup d'estudis s'han dedicat a analitzar l'ús autopercebut dels subjectes pel que fa a les estratègies metacognitives en tasques d'escriptura en L1 o L2/LE. Generalment, aquestes investigacions utilitzen qüestionaris (Dülger, 2011; Farahian, 2015; Sasaki i Hirose, 1996; Karlen, 2017; Qin i Zhang, 2019; Ruan, 2014), tècniques de pensament en veu alta i entrevistes immediates (Bui i Kong, 2019; Knospe, 2017; Chanquoy, 2001; Tiryakoglu et al., 2019) (hi havia un signe gràfic) o l'anàlisi de les converses dels i les participants (Van Steendam et al., 2010; Bui i Kong, 2019).

L'ocupació i la descripció de les estratègies metacognitives que els escriptors i les escriptores empren en el seu procés de redacció s'han investigat des de diferents perspectives en la didàctica de les llengües estrangeres, especialment en l'anglés com a LE.

A Sri Lanka, Kodituwakku (2008) va avaluar el coneixement metacognitiu de 725 alumnes de secundària de contextos rurals i urbans després de diverses intervencions didàctiques en la seua L1. Cal destacar que durant la revisió els canvis

predominants introduïts pels i les participants van ser de nivell superficial, basant-se en l'estratègia de comprovar el resultat final. Van escassejar els exemples en els quals els escriptors i les escriptores adoptaren el rol de lectors/es o se centraren a afegir informació que consideraren necessària, mostrant així una representació mental estàtica del text.

La investigació de Karlen (2017) es va centrar en l'alumnat universitari a Suïssa en la seua L1 (alemany) i va esbrinar, a través de qüestionaris validats que, com major era el coneixement metacognitiu (fins i tot autopercebut) sobre la planificació, el control i, sobretot, l'avaluació, la qualitat dels textos acadèmics era major. A més a més, aquells/es participants que van demostrar un major coneixement metacognitiu, van fer ús més freqüent d'estratègies metacognitives per exemple la lectura del text per part d'altres lectors/es, la revisió de parts dels seus textos que no els van resultar satisfactòries i la comprovació que l'argumentació s'ajustava a la tasca, entre d'altres.

En anglés com a LE, Sasaki i Hirose (1996) van investigar el procés d'escriptura de textos expositius de 70 alumnes universitaris/es amb nivells d'anglés de baix a mitjà- alt. Els resultats obtinguts a través de l'ús de qüestionaris i del protocol de pensament en veu alta en correlació amb la qualitat dels textos suggerien que el nivell d'anglés, la destresa en escriptura en L1 i el coneixement metacognitiu eren essencials per a identificar a els bons escriptors i les bones escriptores. Així doncs, aquests/es es fixaven en l'organització dels textos en L1 i L2, escrivien amb major fluïdesa en les dues llengües, tenien major confiança a l'hora d'escriure textos acadèmics en anglés i havien escrit més d'un paràgraf de manera regular en les seues classes d'anglés en l'educació secundària.

Ruan (2014) va proposar un model que explicava la consciència metacognitiva en l'escriptura en anglés arran d'entrevistar diversos grups d'alumnat universitari especialitzats en anglés que participaren en un curs sobre escriptura. Es va centrar en les variables que afectaven el coneixement metacognitiu. La relació entre aspectes com les percepcions sobre ells/es mateixos/es com a escriptors/es, la representació dels objectius de la tasca, les seues restriccions i la interferències entre llengües. Les persones participants admetien escriure allò en què estaven pensant en aqueix moment sense tot just planificar la redacció del text globalment. A més, van puntualitzar que

van centrar la seua revisió en redactar oracions simples i comprensibles com els havien ensenyat en etapes educatives anteriors.

Qin i Zhang (2019) van investigar el coneixement metacognitiu en l'escriptura en anglés com a LE de 400 estudiants universitaris a la Xina. En el seu estudi van concloure que els escriptors i les escriptores amb èxit planificaven tot el text abans d'escriure, se centraven en la regulació de l'escriptura i avaluaven si el resultat del text quan acabaven d'escriure es corresponia amb la representació mental que tenien d'aquest. Els seus resultats contrasten amb els de Yanyan (2010), també a la Xina, i en un estudi similar sobre l'anglés com a LE en el qual va demostrar que el coneixement metacognitiu dels i les participants era baix, especialment el de les estratègies. Les persones que hi participaren quasi mai exercien el rol de lector/a del text, se n'ocupaven molt poc de l'organització i el contingut d'aquest i, a més, admetien revisar amb poca freqüència les seues produccions quan les havien finalitzades. Les dues propostes pedagògiques en ambdós casos són similars i impliquen elevar l'atenció en la planificació, la regulació i l'avaluació del text.

Dülger (2011), en relació a la instrucció d'estratègies metacognitives i la qualitat dels textos, va analitzar assajos en anglés com a LE de dos grups d'alumnat universitari turc de primer curs. El primer grup (experimental) va participar en una intervenció didàctica centrada en el desenvolupament explícit d'estratègies metacognitives. El segon grup (control) va seguir la instrucció ordinària. Les persones participants en el grup experimental van presentar millores significatives en l'organització del text, el seu contingut i el vocabulari emprat. Aquestes millores van persistir en el test de retenció efectuat quatre mesos després.

Knospe (2018) va entrevistar una sisena d'alumnes de secundària quan van escriure assajos en alemany com a segona LE. Els resultats de les seues entrevistes van indicar que factors afectius, com ara la inseguretat o la manca de confiança en ells/es, influïen en l'escriptura així com en l'avantatge de reflexionar sobre aspectes estratègics, com ara la traducció literal quan escrivien en anglés com a primera LE o alemany com a segona LE. Finalment, l'alumnat participant també va mostrar ser conscient de les necessitats de l'estructura i el vocabulari adient per a escriure un text argumentatiu en la seua L3 o segona LE (alemany).

SECCIÓ 1

3.1. ESTUDI 1

3.1.1 MARC METODOLÒGIC

Participants

En el primer estudi van participar 98 estudiants de grau, d'entre 18 i 45 anys, pertanyents a dos grups intactes dels graus universitaris de Mestre/a d'Educació Primària i Infantil. El nivell d'anglès com a LE dels participants oscil·lava des del més bàsic (A1) fins a nivells avançats (C1).

Disseny i variables

Per a calcular les correlacions i els efectes sobre la variable dependent (transformacions textuais) es va realitzar una ANOVA mixt 2 (tasques: assaig i resum) X 2 (llengües: L1 i anglès com a LE) X 2 (nivell d'anglès: alt - B2 i C1 - i baix - A1, A2 i B1-).

D'altra banda, per a calcular els efectes en la qualitat dels textos abans i després del procés de revisió es va dur a terme una ANOVA 2 (tasques: assaig i resum) X 2 (llengües: L1 i anglès com a LE) X 2 (nivell d'anglès: alt - B2 i C1 - i baix - A1, A2 i B1-) X 2 (fases: versió 1 i revisió). En la part concernent a l'escala analítica d'errors, es va dur a terme una ANCOVA, a les variables anteriorment consignades, se li va afegir les covariables relatives a la longitud dels textos en L1 i anglès com a LE.

Materials i mesures

Cada grup de participants va escriure un tipus de text en totes dues llengües. El primer grup va escriure un assaig i el segon un resum. Aquestes tasques comporten una càrrega cognitiva diferent, l'assaig comporta "transformar el coneixement" mentre que el resum implica "dir el coneixement" (Scardamalia i Bereiter, 1987).

En primer lloc, es van classificar les accions de regulació metacognitiva, és a dir, els canvis que cada participant va realitzar en fer la revisió per a ajustar la seua

representació mental del text al qual pretenia escriure. Aquests canvis, o "transformacions", es basen en la taxonomia de Allal (2000), complementada amb la de Chanquoy (2001). Aquestes dimensions tenen en compte el nivell de llengua modificat (paraula, grup, oració o text), el tipus de transformació (addició, sostracció, substitució o reubicació), la relació amb les normes de la llengua (canvis opcionals o convencionals) i el nivell textual afectat (des d'aspectes ortogràfics a canvis en el significat global del text).

En segon lloc, amb posterioritat a la validació de les escales, es va avaluar la qualitat dels textos tant després de la primera versió com de la revisió per a la qual cosa es van utilitzar rúbriques adaptades de Liu (2005). Finalment, es van classificar els errors comesos en els textos abans i després de la revisió adaptant el model de Castillejos (2009). D'aquesta manera, es va distingir entre errors superficials, de caire gramatical o ortogràfic, i errors centrats en aspectes semàntics, com l'ús de calcs, falsos amics, etc.

Procediment

Es van necessitar dues sessions de classe per a recollir les dades (temps típic: 90 minuts cada sessió). En la primera sessió, els participants van escriure dos textos (resum o assaig), un en la L1 de la seua elecció, espanyol o català, i un altre en anglés com a LE, sobre les pel·lícules que havien visionat amb anterioritat. En la segona sessió, els estudiants van tindre la possibilitat de tornar als seus textos i revisar-los als dos dies, amb l'objectiu de millorar-ne la qualitat d'aquests.

3.1.2. RESULTATS I DISCUSSIÓ

Els resultats d'aquest primer estudi indiquen, com s'esperava, que els textos en L1 eren més llargs que en anglés, la seua qualitat era major i contenien menys errors en els dos grups de participants: nivell alt (B2 i C1) i baix (A1, A2 i B1) d'anglés com a LE.

En línies generals, les accions de regulació metacognitiva predominants en totes dues llengües es van centrar en modificar paraules, majoritàriament substitucions; en menor mesura, es van fer servir addicions, que corregien errors formals (gramaticals o ortogràfics); algunes d'aquestes darrers relacionades amb el contingut, que van tindre molt poc impacte en la millora de la qualitat i el significat del text.

El nivell d'anglès de les persones participants va comportar variacions respecte a les accions de regulació metacognitiva. D'una banda, aquelles persones amb un nivell més alt van dur a terme més transformacions en les dues llengües i, aquestes es van centrar en aspectes relacionats amb el significat del text, especialment en L1, en una línia semblant a investigacions anteriors (Fagley i Witte, 1981; Stevenson et al., 2006; Tyriakoglu et al., 2019). Les seues transformacions eren de caire opcional, la qual cosa suggereix que aquestes persones tenien una representació mental del text més dinàmica. És a dir, eren capaces de modificar el text per a millorar-lo més enllà del nivell superficial o formal; i incorporaren aspectes relacionats amb el contingut i organització.

En les accions de regulació metacognitiva, la distribució del tipus d'accions va ser significativament diferent en funció de la llengua i el nivell d'anglès en cadascuna d'elles i també es van trobar efectes estadístics de la tasca: les accions van ser diferents en l'assaig comparat amb el resum. Conforme el nivell d'anglès dels participants va ser més alt, es va parlar una major atenció a les transformacions de tipus “grups de paraules” i “oracions”.

Les transformacions van suposar una millora de la qualitat dels textos en totes dues llengües, tasques i nivells d'anglès. No obstant això, la qualitat global en L1 en el resum va empitjorar lleugerament. Els errors en ortografia van penalitzar a les persones participants. De la mateixa forma, la llengua i el nivell d'anglès van mostrar diferències significatives en els aspectes analítics de la qualitat del text.

Pel que fa a la gramàtica i el vocabulari, les mitjanes van revelar diferències significatives en funció de la llengua en la qual els textos es van escriure, el nivell d'anglès dels escriptors i les escriptores i la interacció entre totes dues variables. Així doncs, en els textos en L1 les mitjanes en gramàtica i vocabulari van ser

significativament superiors als escrits en anglés, com caldria esperar. De la mateixa forma, els i les participants amb major nivell d'anglés també van exhibir major qualitat en aquests aspectes en L1. En altres paraules, aquelles persones amb millor nivell d'anglés van cometre menys errors de gramàtica i vocabulari en totes dues llengües.

La qualitat de l'ortografia va ser significativament pitjor en anglés. No obstant això, l'efecte no va ser gran la qual cosa mostra que aquest tipus d'errors es van distribuir de manera semblant en L1 i anglés.

Finalment, cal destacar els errors en la formació i ús dels temps verbals. Les diferències entre llengües van ser significatives i en anglés es van trobar molts més errors. A més a més, es van trobar diferències entre el nivell d'anglés i la tasca, i efecte d'interacció entre totes dues i la llengua. Les mitjanes reflecteixen un nombre més elevat d'errors en temps verbals en participants amb menor nivell d'anglés, especialment en el resum, i, curiosament, per la utilització o formació inadequada dels temps verbals de passat.

SECCIÓ 2

4.1. ESTUDIS 2, 3 i 4

4.1.1. MARC METODOLÒGIC

Participants

En aquest estudi de casos van participar, d'una banda, 8 estudiants de grau (3 homes i 5 dones), d'edats entre els 19 i els 25 anys, pertanyents a dos grups intactes d'alumnat universitari dels graus de Mestre/a d'Educació Primària i Infantil. Els estudiants es van agrupar en dos nivells d'anglés per a les anàlisis: nivell bàsic (A2) i nivell intermedi (B2).

D'altra banda, van participar 4 persones expertes (3 homes i 1 dona d'edats compreses entre els 34 i els 49 anys). Eren professors universitaris o d'Educació

Secundària, amb experiència en la redacció de textos científics i amb un nivell d'anglès B2 o superior.

Disseny

Aquest experiment possibilita obtenir una visió dels estils de revisió en funció de la perícia en l'escriptura i el nivell d'anglès de les persones participants.

El disseny d'aquest estudi exploratori s'ha basat en la comparació de l'autopercepció de les persones participants en la freqüència d'ús de les estratègies metacognitives en la revisió diferida d'assajos en la seua L1 i en anglès, les operacions de regulació metacognitiva proposades per Allal (2000) i l'ús de les estratègies de control metacognitiu de cada participant en l'escriptura de textos. L'última part es va desenvolupar a través de l'anàlisi de les transcripcions del protocol de pensament en veu alta que es van enregistrar durant la revisió.

Al segon estudi, per tal de conèixer l'autopercepció en la freqüència d'ús de les estratègies de regulació metacognitiva en la revisió diferida d'assajos d'opinió en la seua L1 i en anglès, s'ha usat un disseny en tres fases: (i) emplenar un qüestionari per a l'escriptura en L1 i en anglès abans de les tasques d'escriptura i revisió, (ii) escriptura i revisió dels assajos, (iii) emplenar el mateix qüestionari després de les tasques.

Per a l'anàlisi, s'ha dut a terme una ANOVA amb un disseny 2 X 2 X 3 per a cada ítem del qüestionari: 2 (fases: anterior i posterior a la tasca) X 2 (llengües: L1 i anglès com a LE) X 3 (grups de participants: experts/es, estudiants magisteri de nivell mitjà i bàsic d'anglès).

Materials, instruments i mesures

Es va replicar el mateix procediment i materials que en l'Estudi 1, només que aquesta vegada les persones participants van escriure un assaig en totes dues llengües.

Es van dissenyar, també, dos qüestionaris d'autopercepció en l'ús d'estratègies metacognitives durant la revisió de l'escriptura. Van ser adaptats d'altres similars per al propòsit de la investigació (Farahian, 2015; Petric i Czarl, 2003, Sasaki i Hirose,

1996). Els ítems feien referència a la tasca: potencials lectors/as, la consciència en l'atenció a l'impacte de les modificacions en el text i aspectes formals en els quals centrar la revisió: gramàtica, ortografia i vocabulari. Així mateix, es preguntava sobre l'organització del contingut del text i els tipus d'accions a dur a terme en l'edició dels textos.

La utilització del protocol de pensament en veu alta va comportar l'ús dels programes d'enregistrament de pantalla (Camtasia i Snagit) a fi d'anotar la duració de les revisions, la longitud dels textos i per a enregistrar el que els i les participants van comentar en veu alta durant la seua revisió. L'anàlisi de la revisió es va dur a terme a través de l'anàlisi de les transcripcions de les sessions de cada participant prenent com a referència models semblants en investigacions anàlogues (Bañales, 2013; Tillema, 2012).

Procediment

Es va seguir un procediment similar a l'Estudi 1. Els i les participants van visionar les pel·lícules proposades abans de la tasca d'escriptura. A més, van emplenar el qüestionari d'autopercepció sobre accions de regulació durant la revisió. Després, van escriure la primera versió del text i van dur a terme la seua revisió diferida. Aquesta vegada, la sessió de revisió va ser enregistrada en vídeo (enregistrament de pantalla). Abans de realitzar la revisió, els i les participants van practicar la tècnica del pensament en veu alta. Les revisions van ser transcrites i organitzades en segments per a l'anàlisi posterior. Finalment, totes les persones participants van emplenar un qüestionari d'autopercepció en l'ús d'estratègies metacognitives després de la tasca d'escriptura.

4.1.2. RESULTATS I DISCUSSIÓ

Estudi 2

Els resultats procedents dels qüestionaris van mostrar diferències significatives en l'autopercepció dels participants quant a la freqüència d'ús d'estratègies metacognitives d'escriptura. Els i les participants van percebre que tenien més en

compte l'audiència a la qual s'adreçaven, especialment les persones expertes. Els efectes estadístics van revelar diferències significatives en els ítems relacionats amb la coherència: la progressió del contingut en el text i la divisió de les idees en els paràgrafs. Finalment, es va observar un canvi en la percepció de l'ús de la substitució com a estratègia. De fet, aquest va ser el tipus d'acció més freqüent en L1 i en LE on la mitjana es va situar molt a prop de l'addició. Cal afegir que, malgrat no trobar efectes estadístics en alguns ítems com l'ús de lectura en veu alta o l'ús de la L1 per a la traducció, es van produir canvis en la percepció, especialment entre l'alumnat universitari. De la mateixa manera, la percepció en la freqüència d'ús en els tres grups de participants de la reubicació de paraules, oracions o paràgrafs va ser molt alta mentre l'ús real que es va fer d'ella va resultar molt escàs.

Estudi 3

La qualitat dels textos va millorar excepte en el grup de persones expertes, en el qual van empitjorar escassament en LE. Les primeres versions d'aquest grup van ser millors que la resta de grups en totes dues llengües. La diferència entre els tres grups en LE és rellevant. El nivell de competència lingüística dels i les participants marca la qualitat dels textos a nivell global: a major competència, textos de major qualitat en la primera versió i després de la revisió (Silva, 1993; Tiryakoglu et al., 2019).

Pel que fa als tipus d'operacions de regulació metacognitiva, va ser l'alumnat de nivell intermedi d'anglès qui va fer més transformacions en totes dues llengües encara que se'n van registrar més en LE que en L1, en consonància amb el primer estudi i Stevenson et al. (2006). En relació a l'anticipació, la majoria de les transformacions van ser opcionals en totes dues llengües, la qual cosa reflecteix el caràcter dinàmic de la representació mental dels textos. No obstant això, l'alumnat de nivell bàsic va fer més canvis opcionals en L1, basats en aspectes ortogràfics o gramaticals (Chanquoy, 2001; Faigley i Witte, 1981; Stevenson et al., 2006). Per contra, els experts van parar atenció als canvis opcionals, majoritàriament en LE.

En el control, les persones expertes s'hi van centrar, en canvi, en nivells més alts, com ara les oracions (en L1), mentre que la resta de grups va realitzar transformacions a de paraules i de caire formal, especialment l'alumnat de nivell baix.

Les transformacions relacionades amb el control en LE van estar centrades en nivells formals i de paraula en els tres grups.

Finalment, en la part d'ajustament, en L1 l'addició de paraules i oracions va prevaldre en els grups d'alumnat mentre que les persones expertes van optar per la substitució (Allal, 2000; Chanquoy, 2001; Sommers 1980). D'altra banda, la substitució va imperar en la revisió en LE en tots els grups (Stevenson et al., 2006).

Estudi 4

Quant al procés de revisió, els i les participants han mostrat comportaments molt diversos entre ells i elles. Així doncs, les persones expertes i els futurs i les futures mestres han compartit estils i estratègies de revisió. L'anàlisi de les transcripcions ens revela que el grup de persones experts estava més satisfet amb la seua primera versió i no tant així els dos grups d'alumnat.

L'observació del procés de revisió va revelar que, en els tres grups, els participants comencen a dur a terme la seua revisió sense un pla previ. Comencen a llegir, en veu alta o en silenci, i editen (transformen) el text directament si fa falta. Així doncs, la major part són "emergent planners" (Cummings, 1989; Tiryakoglu et al., 2019) en totes dues llengües. Així i tot, la lectura predomina en LE, així com es fa palès l'ús de la L1 per a traduir el que s'ha escrit, especialment com menor és el nivell d'anglès (Manchón et al., 2009). No obstant això, la lectura en veu alta d'aquestes persones és escassa perquè els esforços per a pronunciar en anglès semblen sobrecarregar la memòria de treball (Kellogg, 1996; Chanquoy, 2009).

Els i les participants de tots tres grups van manifestar la seua atenció per aspectes relacionats amb la coherència del text: el seu contingut i organització. No obstant això, van ser les persones integrants del grup d'experts els qui ho van manifestar de manera explícita. Igualment, totes les persones participants van mostrar la seua atenció als aspectes més purament formals: gramàtica, vocabulari i ortografia en les dues llengües. Tanmateix, tot i dur a terme successives lectures per a avaluar el text a aquest nivell, diversos errors van quedar sense corregir en tots els grups.

A més, el contrast entre les accions de revisió realitzades i la pròpia percepció de la freqüència amb què les duïen a terme ens han mostrat certes inconsistències. D'una banda, la major part dels i les participants asseguren que es fixen en aspectes que tenen més a veure amb el significat del text i no sols amb la gramàtica o l'ortografia, la qual cosa no es correspon amb la revisió real. Igualment, la freqüència de les accions que fan tampoc és igual al que realment duen a terme; per exemple, manifesten la percepció que realitzen reubicacions de tota mena en el text, quan és l'acció més escassa amb diferència. Aquesta dissonància entre allò que els estudiants perceben que fan (autopercepció d'ús d'estratègies) i allò que realment fan (tasca real) sembla ser fruit del baix nivell d'estratègies metacognitives que usen quan escriuen, especialment de control metacognitiu (López et al., 2018; McCutchen, 2011; Ruan, 2014; Silva, 1993; Tiryakoglu et al., 2019).

5. CONCLUSIONS I RECOMANACIONS DIDÀCTIQUES

En primer lloc, s'han complert els objectius plantejats a l'inici de la investigació. S'han revisat i validat indicadors per a avaluar la regulació metacognitiva o transformacions en la revisió de textos i s'han dissenyat dues tasques d'acord amb aquelles que s'hi donen en l'àmbit d'estudi.

Cal indicar que els resultats de la present recerca suggereixen que la revisió diferida s'hi du a terme de diverses maneres en funció de la llengua, la tasca i el nivell d'anglès. D'una banda, pel que fa a les transformacions en L1 són de major impacte aquelles que tenen a veure amb el contingut i l'organització del text, la qual cosa sembla suggerir una representació del text més dinàmica. Així, en LE, tot i que se'n troben més, la revisió se centra a substituir paraules o corregir aspectes formals amb una mínima incidència en el significat global de text.

Així mateix, la revisió diferida suposa una oportunitat de millora de la qualitat dels textos en L1 i LE. D'acord amb l'estudi de Stevenson et al. (2006), aquelles persones amb un nivell major d'anglès milloren més la qualitat dels textos, mentre que en L1 les diferències són exigües. Al resum tenen lloc menys transformacions que a

l'assaig i aquestes són de caire més superficial, en altres paraules, la tasca amb menor despesa de recursos cognitius també ofereix una representació del text més estàtica.

El nivell de LE, com és d'esperar, sembla tindre una influència decisiva en la qualitat dels textos. A més, les transformacions del text realitzades pels i les participants amb nivells més baixos d'anglès se centren en aspectes de nivell superficial amb poc impacte en el desenvolupament del contingut o l'estructura del text (Tiryakoglu et al., 2019). En la mateixa línia, les persones participants amb major nivell d'anglès produeixen textos amb millor qualitat en les dues llengües i en les dues tasques, i esmenen els seus errors superficials i de contingut amb major freqüència (Tiryakoglu et al., 2019). En la revisió diferida, aquest alumnat s'ha centrat més sovint en estructures més enllà de la paraula, que tenien major incidència en el resultat del text i que s'ajustaven a les convencions gramaticals i ortogràfiques en totes dues llengües (D'Angelis i Jessner, 2012; Manchón et al., 2009; Stevenson et al., 2006). Així mateix, les persones amb major nivell d'anglès han escrit textos amb qualitat semblant en totes dues llengües.

Respecte als estudis de la segona secció, la percepció de la freqüència d'ús de les diverses estratègies plantejades ens mostra diferències amb efectes significatius o quasi-significatius en aquells ítems que tenen a veure amb el desenvolupament del contingut i la coherència textual majoritàriament. És a dir, la consecució de les tasques en totes dues llengües ha mostrat una variació en la percepció de la freqüència d'ús.

D'altra banda, el procés de revisió diferida ens ha mostrat que les persones expertes se centren en aspectes relacionats amb el significat global del text i el fan amb transformacions més complexes en L1 mentre que aquest focus minva a mesura que el nivell d'anglès descendeix en l'alumnat. En LE, per contra, els tres grups se centren en aspectes més superficials, a pesar que a major nivell de competència en LI, millora la qualitat dels textos. No obstant això, en el grup de persones expertes la revisió no millora la qualitat dels textos en LI i sí que ho fa en la resta dels grups.

Les diferències entre persones expertes en la revisió diferida en L1 i LE dels assajos ens ha mostrat que quasi totes les persones participants han començat la revisió sense planificar-la (Cummings, 1989; Tiryakoglu et al., 2019). A més, les persones expertes han mostrat major confiança en les seues primeres versions.

L'alumnat amb nivell mitjà de LE ha mostrat, en totes dues llengües, tindre una representació mental del text més dinàmica, amb major nombre de transformacions, mentre que les persones expertes i l'alumnat de nivell bàsic han fet palesa una representació més estàtica. Així i tot, el nivell de percepció d'ús d'estratègies metacognitives sobre aspectes propis de la tasca, com ara el tipus de lector, el tipus de text o el desenvolupament del contingut al llarg d'ell va variar en funció del nivell d'anglès de les persones participants. No obstant això, s'han donat algunes excepcions, ja que algun/a alumne/a ha demostrat ser conscient de quins aspectes havia d'abordar, encara que, al final, aquest alumnat no haja fet la tasca de manera reeixida.

La lectura en veu alta, en els nivells més baixos de competència en anglés, ha suposat una càrrega atencional per a la memòria de treball (Kellogg, 1996) en anglés, principalment per la complexitat de la pronunciació en aquesta llengua: descodificar el significat del text escrit fins al moment i avaluar allò esmenable d'acord amb allò que es pretén escriure. D'altra banda, l'ús de la traducció a la L1 és major com menor era el nivell d'anglès (Manchón et al., 2009). De fet, alguna persona va canviar la lectura en veu alta original per la traducció a la L1.

Recomanacions didàctiques

Els resultats i conclusions aconseguits indiquen la necessitat d'introduir a l'aula estratègies de control i regulació metacognitives, com diversos/es autors/es han proposat tant per a L1 (Allal i Chanquoy, 2004; Castelló, 2008; Hurtado, 2013; López et al., 2018; McCutchen, 2011; Negretti, 2012; Salvador-Mata i García-Guzmán, 2009) com per a L2/LE (Dülger, 2011; Knospe, 2018; Kodituwakku, 2008; Qin i Zhang, 2019; Ruan, 2014; Xiao, 2007, Yanyan, 2010).

En primer lloc, com les investigacions anteriorment citades recomanen, la intervenció didàctica ha de contindre l'adquisició de les estratègies a través d'una instrucció formal i coordinada que, independentment de la metodologia didàctica emprada, tindria com a objectiu fer conscient l'alumnat del seu coneixement metacognitiu de les estratègies per a revisar els textos. Entre aquestes estratègies, cal destacar l'atenció al lector/a potencial, a les característiques del gènere que s'aborda i a la progressió temàtica coherent i organitzada dels continguts en cadascun dels

paràgrafs. Aquestes activitats d'explicitació de les estratègies es troben en consonància amb els mètodes d'escriptura autoregulada, com l'activació del coneixement previ o l'apropiació de les característiques dels gèneres (Graham i Harris, 2017; Fidalgo i Torrance, 2017) en els quals podrien tindre cabuda. Aquesta instrucció hauria d'estar estructurada de manera que ens permeta relacionar-la amb d'altres parametritzades de manera semblant i poder construir així un paradigma d'investigació sobre l'escriptura basada en evidències (Rijlaarsdam et al., 2017).

En segon lloc, aquesta proposta s'inclou des del desenvolupament d'habilitats d'escriptura des d'una perspectiva transversal de plurialfabetització (Meyer et al., 2017) que inclou totes les àrees de desenvolupament dels currículums i totes les llengües vehiculars del centre educatiu en qualsevol etapa. En altres paraules, la regulació metacognitiva hauria de ser abordada en cada activitat que implicara una producció escrita atesa la singularitat del context: tipus d'alumnat, tasca, llengua, etc. Igualment, mentre que la formació i avaluació de l'alumnat de Magisteri es realitza majoritàriament a través de l'expressió escrita, l'adquisició de les estratègies de regulació metacognitiva haurien de formar part de la seua formació.

RESUMEN EN ESPAÑOL

1. INTRODUCCIÓN

La presente tesis doctoral se inscribe dentro del programa de Doctorado en Didácticas Específicas de la Facultad de Magisterio de la Universitat de València y, en concreto, en el Departamento de Didáctica de la Lengua y la Literatura.

El objetivo principal de la presente investigación es llevar a cabo un diagnóstico del control metacognitivo en la escritura del alumnado de Magisterio. En este caso, la investigación se centra en la revisión diferida de dos tareas de redacción de textos en dos lenguas*. De este modo, con los resultados obtenidos se han formulado diversas recomendaciones didácticas para mejorar o perfeccionar aquellos aspectos que se identifican a partir de los estudios que se han llevado a cabo para tener en cuenta dentro de la formación de los/as futuros/as maestros/as.

Los objetivos específicos fijados han sido:

OB1. Estudiar y analizar la literatura internacional dedicada en la investigación de habilidades de escritura y metacognición, incluyendo lenguas primeras (L1) y lenguas extranjeras (LEs), para explicar los fundamentación teórica de esta investigación mediante el uso de modelos validados.

OB2. Definir y validar descriptores relacionados con el control metacognitivo en textos escritos en inglés como lengua extranjera así como diseñar las tareas adecuadas a partir de aquellos descriptores que evalúan estas habilidades.

OB3. Evaluar el control metacognitivo de los futuros/as maestros/as en las tareas de revisión diferida en su lengua materna y en inglés, utilizando tareas con diferentes exigencias cognitivas (tareas de "decir el conocimiento" y "transformar el conocimiento").

OB4. Analizar la influencia del nivel de dominio del inglés en el control metacognitivo y la calidad de los textos en el proceso de revisión diferida.

* Las personas participantes han escrito sus textos en la lengua que han considerado como materna (L1), bien catalán bien español. Los textos en lengua extranjera (LE) se han redactado en inglés.

OB5. Comparar el uso que hacen los escritores i escritoras expertos/as y los futuros y futuras maestros/as de primaria de las estrategias de regulación metacognitiva en el proceso de revisión diferida en L1 y LE.

OB6. Proponer recomendaciones didácticas para incluir la regulación metacognitiva en la enseñanza y aprendizaje de la escritura de acuerdo con los resultados de esta investigación.

A partir de los objetivos planteados, se han formulado las siguientes preguntas de investigación:

PI1. ¿Cómo se puede evaluar la regulación metacognitiva de los futuros y las futuras maestras en la revisión diferida de las tareas de escritura en su L1 y LE? ¿Qué tipo de estrategias de regulación metacognitiva usan los/as futuros/as maestros/as al revisar sus textos? ¿Cuál es el efecto de la tarea de escritura (ensayo o resumen) sobre el uso de las acciones reguladoras y la calidad de los textos?

PI2. ¿Cuál es el efecto de la competencia en lengua extranjera? ¿Hay una transferencia de regulación metacognitiva de la L1 a la LE?

PI3. ¿Cuáles son las diferencias entre los textos producidos en L1 y LE, cómo se pueden explicar estas diferencias?

PI4. ¿Qué contrastes se aprecian entre expertos/as y futuros/as maestros/as en el uso de estrategias metacognitivas en la revisión diferida? ¿Cómo es esta regulación en relación a las propiedades textuales?

Para lograr nuestro propósito se han diseñado dos estudios exploratorios que nos han aportado distintas perspectivas del mencionado proceso de revisión diferida. El primer estudio, de corte cuantitativo, analizará las acciones de regulación metacognitiva de los sujetos durante una tarea de revisión de la escritura y el impacto en la calidad de los textos producidos en lengua materna y en inglés como lengua extranjera. El segundo estudio, cualitativo, profundizará sobre los comportamientos y patrones seguidos por los sujetos en el proceso de revisión diferida en ambas lenguas.

2. MARCO TEÓRICO

Los modelos cognitivos de escritura más citados (Berninger y Swanson, 1994; Flower y Hayes, 1981; Kellogg, 1996; Scardamalia y Bereiter, 1987) en los últimos cuarenta años de investigación distinguen varias fases en el proceso de escritura. Por un lado, la planificación, por otra la textualización y, finalmente, la revisión. Los modelos han sufrido modificaciones posteriores y diversos aspectos han sido enfatizados en cada una de las fases y sus implicaciones en la eficacia del proceso de escritura y la calidad de los textos.

En cuanto al proceso de revisión de los textos, Hayes et al. (1987) identificaron las acciones que los y las escritoras llevaban a cabo al realizar la revisión. Scardamalia y Bereiter (1987), en una línea parecida a la señalada por los autores y las autoras anteriores, propusieron el procedimiento CDO: comparar, diagnosticar y operar. En estos modelos los/as escritores/as contrastaban la representación mental del texto que habían escrito hasta el momento con la del texto que querían escribir y encontraban los aspectos que no convergían. A partir de ahí introducían los cambios que consideraban oportunos para reducir la distancia entre esos dos textos: el escrito hasta ese momento y el que se pretende escribir.

Las revisiones del texto pueden tener lugar en varios momentos del proceso del mismo (Chanquoy, 2001): durante el proceso de redacción (online), al completar la tarea (inmediatas) o tiempo después de acabar la tarea (diferidas). Alamargot y Chanquoy (2001) hacen la distinción entre los tipos de revisiones en función de la visibilidad y el impacto en el texto. Así pues, distinguen entre revisión interna, aquella que comporta una revisión mediante un diálogo interno del redactor/a y externa cuando se incluye la edición del texto; la revisión autónoma, sin ninguna ayuda o referencia externa; y la revisión recursiva como evaluación del texto dentro de las otras fases del proceso de escritura.

Con respecto a la metacognición en la escritura, el proceso de redacción ha sido definido como metacognición aplicada, de modo que escribir supone la explicitación del pensamiento en forma a través de unos símbolos externos, las gráficas (Hacker et al., 2009). El conocimiento metacognitivo abarca lo que el autor/a sabe de sí mismo

como escritor/a, sobre las características de la tarea a acometer y las particularidades de las estrategias a utilizar durante proceso de redacción (Karlen, 2017). El control metacognitivo está relacionado con los aspectos procedimentales de la metacognición y se refiere a la regulación de las actividades cognitivas, metacognitivas y conductuales como la planificación, las estrategias, la supervisión (monitoring) y la revisión (Knospe, 2017).

El control metacognitivo es el objeto de estudio de la presente tesis doctoral, es decir, aquellas estrategias que se utilizan para construir, memorizar, recordar y controlar el conocimiento de acuerdo con Tönshoff (2003) citado en Knospe (2017) durante el proceso de revisión diferida en la escritura.

Diversos estudios sugieren que un alto grado de competencia en el control metacognitivo se relaciona con una mayor calidad textual y eficiencia en la escritura en varias etapas del sistema educativo tanto en L1 (Harris et al., 2010; López, et al., 2018) como en L2/LE, generalmente inglés como lengua extranjera en varios contextos (Bui y Kong, 2019; Dülger, 2011; Kodituwakku, 2008; Ruan, 2005, 2014; Silva, 1993; Xiao, 2007, 2016). En estos estudios los resultados, en líneas generales, indican que los/as escritores/as con mayor conocimiento metacognitivo llevan a cabo una mayor planificación; revisan de manera más eficiente los textos que escriben; se centran en aspectos más globales del texto; y se alejan de las correcciones de aspectos superficiales, como la ortografía, o formales, como los errores gramaticales.

En relación a la revisión, Allal (2000) estableció que las modificaciones que los/as escritores/as introducen en sus textos suponen la vertiente visible del proceso que guía la evolución la representación mental del texto y su redacción real. De esa manera, las modificaciones introducidas por los/as escritores/as suponen "transformaciones" de los textos y la regulación metacognitiva de los mismos. Allal y Chanquoy (2004) en su manual sobre la revisión acuñan este término que otros estudios anteriores habían calificado como "cambios" (Sommers, 1980), "modificaciones" (Chanquoy, 2001) y otros posteriores denominarán "revisiones" (Stevenson et al., 2006). Este último incluye la comparación entre L1 e inglés como LE mientras que el resto solo se centran en inglés como L1 (Faigley y Witte, 1981; Monahan, 1984; Sommers, 1980) y L1 francés (Allal, 2000; Chanquoy, 2001)

Las dimensiones en las que Allal (2000) clasifica el impacto de las "transformaciones" están en la línea de modelos anteriores (Faigley y Witte, 1981; Monahan, 1984; Sommers, 1980). No obstante, su taxonomía cubre la relación de las revisiones textuales con las convenciones lingüísticas. Además, divide sus transformaciones de regulación metacognitiva en la anticipación, el control y el ajuste.

La anticipación se refiere a la concepción de la transformación como cambio relacionado con las normas lingüísticas o el contenido del texto. Aquellas que tienen más a ver con el contenido del texto y niveles globales del texto suponen una representación más dinámica del mismo que puede indicar un cambio en la concepción de la tarea.

La operación de control da cuenta del nivel de la lengua modificado, desde la palabra al párrafo o texto, y el impacto que este ejerce sobre significado del texto, desde los aspectos formales - meramente superficiales - al sentido global.

Finalmente, el ajuste corresponde a los tipos de acciones llevadas a cabo para reducir la distancia entre el texto escrito y el texto que se quiere escribir, y se divide en: adición, supresión, sustitución y reubicación.

Con anterioridad, Sommers (1980) observó que había diferencias entre las revisiones realizadas por personas expertas y por el alumnado universitario en la redacción de ensayos en L1, inglés. Esas personas expertas se centraron en aspectos que afectaban al significado global del texto, y añadían o suprimían más información que el alumnado universitario. Por contra, el alumnado se concentró en aspectos formales como la gramática o el vocabulario, de nivel más superficial.

En una línea parecida, Faigley y Witte (1981) compararon la revisión de textos descriptivos y ensayos de alumnado universitario, con diferentes niveles de competencia en escritura, y de escritores expertos. Los escritores menos experimentados revisaban los aspectos más superficiales de los textos (palabras a nivel gramatical u ortográfico) y dejaban de lado el significado global del texto. No obstante, en ambos casos las substituciones bien de palabras, bien de grupos de palabras u oraciones eran predominantes. Monahan (1984) también observó la ausencia de revisiones de nivel más profundo, es decir, de contenido y organización, en los textos del alumnado de secundaria.

Por su parte, Allal (2000) encontró que el alumnado con mayor rendimiento académico hacía revisiones más profundas, tenía representaciones mentales más dinámicas y usaba cambios, "ajustes", más complejos (sustituciones y reubicaciones).

Chanquoy (2001) investigó la mejora de la calidad de los textos que el alumnado de tres cursos de primaria llevó a cabo después de revisarlos en diferentes momentos del proceso de escritura. Sus resultados indicaban que la revisión al acabar de realizar la tarea (revisión inmediata) incrementaba más la calidad de los textos que las revisiones online y diferidas. Asimismo, halló que el alumnado del curso más bajo, de manera un tanto inesperada, llevaba a cabo una cantidad significativa de acciones de regulación metacognitiva en los textos. Stevenson et al. (2006) compararon las revisiones online de ensayos en neerlandés e inglés como lengua extranjera de alumnado de secundaria con varios niveles de competencia en escritura. Las revisiones en inglés eran más frecuentes que en L1 y el alumnado con menor competencia escrita realizaba mayor número de revisiones. Sin embargo, éstas estaban centradas en palabras, con un impacto en los aspectos formales de los textos, especialmente en inglés. En ambas lenguas predominaban las sustituciones.

Por otra parte, hay otro grupo de estudios que se han dedicado a analizar el uso autopercibido de los sujetos de estrategias metacognitivas en tareas de escritura en L1 o L2/LE. Generalmente, estas investigaciones utilizan cuestionarios autoadministrados (Dülger, 2011; Farahian, 2015; Sasaki e Hirose, 1996; Karlen, 2017; Qin y Zhang, 2019; Ruan, 2014), técnicas de pensamiento en voz alta y entrevistas realizadas inmediatamente después de la tarea (Bui y Kong, 2019; Knospe, 2017; Chanquoy, 2001; Tiryakoglu et al., 2019), o conversaciones de las personas participantes (Van Steendam et al., 2012; Bui y Kong, 2019).

El empleo y la descripción de las estrategias metacognitivas que los/las escritores/as emplean en su proceso de redacción se han investigado desde diferentes perspectivas en la didáctica de las lenguas extranjeras, especialmente inglés como lengua extranjera.

En Sri Lanka, Kodituwakku (2008) evaluó el conocimiento metacognitivo de 725 alumnos/as de secundaria de contextos rurales y urbanos después de diversas intervenciones didácticas en su L1. Cabe destacar que durante la revisión los cambios

predominantes introducidos por las personas participantes fueron de nivel superficial, basándose en la estrategia de comprobar el resultado final. Escasaron los ejemplos en los que los escritores i las escritoras adoptaran el rol de lectores o lectoras o se centraran en añadir información que consideraran necesaria, mostrando así una representación mental estática del texto.

La investigación de Karlen (2017) se centró alumando universitario en Suiza en su L1 (alemán) averiguó, a través de cuestionarios validados, que a mayor conocimiento metacognitivo (incluso autopercebido) sobre la planificación, el control y, sobretodo, la evaluación, la calidad de los textos académicos era mayor. Además aquellos/as participantes que demostraron un mayor conocimiento metacognitivo, hicieron uso con mayor frecuencia de estrategias metacognitivas como la lectura del texto por parte de otros/as lectores/as, la revisión de partes que no les resultaron satisfactorias y la comprobación de que la argumentación se ajusta a la tarea, entre otras.

En inglés como lengua extranjera, Sasaki e Hirose (1996) investigaron el proceso de escritura de textos expositivos de 70 alumnos/as universitarios/as con niveles de esta lengua de bajo a intermedio alto. Los resultados obtenidos a través del uso de cuestionarios y del protocolo de pensamiento en voz alta en correlación con la calidad de los textos sugerían que el nivel de inglés, la destreza en escritura en L1 y el conocimiento metacognitivo eran esenciales para identificar a los/as buenos/as escritores/as. Así pues, estos/as se fijaban en la organización del textos en L1 y L2, escribían con mayor fluidez en las dos lenguas, tenían mayor confianza a la hora de escribir textos académicos en inglés y habían escrito más de un párrafo de manera regular en sus clases de inglés en la educación secundaria.

Ruan (2014) propuso un modelo que explicaba la conciencia metacognitiva en la escritura en inglés como lengua extranjera. Para ello, entrevistó a diversos grupos de alumnado universitario especializados en inglés que participaría en un curso sobre escritura. Se centró en las variables que afectaban conocimiento metacognitivo. La relación entre aspectos como las percepciones sobre ellos/as mismos/as como escritores/as, la representación de los objetivos de la tarea, las restricciones de la misma y la interferencias entre lenguas. Las personas participantes admitían escribir

aquello en lo que estaban pensando en ese momento sin apenas planificar la redacción del texto globalmente. Además, puntualizaron que centraron su revisión en intentar oraciones simples y comprensibles como habían sido enseñados en etapas educativas anteriores.

Qin y Zhang (2019) investigaron el conocimiento metacognitivo en la escritura en inglés como LE de 400 estudiantes universitarios en China. En su estudio, concluyeron que los escritores con éxito planificaban todo el texto antes de escribir, se centraban en la regulación de la escritura y evaluaban si el resultado del texto cuando acababan de escribir se correspondía con la representación mental que tenían del mismo. Sus resultados contrastan con los de Yanyan (2010), también en China, quien en un estudio similar en inglés también en el cual concluyó que el conocimiento metacognitivo de sus participantes era bajo, especialmente el de las estrategias. Sus participantes casi nunca ejercían el role de lectores/as del texto y se ocupaban muy poco de la organización y el contenido del mismo, además admitían revisar con poca frecuencia sus producciones cuando las habían finalizado. Las dos propuestas pedagógicas en ambos casos fueron similares e implicaban elevar la atención en la planificación, la regulación y la evaluación del texto.

Dülger (2011), en relación a la instrucción de estrategias metacognitivas y la calidad de los textos, analizó ensayos en inglés como LE de dos grupos de alumnado universitario turco de primer curso. El primer grupo (experimental) participó en una intervención didáctica centrada en el desarrollo explícito de estrategias metacognitivas. El segundo grupo (control) siguió la instrucción ordinaria. Las personas participantes en el grupo experimental presentaron mejoras significativas en la organización del texto, su contenido y el vocabulario empleado. Estas mejoras persistieron en el test de retención efectuado cuatro meses después.

Knospe (2018) entrevistó a diversos alumnos/as de secundaria cuando escribieron ensayos en alemán como segunda LE. Los resultados de sus entrevistas indicaron que factores afectivos (la inseguridad y falta de confianza en si mismo) influían en la escritura. De la misma manera, apuntó la ventaja de reflexionar sobre aspectos estratégicos, como la traducción literal, que tenía lugar en la escritura del inglés y el alemán como primera y segunda LEs. Esta autora, asimismo, dio cuenta de

las estrategias de las que sus participantes eran conscientes que utilizaban en la escritura en una segunda LE como la planificación en L1 del texto. Finalmente, el alumnado participante también mostró ser consciente de las necesidades de la estructura y el vocabulario necesario para escribir un texto argumentativo en su L3.

SECCIÓN 1

3.1. ESTUDIO 1

3.1.1. MARCO METODOLÓGICO

Participantes

En el primer estudio participaron 98 estudiantes de grado, de entre 18 y 45 años, pertenecientes a dos grupos intactos de los grados universitarios de Maestro/a de Educación Primaria e Infantil. El nivel de inglés de los participantes oscilaba desde el más básico (A1) hasta niveles avanzados (C1).

Diseño y variables

Para calcular las correlaciones y los efectos sobre la variable dependiente (transformaciones textuales) se realizó un ANOVA mixto 2 (Tareas: ensayo y resumen) X 2 (Lenguas: L1 e inglés) X 2 (Nivel de inglés: alto y bajo).

Por otro lado, para calcular los efectos en la calidad de los textos antes y después del proceso de revisión se llevó a cabo una ANOVA 2 (Tareas: ensayo y resumen) X 2 (Lenguas: L1 e inglés) X 2 (Nivel de inglés: alto, mediano y bajo) X 2 (Fases: versión 1 y revisión). En la parte concerniente a la escala analítica de errores, se llevó a cabo un ANCOVA, a las variables anteriormente consignadas, se le añadió las covariables relativas a la longitud de los textos en L1 e inglés como lengua extranjera.

Materiales y medidas

Cada grupo de participantes escribió un tipo de texto en ambas lenguas. El primer grupo escribió un ensayo y el segundo un resumen. Estas tareas comportan una carga cognitiva diferente, el ensayo comporta "transformar el conocimiento" mientras que el resumen implica "decir el conocimiento" (Scardamalia y Bereiter, 1987).

En primer lugar, se clasificaron las acciones regulación metacognitivas, es decir, los cambios que cada participante realizó al hacer la revisión para ajustar su representación mental del texto al que pretendía escribir. Estos cambios, o "transformaciones", se basan en la taxonomía de Allal (2000), complementada con la de Chanquoy (2001). Estas dimensiones tienen en cuenta el nivel de lengua afectado (palabra, grupo, oración o texto), el tipo de transformación (adición, sustracción, sustitución o reubicación), la relación con las normas de la lengua (cambios opcionales o convencionales) y el nivel textual afectado (desde aspectos ortográficos a cambios en el significado global del texto).

En segundo lugar, con posterioridad a la validación de las escalas, se evaluó la calidad de los textos tanto después de la primera versión como de la revisión para lo que se utilizaron rúbricas adaptadas de Liu (2005). Finalmente, se clasificaron los errores cometidos en los textos antes y después de la revisión adaptando el modelo de Castillejos (2009). De esta manera, se dividió entre errores superficiales, de cariz gramatical u ortográfico, y errores centrados en aspectos semánticos, como el uso de calcos lingüísticos, falsos amigos, etc.

Procedimiento

Se necesitaron dos sesiones de clase para recoger los datos (tiempo típico 90 minutos cada sesión). En la primera sesión, los participantes escribieron dos textos (resumen o ensayo), uno en la L1 de su elección, español o catalán, y otro en inglés, sobre las películas que habían visionado con anterioridad. En la segunda sesión, los/as participantes tuvieron la posibilidad de volver a sus textos y revisarlos dos días después con el objetivo de mejorar la calidad de los mismos.

3.1.2. RESULTADOS Y DISCUSIÓN

Los resultados de este primer estudio indican, como se esperaba, que los textos en L1 eran más largos que en inglés, su calidad era mejor y contenían menos errores en los dos grupos de participantes: nivel alto (B2 y C1) y bajo (A1, A2 y B1) de inglés.

En líneas generales, las acciones de regulación metacognitiva predominantes en ambas lenguas fueron palabras, mayoritariamente sustituciones; en menor medida, adiciones, que corregían errores formales (gramaticales u ortográficos); algunas relacionadas con el contenido, que tuvieron muy poco impacto en la mejora de la calidad y el significado del texto.

El nivel de inglés de las personas participantes conllevó variaciones respecto a las acciones de regulación metacognitiva. Por una parte, aquellas personas con un nivel de competencia lingüística más alto llevó a cabo más transformaciones en las dos lenguas y, estas se centraron en aspectos relacionados con el significado del texto, especialmente en L1, en una línea similar a investigaciones anteriores (Faigley y Witte, 1981; Stevenson et al., 2006; Tyriakoglu et al., 2019). Sus transformaciones eran de índole opcional, por lo que estos/as participantes tienen una representación mental del texto más dinámica. Es decir, son capaces de modificar el texto para mejorarlo más allá del nivel superficial o formal; e incorporan aspectos relacionados con su contenido y organización.

En las acciones de regulación metacognitiva, la distribución de los tipos de acciones fue significativamente diferente en función de la lengua y el nivel de inglés en cada una de ellas y también se encontraron efectos estadísticos de la tarea. Estas diferencias se vieron remarcadas por las interacciones entre algunas de las variables. Conforme el nivel de inglés de los participantes fue más alto, se prestó una mayor atención a las transformaciones de tipo “grupos de palabras” y “oraciones”.

Las transformaciones supusieron una mejora de la calidad de los textos en ambas lenguas, tareas y niveles de inglés. Sin embargo, la calidad global en L1 en el resumen empeoró ligeramente. Los errores en ortografía penalizaron a los/as participantes. De

la misma forma, la lengua y el nivel de inglés mostraron diferencias significativas en los aspectos analíticos de la calidad del texto.

Por lo que respecta a la gramática y el vocabulario, las medias revelaron diferencias significativas en función de la lengua en la cual los textos se escribieron, el nivel de inglés de los/as escritores/as y la interacción entre ambas variables. Así pues, en los textos en L1 las medias en gramática y vocabulario fueron significativamente superiores a los escritos en inglés, como cabría esperar. Igualmente, los/as participantes con mayor nivel de inglés también exhibieron mayor calidad en estos aspectos en las dos lenguas. En otras palabras, aquellas personas con mejor nivel de LE cometieron menos errores de gramática y vocabulario en las dos lenguas.

La calidad de la ortografía fue significativamente peor en los textos escritos en inglés. No obstante, el efecto no era de gran tamaño, lo que muestra que este tipo de errores se distribuyeron de forma similar en las dos lenguas.

Por último, cabe destacar los errores encontrados en la formación y uso de los tiempos verbales. Las diferencias entre lenguas fueron significativas, en inglés se encontraron muchos más errores. Además, se encontraron diferencias significativas entre participantes con nivel de inglés diferente y las dos tareas, y efecto de interacción entre ambas y la lengua en la que se escribieron los textos. Las medias reflejan un número más elevado de errores en tiempos verbales en participantes con menor nivel de inglés, especialmente en el resumen, y, curiosamente, por la utilización o formación inadecuada de los tiempos verbales de pasado.

SECCIÓN 2

4.1. ESTUDIOS 2, 3 i 4

4.1.1. MARCO METODOLÓGICO

Participantes

En este estudio de casos participaron, por una parte, 8 estudiantes de grado (3 hombres y 5 mujeres), de edades entre los 19 y los 25 años, pertenecientes a dos grupos intactos de alumnado universitario de los grados de Maestro/a de Educación Primaria e Infantil. Los estudiantes se agruparon en dos niveles de inglés para los análisis: nivel básico (A2) y nivel intermedio (B2).

Por otra parte, participaron 4 sujetos expertos (3 hombres y 1 mujer de edades comprendidas entre los 34 y los 49 años). Eran profesores universitarios o de Educación Secundaria, con experiencia en la redacción de textos científicos y con un nivel de inglés B2 o superior.

Diseño y medidas

Este experimento posibilita obtener una visión de los estilos de revisión en función de la pericia en la escritura y el nivel de LE de los/as participantes.

El diseño de este estudio exploratorio se ha basado en la comparación de la autopercepción de los/as participantes en la frecuencia de uso de las estrategias metacognitivas en la revisión diferida de ensayos en su L1 e inglés, las operaciones de regulación metacognitiva propuestas por Allal (2000) y el uso de las estrategias de control metacognitivo de cada participante en la escritura de textos. La última parte se llevó a cabo a través del análisis de las transcripciones del protocolo de pensamiento en voz alta que se grabaron durante la revisión.

Para conocer la autopercepción en la frecuencia de uso de las estrategias de regulación metacognitiva en la revisión diferida de ensayos de opinión en su L1 y en LE, se ha usado un diseño en tres fases: (i) rellenar un cuestionario para la escritura en

L1 y en LE antes de las tareas de escritura y revisión, (ii) escritura y revisión de los ensayos, (iii) rellenar el mismo cuestionario después de las tareas.

Para los análisis, se ha llevado a cabo una ANOVA con un diseño 2 X 2 X 3 para cada ítem del cuestionario: 2 (Fases: anterior y posterior a la tarea) X 2 (Lenguas: L1 e inglés como LE) X 3 (Grupos de participantes: expertos/as, estudiantes magisterio de nivel intermedio y de nivel básico de inglés).

Materiales, instrumentos y medidas

Se replicó el mismo procedimiento y materiales que en el Estudio 1, solo que esta vez los participantes escribieron un ensayo en ambas lenguas.

Se diseñaron, también, dos cuestionarios de autopercepción del uso de estrategias metacognitivas durante la revisión de la escritura. Fueron adaptados de otros similares para el propósito de la investigación (Farahian, 2015; Petric y Czarl, 2003, Sasaki e Hirose, 1996). Los ítems hacían referencia a la tarea: potenciales lectores/as, la conciencia en la atención al impacto de las modificaciones en el texto, y aspectos formales en los que centrar la revisión: gramática, ortografía y vocabulario. Asimismo, se inquiría sobre la organización del contenido del texto y los tipos de acciones a llevar a cabo en la edición de los textos.

La utilización del protocolo de pensamiento en voz alta comportó el uso de los programas de grabación de pantalla (Camtasia y Snag it) para anotar la duración de las revisiones, la longitud de los textos y grabar lo que los participantes comentaron en voz alta durante su revisión. El análisis de la revisión se llevó a cabo a través del análisis de las transcripciones de las sesiones de cada participante tomando como referencia modelos parecidos en investigaciones análogas (Bañales, 2010; Tillema, 2012).

Procedimiento

Se siguió un procedimiento similar al Estudio 1. Los/las participantes visionaron las películas propuestas antes de la tarea de escritura. Además, rellenaron el cuestionario de autopercepción sobre acciones de regulación durante la revisión.

Después, escribieron la primera versión del texto y llevaron a cabo su revisión diferida. Esta vez, la sesión de revisión fue registrada en video (grabación de pantalla). Antes de realizar la revisión, los/as participantes practicaron la técnica del pensamiento en voz alta. Las revisiones fueron transcritas y organizadas en segmentos para el análisis posterior. Finalmente, todas las personas que participaron rellenaron un cuestionario de autopercepción de uso de estrategias metacognitivas después de la tarea de escritura.

3.1.2. RESULTADOS Y DISCUSIÓN

Estudio 2

Los resultados procedentes de los cuestionarios mostraron diferencias significativas en la autopercepción de los participantes en cuanto a la frecuencia de uso de estrategias metacognitivas de escritura. Los/as participantes percibieron que tenían más en cuenta a la audiencia a la que se dirigían, especialmente los expertos. Los efectos estadísticos revelaron diferencias significativas en los ítems relacionados con la coherencia, la progresión del contenido en el texto y la división de las ideas en los párrafos. Finalmente, se observó un cambio en la percepción del uso de la sustitución como estrategia que fue el tipo de acción más frecuente en LE y en L1 se quedó muy cerca de la adición. Cabe añadir que, a pesar de no encontrar efectos estadísticos en algunos ítems como el uso de lectura en voz alta o el uso de la L1 para traducción, se produjeron cambios en la percepción, especialmente entre el alumnado universitario. Del mismo modo, la percepción en la frecuencia de uso en los tres grupos de participantes de la reubicación de palabras, oraciones o párrafos fue muy alta mientras el uso real que se hizo de ella resultó muy escaso.

Estudio 3

La calidad de los textos mejoró excepto en el grupo de expertos/as, en el cual empeoraron exiguamente en LE. Las primeras versiones de los/las expertos/as fueron mejores que el resto en ambas lenguas. La diferencia entre los tres grupos en LE es relevante. El nivel de competencia lingüística de los participantes marca la calidad de

los textos a nivel global: a mayor competencia, textos de mayor calidad en la primera versión y después de la revisión (Silva, 1993; Tiryakoglu et al., 2019).

Por lo que respecta a los tipos de operaciones de regulación metacognitiva, fue el alumnado de nivel intermedio de inglés quién hizo más transformaciones en ambas lenguas y, se registraron más en LE que en L1, en línea con el primer estudio y Stevenson et al. (2006). En relación a la anticipación, la mayoría de las transformaciones fueron opcionales en ambas lenguas, lo que refleja el carácter dinámico de la representación mental de los textos. No obstante, el alumnado de nivel básico hizo más cambios opcionales en L1, basados en aspectos ortográficos o gramaticales (Chanquoy, 2001; Faigley y Witte, 1981; Stevenson et al., 2006). Por el contrario, las personas expertas prestaron atención a los cambios opcionales, mayoritariamente en LE.

En el control, los/as expertos/as se centraron, en cambio, en nivel más altos, como las oraciones en L1, mientras que el resto de grupos realizó transformaciones a nivel de palabra y de tipo formal, especialmente el alumnado de nivel bajo de inglés. Las transformaciones relacionadas con el control en LE estuvieron centradas en niveles formales y de palabra en los tres grupos.

Finalmente, en la parte de ajuste, en L1 la adición de palabras y oraciones prevaleció en los grupos de alumnado mientras que los/as expertos/as optaron por la sustitución (Allal, 2000; Chanquoy, 2001; Sommers 1980). Por otro lado, la sustitución imperó en la revisión en LE en todos los grupos (Stevenson et al., 2006).

Estudio 4

Por lo que respecta al proceso de revisión, los/as participantes han mostrado comportamientos muy diversos entre sí. Así pues, expertos/as y futuros/as maestros/as han compartido estilos y estrategias de revisión. El análisis de las transcripciones nos revela que el grupo de expertos estaba más satisfecho con su primera versión y no tanto así los dos grupos de alumnado.

La observación del proceso de revisión reveló que, en los tres grupos, los participantes empiezan a llevar a cabo su revisión sin un plan previo. Comienzan a

leer, en voz alta o en silencio, y editan (transforman) el texto directamente si lo estiman conveniente. Así pues, la mayor parte son "emergent planners" (Cumming, 1989; Tiryakoglu et al., 2019) en ambas lenguas. Aun así, la lectura predomina en LE, así como se hace patente el uso de la L1 para traducir lo que se ha escrito, especialmente cuanto menor es el nivel de inglés (Manchón et al., 2009). No obstante, la lectura en voz alta de estas personas es escasa puesto que los esfuerzos para pronunciar en la LE sobrecarga la memoria de trabajo (Kellogg, 1996; Chanquoy, 2009).

Los participantes de todos los grupos manifestaron su atención por aspectos relacionados con la coherencia del texto: su contenido y organización; sin embargo, fueron las personas integrantes del grupo expertos/as quienes lo manifestaron de manera explícita. Igualmente, todas las personas participantes mostraron su atención a los aspectos más puramente formales: gramática, vocabulario y ortografía en las dos lenguas. No obstante, a pesar de llevar a cabo sucesivas lecturas para evaluar el texto a este nivel, diversos errores quedaron sin corregir en todos los grupos.

Además, el contraste entre las acciones de revisión llevadas a cabo y la propia percepción de la frecuencia con que las llevaban a cabo nos ha mostrado ciertas inconsistencias. Por un lado, la mayor parte de los participantes aseguran que se fijan en aspectos que tienen más a ver con el significado del texto y no solo con la gramática o la ortografía, lo cual no se corresponde con la revisión real. Igualmente, la frecuencia de las acciones que llevan a cabo tampoco es igual al que realmente llevan a cabo; por ejemplo, manifiestan la percepción de que realizan reubicaciones de todo tipo en el texto, cuando es la acción más escasa con diferencia. Esta disonancia entre aquello que los estudiantes perciben que hacen (autopercepción de uso de estrategias) y aquello que realmente hacen (tarea real) parece ser fruto del bajo nivel de estrategias metacognitivas que usan cuando escriben, especialmente de regulación metacognitiva (López et al., 2018; McCutchen, 2011; Ruan 2014; Silva, 1993; Tiryakoglu et al., 2019).

5. CONCLUSIONES Y PROPUESTAS DIDÁCTICAS

En primer lugar, se han cumplido los objetivos planteados al inicio de la investigación. Se han revisado y validado indicadores para evaluar la regulación metacognitiva o *transformaciones* en la revisión de textos y se han diseñado dos tareas en línea con las tendencias en el ámbito de estudio.

Cabe indicar que los resultados de la investigación sugieren que la revisión diferida sugiere varias maneras de llevarla a cabo en función de la lengua, la tarea y el nivel de inglés. Por un lado, en cuanto a las transformaciones en L1 son de mayor impacto aquellas que tienen relación con el contenido y la organización del texto, lo que parece sugerir una representación del texto más dinámica. Así, en LE, a pesar de que sean más numerosas, la revisión se centra a sustituir palabras o corregir aspectos formales con una mínima incidencia en el significado global de texto.

Así mismo, la revisión diferida supone una oportunidad de mejora de la calidad de los textos en L1 y LE. De acuerdo con el estudio de Stevenson et al. (2006), aquellas personas con un nivel mayor de inglés mejoran más la calidad de los textos, mientras que en L1 las diferencias son exiguas. En tarea de resumen se han encontrado menos transformaciones que en el ensayo y estas son de cariz más superficial, en otras palabras, la tarea con menor exigencia de recursos cognitivos también ofrece una representación del texto más estática.

El nivel de LE, como es de esperar, parece tener una influencia decisiva en la calidad de los textos. Además, las transformaciones del texto realizadas por los y las participantes con niveles más bajos de inglés se centran en aspectos de nivel superficial con poco impacto en el desarrollo del contenido o la estructura del texto (Tiryakoglu et al., 2019). En la misma línea, las personas participantes con mayor nivel de inglés producen textos con mejor calidad en las dos lenguas y en las dos tareas, y enmiendan sus errores superficiales y de contenido con mayor frecuencia (Tiryakoglu et al., 2019). En la revisión diferida, este alumnado se ha centrado más a menudo en estructuras más extensas que la palabra, que tenían mayor incidencia en el resultado del texto y que se ajustaban a las convenciones gramaticales y ortográficas en ambas lenguas (De Angelis y Jessner, 2012; Manchón et al., 2009; Stevenson et al., 2006). Asimismo, las

personas con mayor nivel de inglés han escrito textos con calidad parecida en ambas lenguas.

Respecto a los estudios de la segunda sección, la percepción de la frecuencia de uso de las varias estrategias planteadas nos muestra diferencias con efectos significativos o casi-significativos en aquellos ítems que tienen que ver con el desarrollo del contenido y la coherencia textual mayoritariamente. Es decir, la consecución de las tareas en ambas lenguas ha mostrado una variación en la percepción de la frecuencia de revisión de estos aspectos.

Por otro lado, el proceso de revisión diferida nos ha mostrado que las personas expertas se centran en aspectos relacionados con el significado global del texto y lo llevan a cabo con transformaciones más complejas en L1 mientras que este foco en niveles de significado más globales mengua a medida que el nivel de inglés desciende en el alumnado. En LE, por el contrario, los tres grupos se centran en aspectos más superficiales, a pesar de que a mayor nivel de competencia en LE, mejora la calidad de los textos. Sin embargo, en el grupo de personas expertas la revisión no mejora la calidad de los textos en LE y sí que lo hace en el resto de los grupos.

Las diferencias entre personas expertas en la revisión diferida en L1 y LE de los ensayos nos ha mostrado que casi todas las personas participantes han empezado la revisión sin planificarla (Cummings, 1989; Tiryakoglu et al., 2019). Además, las personas expertas han mostrado mayor confianza en sus primeras versiones.

El alumnado con nivel mediano de LE ha mostrado, en ambas lenguas, tener una representación mental del texto más dinámica, con mayor número de transformaciones, mientras que las personas expertas y el alumnado de nivel básico han hecho patente una representación más estática. Aun así, el nivel de percepción de uso de estrategias metacognitivas sobre aspectos propios de la tarea, como por ejemplo el tipo de lector, el tipo de texto o el desarrollo del contenido a lo largo de él varió en función del nivel de inglés de las personas participantes. Sin embargo, se han dado algunas excepciones, puesto que alguno/a alumno/a ha demostrado ser consciente de qué aspectos tenía que abordar, aunque, finalmente, este alumnado no haya hecho la tarea de manera exitosa.

La lectura en voz alta, en los niveles más bajos de competencia en inglés, ha supuesto una sobrecarga atencional para la memoria de trabajo (Kellogg, 1996) en inglés, principalmente por la complejidad de la pronunciación en esta lengua: descodificar el significado del texto escrito hasta el momento y evaluar aquello enmendable de acuerdo con aquello que se pretende escribir. Por otro lado, el uso de la traducción a la L1 es mayor como menor era el nivel de inglés (Manchón et al., 2009). De hecho, alguna persona cambió la lectura en voz alta original del texto que había escrito en inglés por la traducción a la L1.

Propuestas didácticas

Los resultados y conclusiones alcanzados indican la necesidad de introducir en el aula estrategias de control y regulación metacognitivas, como varios/as autores/as han propuesto tanto para L1 (Allal y Chanquoy, 2004; Castelló, 2008; Hurtado, 2013; López et al., 2018; McCutchen, 2011; Negretti, 2012; Salvador-Mata y García-Guzmán, 2009) como para L2/LE (Dülger, 2011; Knospe, 2018; Kodituwakku, 2008; Qin y Zhang, 2019; Ruan, 2014; Xiao, 2007, Yanyan, 2010).

En primer lugar, como los autores anteriormente citados recomiendan, la intervención didáctica debe contener la adquisición de las estrategias a través de una instrucción formal y coordinada que, independientemente de la metodología didáctica empleada, tendría como objetivo hacer consciente al alumnado de su conocimiento metacognitivo de las estrategias para la revisar los textos. Entre estas, cabe destacar la atención al lector/a potencial, las características del género que se aborda y la progresión temática coherente y organizada de los contenidos en cada uno de los párrafos. Estas actividades de explicitación de las estrategias se encuentran en línea con los métodos de escritura autorregulada, como la activación del conocimiento previo o la apropiación de las características de los géneros (Graham y Harris, 2017; Fidalgo y Torrance, 2017) en los cuales podrían tener cabida. Esta instrucción debería estar estructurada de forma que permita relacionarla con instrucciones parametrizadas de manera parecida y poder construir así una paradigma de investigación sobre la escritura basada en evidencias (Rijlaarsdam et al., 2017).

En segundo lugar, esta propuesta se incluye desde una perspectiva del desarrollo de habilidades de escritura desde una perspectiva transversal de plurialfabetización (Meyer et al., 2017) que incluiría todas las materias de los currículos y todas las lenguas vehiculares del centro educativo en cualquier etapa. En otras palabras, la regulación metacognitiva debería ser abordada en cada actividad que implicara una producción escrita atendiendo a la singularidad del contexto: tipo de alumnado, tarea, lengua, etc. De igual manera, en tanto en cuanto la formación y evaluación del alumnado de magisterio se realiza mayoritariamente a través de la expresión escrita, la adquisición de las estrategias de regulación metacognitiva debería formar parte de su formación.

Chapter 1.

Background

1.1. Introduction

This dissertation was designed as a research project under the umbrella of teacher education in a context of languages in contact and it is enclosed in a doctorate programme on plurilingual education. It is the actual result of different training activities that have been undertaken along the process. The professional interest of this PhD candidate is the development of the competences that pre-service teachers should acquire for their professional practice. From all language skills, writing or written expression, is considered of critical relevance for academic purposes or in the deployment of professional tasks (Crossley & McNamara, 2016) which fulfils, mostly, the realm of writing in the training of pre-service teachers.

On the other hand, the contrast of use in the communicative skills in different languages in this kind of context is at the heart of the research in the field of multilingual education (Cenoz & Jessner, 2009) or as part of the pluriliteracies to develop transferable skills (Meyer et al., 2015), in this case, writing.

1.1. Research questions, objectives and planning

The mastery of writing abilities implies the employment of high-level cognitive skills (Flower & Hayes, 1981) as it involves solving a rhetorical problem through a series of constant decisions and it has been correlated as an expression of academic success. The writing research has focused on different educational levels, ages, contexts, languages of production, types of texts, errors...

Writing skills are essential for pre-service teachers (PSTs)[†] in their training as Higher Education (HE) students as it helps develop their cognitive and metacognitive skills: and, more importantly, because it is their responsibility to be aware of what writing entails and provide opportunities for their future students to learn. Furthermore, the acquisition of writing skills influences their academic performance, their future professional development and their teaching and learning skills towards their students-to-be.

[†] Higher Education students enrolled in B.A. courses in Primary or Pre-primary/Nursery Education are considered pre-service teachers. This is the term that will be used along this dissertation.

In contexts of languages in contact, as Valencia and its region, it is also a requisite to be competent to write in the different official languages and in a foreign language, in this case English. Research shows that processes of writing in L1 and L2 or FL[‡] are similar but differences have been encountered regarding fluency and accuracy and even contradictory results have been reported (Hyland, 2003). The use of similar writing skills across languages, L1 and L2 into FL, is also a challenge for researchers and teachers in multilingual education (Cenoz & Jessner, 2009) and the comparison of products and processes can shed some light and show the way to evidence-based pedagogical approaches (Fidalgo et al., 2017)

On the other hand, metacognition, what we know about our cognition - how we learn - (Flavell, 1979) is regarded as a predictor to become a proficient learner and a key aspect in the achievement of effective self-regulated writing and this is an objective of all educational stages including higher education (Kodituwakku, 2008). In fact, basic competences in primary school teachers education cover and, should assess, autonomous learning processes (Universitat de València, 2011). Research so far shows that the mastery of metacognitive skills is a feature of efficient writers (Whalen & Menard, 1995; McCutchen, 2011) and it may serve as a predictor of academic success (Wang et al., 1993).

This dissertation focuses on which the strategies in deferred revision of texts were, what they were like, their influence in text quality and errors and how they were implemented by groups of pre-service teachers (PSTs) with different EFL proficiency. Moreover, it also gives account of how PSTs with an elementary or intermediate EFL proficiency implemented the revision of essays and it has been compared to how expert writers do. Besides, deferred revision has been chosen as a methodological asset (Rijlaarsdam & Van den Bergh, 2006) and a recurrent moment for the review and edition of the text (Chanquoy, 2001; Faigley & Witte, 1981) so that writers can take advantage of the chance to reduce the distance from the actual text and the intended text. It also involves that these models describe and researchers have given account later a significant involvement of the memory (Kellogg, 1996), the long-term memory

[‡] In this dissertation L1 has been considered the language participants chose to compose their texts and the L2 the other official language in the territory. So, L1 and L2 will refer to either Catalan or Spanish, depending on the participants' choice. English has been considered as the foreign language (Manchón et al., 2009). In other contexts, the foreign language has been considered the L2 (Silva, 1993) or L3 (De Angelis & Jessner, 2010; Knospe, 2017).

and, particularly, the working memory in the writers' L1 and L2s/FLs. That is why the writing tasks and their procedures on the basis of the deferred (also known as postponed or delayed), that is to say, participants undertook revision of their texts a sensible amount of time after they finished them (Chanquoy, 2009). This period of time allows them to free up some space in the working memory and the interest was placed on those actions of metacognitive regulation, and up to which extent this kind of revision had an impact on text quality and the kind and amount of language conventions flawed.

So that, the main objective of this research dissertation is:

To improve writing skills in English as a foreign language (EFL) in pre-service primary school teachers with different proficiency levels and in different writing tasks.

From this main objective, more specific objectives have been set:

- OB1. To study and analyse the international literature devoted to the research in writing skills and metacognition, including L1 and EFL, in order to explain this research's foundations by using validated models.
- OB2. To define and validate descriptors related to the metacognitive control in written texts in EFL as well as to design tasks suitable from those descriptors that evaluate those skills.
- OB3. To assess future teachers' metacognitive control in tasks of deferred revision in EFL and in their native language, using tasks with different cognitive demand (tasks involving knowledge telling and knowledge transforming).
- OB4. To analyse the influence of the level of English proficiency in the metacognitive control and text quality in the process of deferred revision.
- OB5. To compare expert writers' and pre-service teachers' use of metacognitive regulation strategies in the process of deferred revision and both in EFL and in L1.
- OB6. To propose pedagogical recommendations for teaching and learning metacognitive regulation operations based on the findings of this research and evidence-based models.

In order to achieve the objectives we have posed the following research questions:

- RQ1. How can the metacognitive regulation of pre-service teachers be evaluated in the deferred revision of writing tasks in their first language (Spanish/Catalan) and in English as a Foreign Language (EFL)?
What kind of metacognitive self-regulatory strategies do pre-service teachers use when revising their writings?
What is the effect of the writing task (essay or summary) on their use of regulatory actions and text quality?
- RQ2. What is the effect of the EFL proficiency? Is there a transfer of metacognitive skills from the native language into the foreign language?
- RQ3. What are the differences between texts produced in English (EFL) and mother tongue (L1) and what are the reasons underlying these differences?
- RQ4. What are the differences between experts and pre-service teachers in their use of metacognitive strategies in deferred revision? What are experts and PSTs' patterns of behaviour with respect to the use of metacognitive strategies related to textual properties?

The **tasks** below were carried out so that the research questions were answered:

- T1. To compile and analyse salient references in the field of writing research in L1 and EFL, focusing on the process of revision and metacognition and identify and use theoretical models of reference for predictions and hypothesis from different research traditions and its implications: research methods, educational stages, languages, writing tasks...
- T2. To validate the standards used to determine and analyse the actions metacognitive regulation, text quality and errors in writing tasks.
- T3. To carry out comparisons of the actions of metacognitive regulation in pre-service teachers with participants with different EFL proficiency in different the deferred revision of two writing in L1 and EFL and its effects on the quality of texts and errors.

- T4. To report on the self-perception that experts and pre-service teachers with different EFL proficiency have over their use of metacognitive strategies in L1 and EFL after the completion of a knowledge-transforming writing task (essay) and identify and the writers' awareness of the deployment those strategies.
- T5. To elaborate on teaching recommendations based on the results of the empirical studies carried out so that pre-service teachers may be able to improve their metacognitive skills in a context of languages in contact.

1.3. Research context

The purpose of this dissertation is to contribute modestly with its results and the conclusions to the vast field of writing research from a psycho-cognitive approach with its implications in teaching first language as well as English as a foreign language (EFL). Besides, since the writing tasks are part of a social, institutionalised practice and belong to a particular, specific geographical context, a socio-cognitive hint underlies the experiments carried out.

It all together can be taken into account as a starting point to identify the state-of-affairs of pre-service teachers with respect to this particular part of their writing skills. Hence, the results and conclusions can have an influence in teacher education as this dissertation expects to identify the specific mastery of the skills researched by participants at different stages of their training as future teachers and their effects on text quality. These pre-service teachers have different levels of English proficiency, and have written one of two different tasks (essay or summary) in two languages, their L1 (Spanish or Catalan) and English as a foreign language (EFL).

The pedagogical implication for pre-service teacher education may also involve an impact on primary school students teaching policies and methodologies since our research is meant to promote evidenced-based practices. Moreover, including a comparison between the performance and processes of the participants in their L1 in a context of languages in contact and English as the preferred and majority foreign languages brings about the need for a reflection on the research for a multilingual education. The subsequent policies should be inspired by studies that may unveil this common ground (Cenoz & Jessner, 2009)

1.4. Approach and limitations

Writing research has been approached from different perspectives and it stands for a discipline with a wide variety of research focuses: writing processes, text quality, genres... Besides, bringing together two distinctive but complementary traditions, L1 and L2/FL writing, adds more sparkle to the diversity and interest of this dissertation.

The use of mixed-methods (quantitative and qualitative research) is a complementary and necessary measure to gain insight on the process and the production of writing texts and requires a series of decisions over how to obtain results that would provide a holistic view on the deferred revision in different tasks and languages.

The validation of the scales and codes occupied the beginning of the research process and provided the foundation for the reliability of the empirical analysis.

Some simplifications were made on some theoretical models to describe the how, what and where the metacognitive regulation in the participants was deployed. These approaches can be ascribed to the applied linguistics, psycholinguistics or cognitive linguistics. Furthermore, the setting of these studies is a well-defined area: Valencia. The participants were local pre-service teachers, undergraduate university students from different years, and bilinguals in Spanish or Catalan (though they may have one of them as L1 for family or education reasons) who had taken English as their foreign language at school.

Finally, the type of texts chosen for the writing tasks were argumentative essays and summaries. A distinction on the attentional, cognitive effort was made between these two types, however, as established by Takala & Vähäpääsi (1983) and in line with Scardamalia and Bereiter's (1987) model of knowledge-telling and knowledge-transforming writing. Essays, in particular, are the most frequent writing task in writing research at university level and summaries served as a contrast as it had been done beforehand (Faigley & Witte; 1981; Manchón et al., 2009). Besides, comparing the performances of writers across writing tasks is uncommon although it has also been recommended in writing research processes (Van Weijen et al., 2009).

1.5. Organisation and outline of the dissertation

This dissertation comprises the completion of two exploratory studies which are preceded by a Literature Review where the main psycho-cognitive writing models have been dealt with and the phase of revision has been emphasised. Besides, the role of metacognitive regulation and the effects on text quality and errors and the perception and actual use of those strategies during revision have been assessed. The most frequent genres involved in the writing research have also been covered and offered a solid ground for this dissertation's choices. Eventually, self-regulated instruction in writing based on research evidences has taken up the final lines of that part.

In order to do gain insights into the deployment of metacognitive regulation, two studies were conducted:

Section 1 constitutes an empirical study on the deployment of the actions of metacognitive regulation carried out by pre-service teachers during the revision of texts in the two languages aforementioned and the completion of two writing tasks: an opinion essay and a summary. It is a quantitative, product-oriented exploratory study in which we have measured which actions PSTs carried out during the revisions of their texts in two languages and how these actions of metacognitive regulations have had an impact on the text quality.

Section 2 attempts to gain insight in the deployment of the actions during the process of revision. In this second qualitative, exploratory study we have witnessed the revisions of essays written in L1 and EFL and recorded the reasoning behind the actions. These actions have been quantified and grouped as operations for further analysis. Before and after the completion of the writing tasks, participants have filled in a questionnaire about the self-perception of frequency of use of several strategies.

Eventually, some recommendations for pre-service teacher training in this particular topic have been outlined. The specificity of the context in which research has been developed in terms of multilingualism has been present at all times since it provides these studies with a special flare. It offers a different, plurilingual view of the writing process from pre-service teachers in a setting with two official languages

where English is the preferred foreign language in education and it is compulsory from the pre-primary stage to higher education.

It also has some implications as this is an international dissertation. The languages in contact in our territory and how they are embedded in the curricula make a difference with respect to other similar international contexts and can provide some food for thought. Catalan or Spanish are participants' L1 or L2. English is the most frequent L3 or FL. However, the educational setting of participants defined which the L1 of their choice was as some had Catalan as L1 and decide to write their texts in Spanish as it had been the language of instruction at school and carried out their think-aloud sessions in Catalan.

As the research involved the learning and teaching of EFL, it was agreed to opt for an international doctorate. Once the consent was given by the doctoral programme committee, the stay at Coventry University (United Kingdom) enabled the candidate to carry out the assessment of the quality of the different writing tasks as well as getting involved in a different research and lecturing tradition. The candidate did also take advantage of the library facilities and the research and referencing training posed by the host institution. Finally, it must be also noted that as part of the specific activities in the doctoral programme, part of the results of the quantitative analysis of the first section were presented at the EARLI's SIG writing conference held in Antwerp (Belgium) in August 2018. Besides, as part of the research school of the same conference, this time hosted by the University of Gent, a poster with some of the results from section 2 was also submitted and its presentation obtained the 2018 BESST award.

Chapter 2.

Literature

overview

2.1. Introduction

Generally speaking, writing is an activity designed to create a text for some audience

John Hayes

Writing is a language skill that poses a rhetorical problem and engages writers in a problem-solving activity that entails several cognitive-demanding processes (Chanquoy, 2001). These processes involve full attention to several aspects to make meaning. Successful writing encompasses the way the content is relevant, coherent and properly arranged all along the text, how this content is linked accurately so that its progression makes sense, up to which extent the situation of communication and its contrivances are observed and how grammar, spelling and punctuation rules are deployed.

In Marzano and Kendall's application of their taxonomy (2008) of processing knowledge the reasoning processing that entails the highest cognitive demand are problem-solving, decision-making, research and experimenting. The process of writing seems to be a compendium, up to a certain extent, of them all. Besides, the cognitive description of writing as a process entails three sub-processes: planning, translating and reviewing (Flower & Hayes, 1981).

Composing a text is a way of organising one's thoughts, it is also an interactional activity defined by the time of interaction, the actual or potential reader, the knowledge of the context of the communicative situation, and the knowledge of the so-defined language forms linked to the particular text. In other words, the metacognitive variables proposed by Flavell (1979) for any cognitive enterprise: person, task and strategy are to be present. Indeed, later authors who have given account of this process have developed the idea of writing as a cognitive process and have elaborated on different models that entailed cognition-led processes

Writing as a way of building and negotiating meaning involves writers in a recursive process that entails the generation of the text, from a draft until its last outline

(Faradiah, 2015). When trying to solve the problem, writers compose a text in which they bear in mind (whether consciously or not) the type of text, the audience they address to and also the language structures and the vocabulary used to convey meaning which is also, in turn, a way of representing the world.

As stated above, cognitively speaking, writing has been conceived as a problem-solving activity (Scardamalia and Bereiter, 1987; Flower & Hayes, 1981). Zamel (1983) realized that his most skilful informants understood composing texts as a constant interaction between thinking, writing and rewriting (or what it can be understood as revising and evaluating).

The writing models from studies conducted in L1 have been reviewed and adapted for L2 or EFL (Chenoweth & Hayes, 2001). They have been put into practice or adapted to writing tasks in a foreign language. This review gives account of the most influential cognitive models of writing in the last decades. Different aspects of the models have been emphasised and have addressed the attention of researchers. The stress on how revision was carried out portrayed by Hayes et al. (1987), the recursivity and importance of the working memory by Kellogg (1996) and the latest writing model of Hayes in (2012) in which the writing process takes place at different levels.

The starting point was Flower and Hayes's (1981) and their successive reviews of the model (Hayes, 1996; Hayes, 2012; Hayes & Berninger, 2014). We also pay attention to different cognitive models like Scardamalia and Bereiter (1987), and also Berninger and Swanson's (1994) revision of Flower and Hayes's model and Kellogg's (1996, 2008) models and proposals of extending Scardamalia and Bereiter's model.

Flower and Hayes's view describe the process of writing in terms of the task design, the writer's long-term memory (LTM) and the writing processes. The task design includes the rhetorical problem of composing a text that writers should solve. The LTM is the place where the writers store their knowledge about the subject, the potential reader, and goals. And, finally, the writing processes include the planning, the text composing and the revision.

Takala and Vähäpääsi's model (1983) related cognitive processes and communicative intention. Whereas for the former reproduction, organisation and

generation of content set out the scale of cognitive complexity, for the latter, several types of texts according to language functions represent those cognitive demands.

In their proposal Scardamalia and Bereiter (1987), emphasized how the cognitive demands influence the writing processes. These models arranged according to the strategies that the writer must follow in order to complete the task of writing are widely known as knowledge-telling and knowledge-transforming. In their description, knowledge-telling is the strategy used by novice writers in which they focus on their knowledge of the topic and have none or little ability to imagine how the text will be read. On the other hand, the knowledge transforming strategy involves an interaction between the representation of the author's knowledge and the text representation itself (Kellogg, 2008). In a way, the writing tasks and their complexity are aligned with Takala and Vähäpääsi's model (1983).

Alamargot and Fayol (2009) pointed out that Berninger and Swanson's (1994) revision of Flower and Hayes' model was more accurate than the original one. Berninger and Swanson stressed the role of transcription as the process from ideas to actual motor representation of written/graphic symbols and pioneered the focus on the role played by the working memory. This latter question was enlarged by and widely dealt with by Kellogg (1996) and Hayes (2006) and in foreign language writing by Chenoweth and Hayes (2001).

Kellogg's models (1996) reviewed the previous Flower and Hayes's, and Berninger and Swanson's. In this paper, Kellogg enhanced the role of the verbal working memory and his essential participating in the act of composing. He also brought about the complete recursivity of the writing process between the different phases and the conception of the writing process as a linear one was abandoned. In his review of Scardamalia and Bereiter model of writing (Kellogg, 2008), he puts forward the role of the specific reader by the writer as the knowledge-crafting writing activity.

Hayes updated his revisions of previous writing models, including his own ones. In the first revision, Chenoweth and Hayes (2001) come up with a new model of language production that describes three levels: resource level, process level and control level. The control level has to do with the task schema or the writer's mental

representation of the task, and regulates the interactions between levels. In the process level, external and internal processes take place and interact with each other. The internal tends to convert the ideas into written language and the external is related to the task environment mentioned by Hayes previously and “includes both the social and the physical environments of the writer” (Chenoweth & Hayes, 2001, p. 84). Finally, in the resource level, the long-term memory and working memory play a crucial role to take part in the other levels.

In his so-far latest model, Hayes (2012) has paid attention to the role of transcription, as Berninger and Swanson (1994) previously did, and motivation in the process. Furthermore, Hayes also developed Scardamalia and Bereiter model of knowledge-telling composing process to identify three different types of text built up by novice writers. In his model of writing and included the reading skills and attention as part of the resources. Moreover, in his ultimate reconsideration of the concept of revision as part of the writing process, he views revision as “a specialized writing task that makes use of the processes in the writing model-proposing, translating, planning, reading, and so forth-to replace an earlier text” (Hayes & Berninger, 2014, p. 6)

Another aspect to be taken into account in the writing skills is, therefore, the task. When the task involves building on new ideas (via inference), providing prior knowledge and coherence to several ideas to achieve a communicative purpose, such as supporting a thesis with arguments, etc. In these cases, more cognitive resources are required than when the planned task is simple, in which it is only required to express literally what one knows. Therefore, the effect of overload of the working memory depends upon of the type of writing task.

From a teaching perspective, a real effort has been made to take students from the way of saying the knowledge to transforming it. The results of these efforts support the belief that strategies for transforming knowledge can be learned. This is a suggested challenge in research that is recurrent in the studies as applied to the cognitive processes of composition. (McCutchen, 2011)

With respect to metacognition, one of the most relevant features in the process of writing is the metacognitive control (Farahian, 2015; McCutchen, 2011; Silva, 1993; Ruan, 2014 Sasaki & Hirose, 1996; Whalen & Menard, 1995). As Flavell (1979)

coined it, the monitoring of cognitive activities such as memory or comprehension played an important role in the acquisition of language skills and, of course, the development of writing. Writers, in this case, retrieve their knowledge of the world in the different “cognitive tasks, goals, actions, and experiences” (Flavell, 1979, p. 906)

Metacognitive control in writing research is associated with the linguistic proficiency, but also the mastering of general metacognitive skills developed in the mother tongue (L1) (Schoonen et al., 2003). These skills range from the organisation and sequencing of the text, its cohesion, to the assertion of important ideas so that the reader understands them easily. Some studies have found a high correlation between the metacognitive skills and the performance in writing in EFL (Beker, 2011; Dülger, 2011; He, 2002; Qin & Zhang, 2019; Wenden, 1991; Yanyan, 2010; You & Joe, 2002; Zhang & Qin, 2018). Castelló (2008) exposed that several studies highlight the importance of regulation and, for her, it depended on the relationships of three variables that play a role in the process simultaneously: the representation of the task, the writer’s knowledge and the text or texts previously written and /or read.

It could be concluded that the teaching of writing should focus on helping students to be capable of build representations of their highest-level texts, i.e., representations of intentions or objectives and main points. It does not entail to possess such representations, but to acquire the ability to operate with them. What really needs to be developed is the process of composition as a whole, and not just any aspect or component and understand, as noted in educational studies, which transform the knowledge is not a process of growth but a reconstruction of the cognitive structure (Ruan, 2014; Tiryakoglu et al., 2019).

2.2. Writing Models

Hayes and Flower's (1981) and Scardamalia and Bereiter's (1987) proposals are the pioneers although some other researchers have supplemented them as Kellogg (1996, 2008) or even had them as references Berninger and Swanson. Takala and Vähäpääsi (1983) also offered a model focusing on the cognitive process and the function of the language involved, as a result texts were arranged depending on the coincidence of each variable.

Writing a text in the native language (L1) is a very demanding task, the same task in a foreign language (FL) may be even more exacting due to several reasons. Firstly, the language proficiency is often more limited in FL than in L1 (lack of vocabulary and consolidation of grammar, spelling, etc.) Sasaki and Hirose (1996) showed that the best predictor of the development of writing in L2 was the language proficiency in L2. Manchón et al. (2009) reviewed and supported this statement and found that the more proficient the writer, the more time for revision spent. These differences are said to be up to four times more often.

On the other hand, Guasch (2001) cited Krapels' (1990) strong suggestion of fact that the lack of competence in L2 writing is the result of general lack of competence in writing, he focused on the problem-solving nature of writing. Secondly, in contrast with the writing in L1, writers have automatized the low-levels processes, such as the access to the lexicon and the use of grammatical structures (Perfetti, 1985; Van Gelderen et al., 2003). This lack of automatization of the low-level processes and the retrieval of the lexicon and grammatical structures would consume the capacity of the working memory. FL writers usually devote all their efforts to solve low-level problems, for instance, finding the accurate word or build up sentences using the correct grammar structure. Therefore, the cognitive resources of the working memory would be used in these low-level processes, in contrast, it leaves takes up most of the room in the working memory for high-level processes, for example, the text

arrangement, the coherence and cohesion of the text or refuting or rebutting a certain position.

In this sense, different authors have stated that the less skilful writers tend to review, plan, and evaluate their writings at a surface level, rather than a textual level, at that stage revisions do not affect text meaning (Whalen and Menard, 1995; Silva, 1993; Sasaki and Hirose, 1996; Sasaki, 2000; Stevenson et al., 2006; Tiryakoglu et al., 2019). In contrast, Chanquoy (2001) noticed that less skilled writers revised their texts as much as older and more skilful writers even when they had not been told to do so explicitly.

2.2.1. Flower and Hayes (1981)

In their seminal paper, Flower and Hayes (1981) set the foundations of the writing theories (see Figure 1). Guasch (2001) states that Flower & Hayes come up with a metaphor to portray the writing mechanisms that will solve the rhetorical problem, these are the three components: the writer's long-term memory, the context of composition and its process' operations: planning, textualizing and revising, as pictured in Figure 1.

For Guasch (2001) in Flower and Hayes' model, planning refers to the procedures involved in the composition (selection and organisation) of the written text and the contents it will convey. Textualization, on the other hand, stands for translation as Berninger and Swanson (1994) named it later. Translating implies converting the ideas into a language string from actual handwriting to morpho-syntactic structure or pragmatic language act. Finally, revision entails the assessment of planning and textualization, according to the successive reformulation of internal objectives set up by the writer.

The role of the working memory will be promoted and set up for further research by Hayes in a later article and has been highlighted later by some other authors (Alamargot & Fayol, 2009; Chanquoy, 2001; Kellogg, 1996, Kellog et al., 2013).

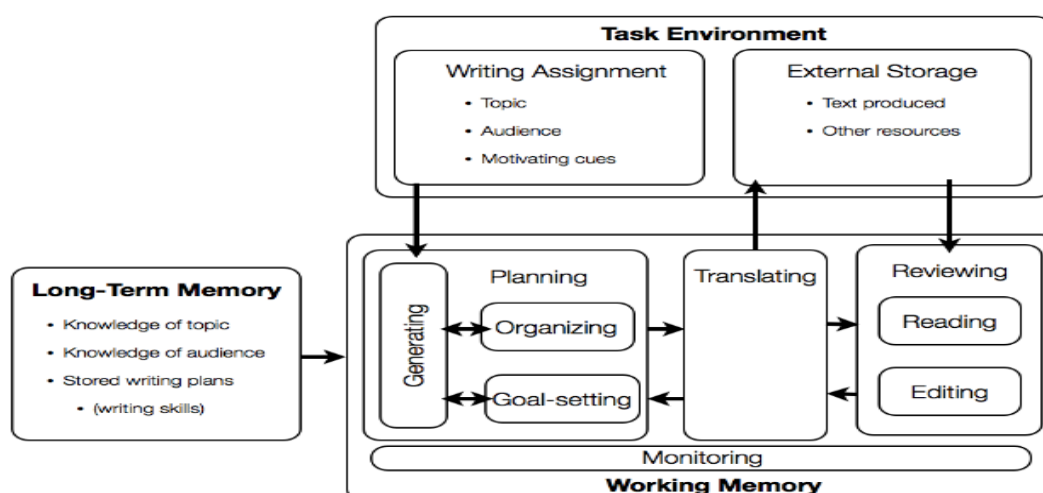


Figure 1. Flower and Hayes' model (1981).

Hayes revisited his model, whether on his own or with some other scholars Flower and Hayes (1981), Chenoweth and Hayes, 2001 and more recently Hayes (2012). In his later considerations of the writing process, Hayes focused on the growing importance of motivation and transcription. Transcription entails a cognitive burden undermined including spelling and punctuation and he highlights that it “plays a critical role in the development of children’s writing in the early years” (Hayes, 2012, p. 371). On the other hand, motivation and the affective implications of the writing process have been allegedly missed out in research and questions such as “whether people write, how long they write and how much they attend to quality of what they write depend on motivation” it stands for a field for future perspectives on the matter. He also addressed to some other aspects of psychological research to focus on the act of translation of ideas into written language when retrieving feeling to be brought to consciousness.

2.2.2.. Takala and Vähäpääsi (1983)

Takala and Vähäpääsi’s model is based on two major aspects. On the one hand, the cognitive processing and, on the other hand, the dominant intention or purpose for communication as shown in Figure 2 below.

In their categorisation, the task that entails less effort with regard to cognitive load is to reproduce information that has already been linguistically coded that is type I. The higher level of cognitive processing, organizing, involves arranging or organizing information that is known to the writer Type II.

"The most demanding level of cognitive processing involves inventing or generating new ideas or information as in expository writing Type III" as Weigle (2002, p. 30) pointed out. This third type of writing, which involves knowledge transforming is seen as most critical in academic writing for first language writers. Takala and Vähäpääsi based their model on Jakobson's model of six communicative functions.

Dominant Intention/Purpose	Cognitive Processing	I REPRODUCE	II ORGANIZE/REORGANIZE		III INVENT/GENERATE	
	Primary Audience	Linguistically precoded/Predetermined Information	Spatial/Temporal	Known Phenomena, Concepts or Mental States	Spatial/Temporal	New or Alternative Phenomena, Concepts or Mental States
1. To learn (metalingual/mathetic)	Self	Copying Taking dictation	Retell a story (heard or read)	Note Resume Summary Outline Paraphrasing	Comments on book margins Metaphors Analogies	
2. To convey emotions, feelings (emotive)	Self Others	Stream of consciousness	Personal story Personal diary Personal letter	Portrayal	Reflective writing - Personal essays	The traditional literary genre and modes can be placed under one or more of these four purposes.
3. To inform (referential)	Others	Quote Fill in a form	Narrative report News Instruction Telegram Announcement Circular	Directions Description Technical description Biography Science report/experiment	Expository writing - Definition - Academic essay/article - Book review - Commentary	
4. To convince, persuade (conative)	Others	Citation from authority/expert	Letter of application Statement of personal views, opinions	Advertisement Letter or advice	Argumentative/persuasive writing - Editorial - Critical essay/article	
5. To entertain, delight, please (poetic)	Others	Quotation of poetry and prose	Given an ending - create a story Create an ending Retell a story	Word portrait or sketch Causerie	Entertainment writing - Parody - Rhymes	
6. To keep in touch (phatic)	Others	Postcards	Postcards, letters			
		DOCUMENTATIVE DISCOURSE		REPORTORIAL DISCOURSE		EXPLORATORY DISCOURSE

Figure 2. Takala and Vähäpääsi's (1983) models of writing discourse.

2.2.3. Scardamalia and Bereiter (1987)

This model has inspired many scholars and it certainly stands for one of the main models to approach the rhetorical problem-solving activity that writing means. These authors model focused on the different ways of handling the process of composition. In this particular model there is a difference in the operation depending on the cognitive load of the composition. Guasch (2001), when comparing both, stressed the epistemic nature of writing in Flower & Hayes' mode in which writing is a way of generating thought in contrast with Scarmalia & Bereiter's as the latter was conceived as an exertion of the cognitive abilities.

The knowledge-telling strategy refers to the production of a text by formulating ideas as they are retrieved from their memory without any conceptual or linguistic reorganisation. Chanquoy (2009) pointed out the relevant component of this strategy as it entails the mental representation of the assignment or task and it also includes the knowledge about content discourse stored in the long-term memory (Cf. Figure 3).

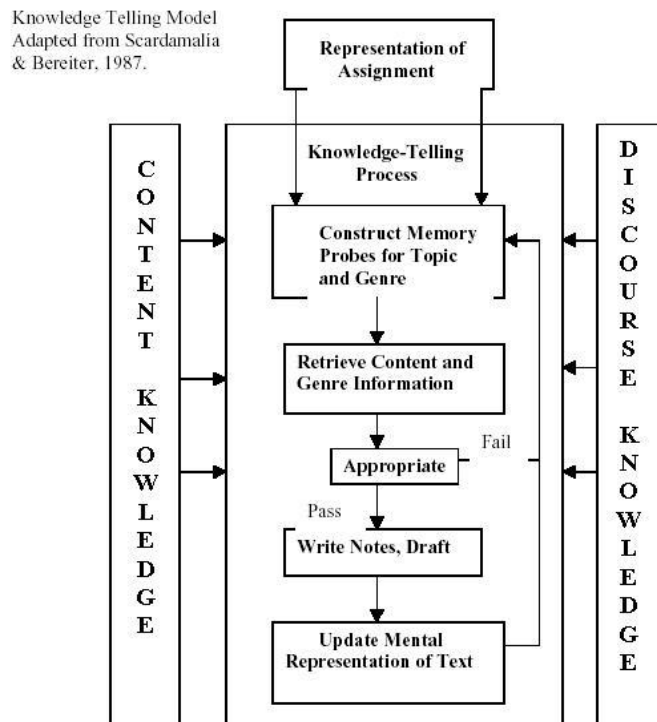


Figure 3. Scardamalia and Bereiter's model of Knowledge-telling writing strategy (1987).

On the other hand, the knowledge transforming strategy relates to the interaction of the writers' ideas and their representation of the text. It brings about more sophisticated types of processing as writers' ability is tested so that the result of generating the text is what authors want to say .

Knowledge-Transforming Model
Adapted from Scardamalia &
Bereiter, 1987

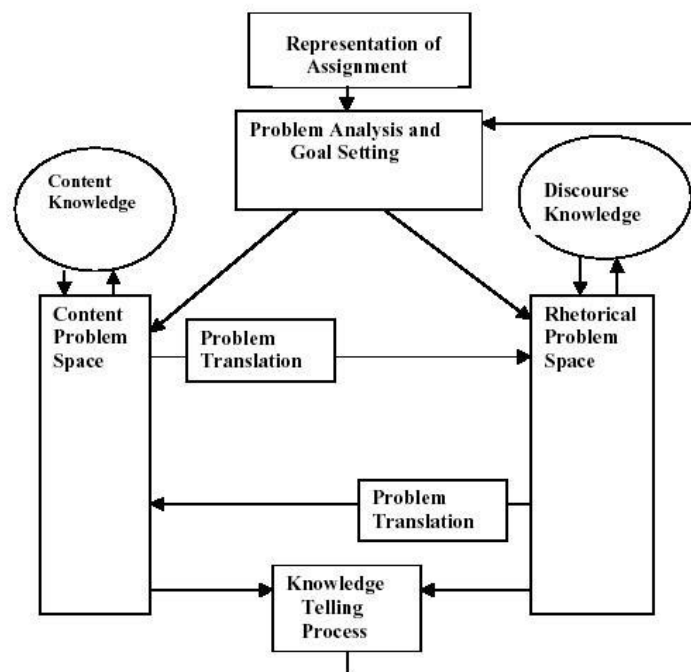


Figure 4. Scardamalia and Bereiter's model of Knowledge-transforming writing strategy (1987)

The assignment of knowledge-telling and knowledge-transforming is rather task-dependent than writer dependent as depicted in both sides of Figure 4. Both strategies may well put into practice by the same writer according to the discourse situation in which writers may engage (Guasch, 2001). The real problem to be solved is the cognitive demand, as a matter of fact, he points out that some types of texts (tasks) we can produce automatically have low cognitive demand. On the other hand,

some other tasks are to be carried out only by adapting and elaborating information and its language forms.

These models place the mental processes of organisation and composition depending on the topics to be covered and the rhetorical context in the centre of the theory of writing. The features of the previous models and the extension stated by Kellogg (2008) can be compared in Figure 5 below.

Authors	Type of text according to the cognitive load			
Takala & Vähäpääsi (1983)	Type I	Type II	Type III	
	Texts reproduce information that has already been linguistically coded.	Texts that entail the higher level of cognitive processing. They involve arranging or organising information that is known to the writer.	Texts that require the most demanding level of cognitive processing involves inventing or generating new ideas or information.	
Examples	Dictation / Copying	Summary	Essay	Academic article
Scardamalia & Bereiter (1987)		Knowledge-telling	Knowledge-transforming	
		Knowledge-telling consists of creating or retrieving what the author wants to say and then generating a text to say it.	Knowledge-transforming involves changing what the author wants to say as a result of generating the text. It implies an interaction between the author's representation of ideas and the text representation itself.	
Kellogg (2008)		Knowledge-telling	Knowledge-transforming	Knowledge-crafting
		Cf. Scardamalia & Bereiter (1987)	Cf. Scardamalia & Bereiter (1987)	In knowledge-crafting, the writer shapes what to say and how to say it with the potential reader fully in mind. The writer tries to anticipate different ways that the reader might interpret the text and takes these into account in revising it.

Figure 5. Kellogg's (2008), Scardamalia and Bereiter (1987), Takala and Vähäpääsi (1983) writing models compared.

2.2.4. Berninger and Swanson (1994)

For some authors like Alamargot and Fayol (2009) this description is more accurate with respect to the process than Flower and Hayes' and Scardamalia and Bereiter's. Berninger and Swanson determine three successive steps, as represented in Figure 6, showing how young writers progressively integrate writing processes and sub processes. They interact with each other as they reach a more mature stage:

- a. Planning
- b. Translating
- c. Reviewing. Revision is only an external process; it only concerns the physical text not an eventual mental representation.

This latter stage is constrained by writer's WM capacity & metacognitive knowledge about revision (Alamargot & Chanquoy, 2001, 2004):

- a. Appears at sentence level
- b. Paragraph level
- c. Text level from a local-to-global perspective

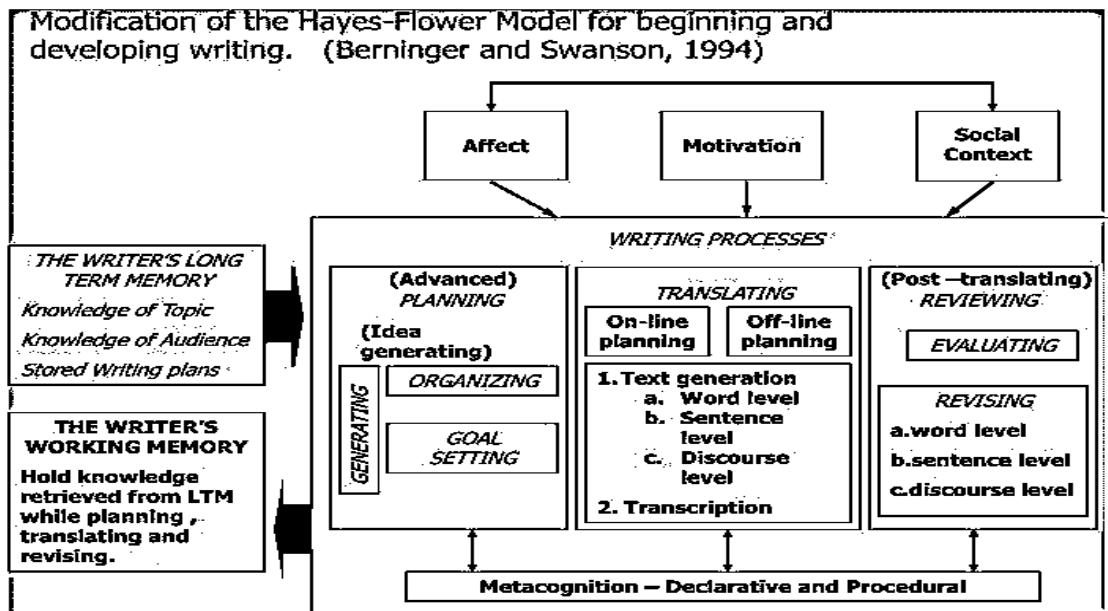


Figure 6. Berninger and Swanson's model (1994).

2.2.5. Kellogg's Models (1996, 2008)

Kellogg's revision of the existing writing models (1996) brought about the recursivity of the writing process. In this case, he related the three phases depicted in Figure 4 below and underlined the advantage writers take when they move forward and backwards from the monitoring to planning and executing their texts. He also stressed the integration of the Working Memory (WM) and its components based on Baddeley and Hitch (1974) WM architecture: central executive for complex processing and two slave registers, the visuospatial sketchpad and the phonological loop and its relevance in the completion of writing tasks.

He did also review the attentional resources deployed by writers in the textualization of the knowledge implemented by writers and described by Scardamalia and Bereiter (1987). He emphasised the role of the readership in the writers' mental representation of the task as outlined in Figure 5 above (Kellogg, 2008).

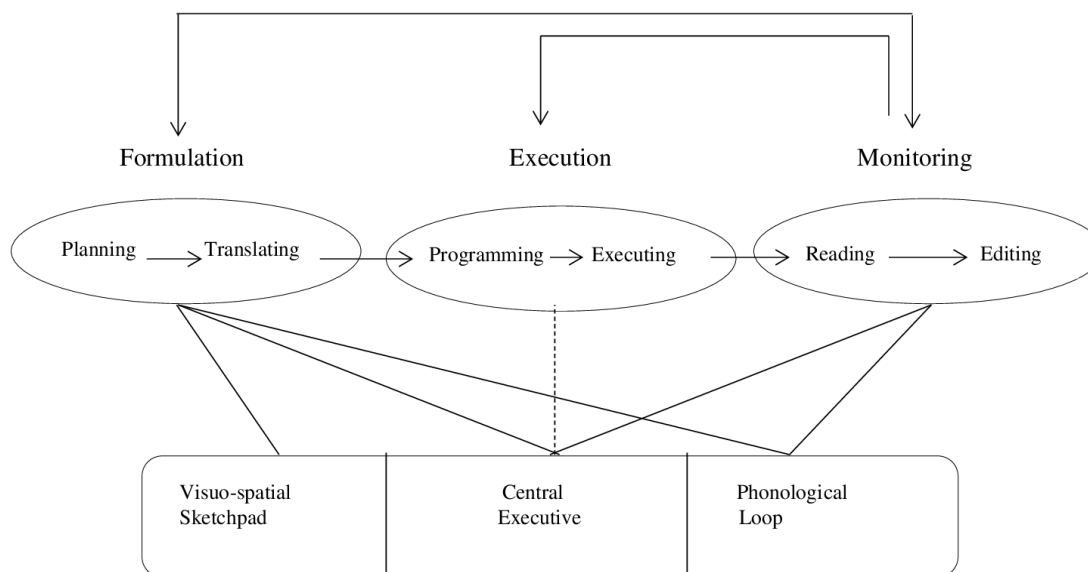


Figure 7. Kellogg's model of writing. (1996, p. 59).

The influence of the constraints of the WM in the whole process and, particularly, when monitoring the accomplishment of the writing task, is observable from Figure 7. It also stands out the role of the phonological in the stages concerned with idea generation and revision. Kellogg (2013) explored the the influence of WM in the generation of ideas and its textualisation.

2.2.6. Hayes' 2012 version of writing model

Hayes (2012) proposed a new model of writing from his previous ones (Flower & Hayes, 1981; Chenoweth & Hayes, 2001). In his latest analysis of the writing process that has been identified as probably the most comprehensive of writing models (Leijten et al., 2014), Hayes (2012, p. 371) stresses the growing importance of motivation and transcription. Transcription entails a cognitive burden undermined including spelling and punctuation and he highlights that it “plays a critical role in the development of children’s writing in the early years”.

On the other hand, motivation and the affective implications of the writing process have been allegedly missed and questions such as “whether people write, how long they write and how much they attend to quality of what they write depend on motivation” stand for a field for future research. He also addressed to some other aspects of psychological research to focus on the act of translation of ideas into written language when retrieving feeling to be brought to consciousness. Moreover, in this last proposal, Hayes disposed of the concept of "monitor" which occupied a relevant place in the 80s cognitive psychology, not only in terms or written production but also in second language acquisition as exposed by Krashen (1985).

In Hayes' last model (2012, p. 373), the monitor was, in his last model, a feature that “accounts for an individual difference among writers”. Besides, planning and revision were revisited and thought as specialized writing activity and regarded as a “special application of the writing model” (2012, p. 376) as picture 8 shows.

Last but not least, Hayes (Cf. Figure 8 below) presented three different levels in which he broke down into the knowledge-telling approach exposed by Scardamalia and Bereiter. As he cited it, his analysis built on Fuller’s (1985) and called in for flexible-focus texts, fixed-topic texts and topic elaboration texts. The first two types have a different developmental trajectory as he named them. They are to be found in younger students whereas the topic-elaboration text becomes more common after sixth grade. Hayes' main concern is to be able to plan and design a model for teachers and to cover different kinds of texts with different kinds of strategies for different kind of writers. Revision is placed at the resource level.

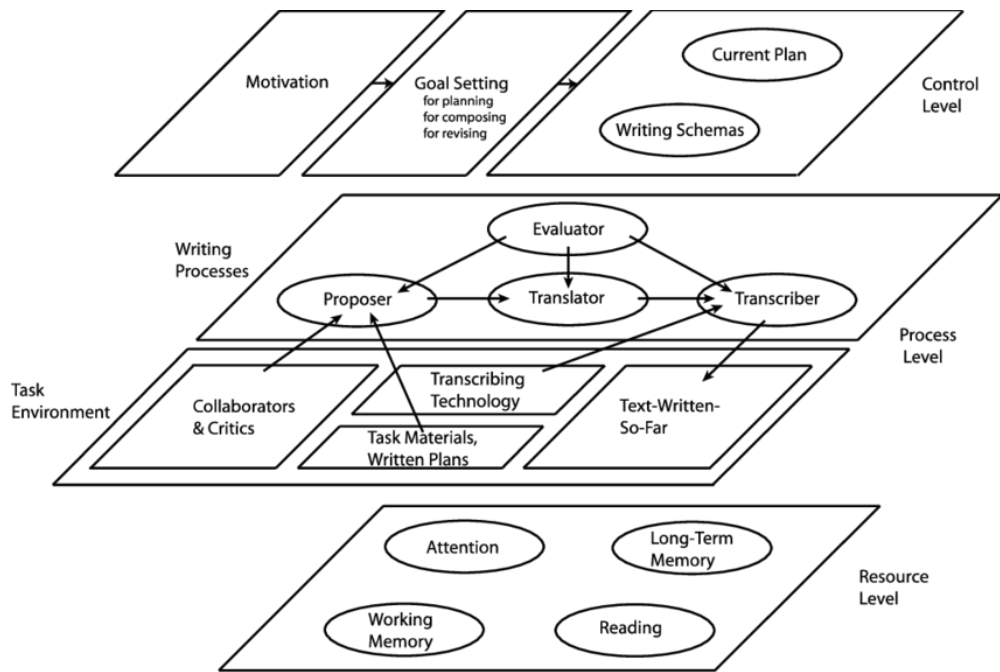


Figure 8. Hayes' (2012) model of written language production.

2.3. Metacognition in writing

Writing is applied metacognition

Hacker, Keerer and Kircher

Metacognition or metacognitive regulation strategies and their implications in writing research in L1 and L2/FL have gained some ground in the last few years. Several authors have suggested the extent to which the acquisition of these strategies can benefit the mastering of writing skills, quality of texts and knowledge development (Allal, 2000; Chanquoy, 2001; Dülger, 2011; Farahian, 2015; Hacker et al., 2009; Hurtado, 2013; Knospe 2017, 2018; Kodituwakku, 2008; Maftoon et al., 2014; McCutchen, 2011; Negretti, 2012; Ruan, 2014, Xiao 2007, 2016).

Metacognition is a reference term in the field of psycholinguistics. It was coined by Flavell (1979) as the “knowledge of cognition about cognitive phenomena”. Simply, the metacognitive strategies are those that one utilizes in order to be aware of the acquisition of knowledge. As Anderson (2008, p. 99) puts it, “metacognition results in critical but healthy reflection and evaluation of thinking that may result in making specific changes in how learning is managed, and in the strategies chosen for this purpose”.

Flavel (op. cit) believes that the monitoring of any cognitive task brings about the interaction of these four elements: metacognitive knowledge, metacognitive experiences, goals (or tasks) and actions (or strategies).

Knospe (2017) puts together Hacker et al. (2009), Harris et al. (2009) and Sitko's (1998) approaches to establish a framework for metacognitive writing knowledge and regulation. On the one hand, the metacognitive writing knowledge includes all what writers master on themselves as writers and their language proficiency as well as the tasks they may be engaged (declarative knowledge). As Hurtado (2013) puts it, the ability to communicate the knowledge about the writing process and its components. The knowledge about the way writing strategies should be employed (procedural knowledge), De Keyser (1998) as cited by Rinnert &

Kobayashi (2009, p. 39), asserted that “knowledge becomes proceduralized though engaging in the target behaviour and the procedural knowledge can be refined and automatized through repeated practice”.

Finally, the awareness about under which circumstances declarative and procedural knowledge should be put into practice (conditional knowledge). For instance, writers can identify what the needs for planning: mind maps, specific words, checklist... are according to the type of task ahead. This merged model exposed has its links with the assessment and the interventions in writing in order to make writers more independent and autonomous and aware of their own writing learning process.

In contrast, the metacognitive regulation in writing involves monitoring and controlling writing. With respect to monitoring, the actions carried out in order to check if the actual text meets the intended text are: reading, rereading, reflecting and reviewing. With regards to controlling, the actions to fulfil this regulation are planning, drafting, translating and revising (Karlen, 2017).

Metacognitive regulation allows writers to control the actions and strategies to be undertaken to solve the rhetorical problem, Chanquoy (2001) emphasizes the fact that depending on the text, the audience and the type task (goal, type of text, task instructions) the sub-processes that comprise organisation and goal setting come into play. The knowledge that writers have over the deployment of those strategies is known as metacognitive control, as Allal (2000, p. 149) put forward when she cited her work alongside Saada-Robert (Allal & Saada- Robert, 1992) “metacognitive regulation as an *interface* which assures the coordinated functioning of two other components of the subject's cognitive activity: the representational network and the production processes mobilised to accomplish the task”. She also added the double function of metacognitive regulations. On the one hand, they guide the production in a way that meets the writers’ representations. On the other hand, they change writers’ representations to include the result of the composing processes (Allal, 2000, p. 149).

Ribas (2000) cited Allal & Saada-Robert (1992) to explain how these authors stated that the metacognitive regulations take place when the learning situation is over and are used to manage the processes undertook by writers. These regulations may involve different degrees of awareness which stand for a display of the metacognitive nature of the regulations. These awareness-rising on the regulations entails four degrees (Allal & Saada-Robert, 1992, cited by Ribas, 2000, p. 24): (i) implicit regulations, no awareness on the writers side; (ii) explicitable-on-demand regulations;

(iii) Explicit regulations, writers use intentionally and orally verbalise; (iiii) Instrumental regulations which have external support.

2.3.1. Assessment of metacognitive strategies

The impact of the metacognitive knowledge on the writing process has been the focus of this corner of the research in cognitive processes. Product-oriented and process-oriented have been used to measure the deployment of metacognitive strategies in writing and its correlation with text quality. The assessment of actual productions either hand-written or typewritten have been complemented with screen-recorded writing processes and verbalised actions under think-aloud protocols and self-reported questionnaires or immediate recall interviews have also been the means to gather meaningful data.

With regards to L1, in the Asian context, Kodituwakku (2009) assessed the metacognitive knowledge of a group of 725 secondary school students from Sri Lanka in their native language from urban and rural contexts after several interventions which were observed by researchers and participants were also interviewed. Results showed that student writers seldom added information or regarded themselves in the role of readers. Besides, the revisions they carried out focused on formal aspects of language conventions and paid attention to the final version of the text exclusively which all together implies a rather static mental representation of the text.

With regards to L1, in English, Karlen (2017) validated a questionnaire to measure the metacognitive knowledge which covered the aspects related to planning, monitoring the writing process and revising the text of around two hundred student writers in Switzerland and engaged them composing the literature review section of an academic text in their L1, German in this case. Later on, he associated the results of the metacognitive knowledge from the questionnaires with a self-report strategy use and the quality of the texts. His findings showed that metacognitive knowledge and text quality correlated positively, even when this knowledge was self-perceived. He also advocated for the use of such instruments to guide practitioners' interventions to improve students' metacognitive strategy knowledge.

With respect to EFL in the Chinese context, Yanyan (2010) assessed the metacognitive knowledge of 120 first-year university students with different EFL

proficiency levels. Participants wrote a composition on a common topic (no genre was specified) and filled out a questionnaire. Results showed that the students' metacognitive knowledge on writing correlated positively with their writing proficiency, and that it was far from satisfactory. It was stated that participants by and large did not have a high metacognitive status. The proposal for instruction advocated for an urgent upgrade of their metacognitive knowledge which in turn would potentially improve their writing ability.

Ruan (2014) assessed the use of metacognitive skills in EFL writing of undergraduate Chinese students. He used semi-structured interviews to define their awareness of the person, task and strategy in an interactional model from the basics of metacognition stated by Flavell (1979). The person variables were given account by means of writing self-efficacy, writing anxiety and motivation for EFL writing. The task variables covered the task purposes, task constraints and cross-language task interference and the strategies gave account of planning, text generating and revising and redrafting. These aspects come into play in an interactional model of metacognitive awareness, Ruan (2014, p. 87) pointed out that the variables are interconnected and that "effective EFL writing, therefore, is the outcome of the interaction of the three dimensions of metacognitive awareness that student writers possess."

A few years later, in a similar context, Qin and Zhang (2019) conducted a research on the metacognitive knowledge of EFL multimedia writing of 400 higher education students in China. A questionnaire was validated and after the completion of a writing task, they checked that successful writers carried out organised before-writing planning and self-regulated their writing, moreover, those writers assessed the outcomes of their compositions. Such results contrast with Yanyan's (2010). They suggested that in terms of pedagogical intervention, more attention should be paid to planning, monitoring and evaluating the text along the process which is pretty much in line with Yanyan's (2010) claims in this particular matter.

In the European context, Knospe (2017, 2018) engaged Swedish students in writing several essays in German as their second FL and one in English as their first FL and she carried out immediate recall interviews. The affective factors were emphasised as well as the fact that students took advantage of the reflection on strategies they carried out when writing in those languages like literal translation. Moreover, she asserted that the role of metacognition has been usually accepted as a

positive influence in learning, she reminded that it had been evoked as a factor for academic success, the self-regulation of learning, the development of learning strategies and as an influence “for the quality and effectiveness of learning” (2017, p. 30). In contrast, Harris et al. (2010) reported the effects of the shortage of metacognitive knowledge in writers who had problems writers who do not use this knowledge produce quality texts. They stated that writers' ability to plan and revise differ significantly in from novice to skilful writers. The time devoted to plan and the aspects in which they focused were different: novice usually go for superficial changes rather than global meaning of the text.

Finally, as for the intervention of metacognitive strategies and its impact on text quality, Dülger (2011) examined the effects of metacognitive strategies on writing and suggested that strategies are found effective on total writing achievement in general, and on content, organization, vocabulary, and mechanics of writing in particular. However, meta-cognitive strategies are not found to create a meaningful difference in the language use dimension. Correspondingly, metacognitive strategies are believed to be effective on retention in dimensions of content, organization, vocabulary, which in turn constitute a positive effect in a retention test four months later. However, metacognitive strategies are not found to have a significant influence on language use, and mechanics in writing.

2.3.2. The role of working memory

The role of working memory (WM) in the writing processes has gained importance in the last thirty years and its relationship with cognitive and metacognitive processes has become a trendy and significant issue in learning processes, particularly in language learning and in writing research. In recent years, the importance of the working memory in writing processes has been stressed and researched. Hayes (2006, p. 28) recognised its essential role in the functioning of the cognitive processes and exemplified what the working memory functioning is like: “anyone who composed a brilliant sentence and then forgot the end of it before it could be committed to paper has experienced one of the problems that limited memory creates for writers”

Baddeley (1986) came up with the structure of the WM as a construct of the visuo-spatial sketchpad, the phonological loop and the central executive. The

phonological loop enables writers to recall the information related to the written encoded form of speech and allows the visuo-spatial sketchpad represent the space and shape for the written form to be actually transcribed into words. Both registers are under control of the central executive which coordinates both. Novice writers spend most of their cognitive efforts in the transition between phonological and the orthographical stages (Alamargot et al., 2005).

WM has proved to play a central revision as it determines up to a great extent the starting point, the evolution and the functioning of the writing processes, at the same time they expressed the difficulty to elaborate a unified model of the constraints of the WM on the writing processes (Alamargot & Chanquoy, 2004; Alamargot & Fayol, 2009).

Kellogg (1996) noted the role of WM in writing and put forward the way that it is used to stock and retrieve information to be used in an efficient manner temporarily to solve problems readily. Whether visual or verbal, the WM has to do with the way we gather information and arrange from the phonological loop and the deployment from the central executive system. Kellogg's model's purpose was to bring together both, Baddeley's (1986) model of WM and Hayes and Flower's (1981). Some other studies have brought to light the relevance of WM in verbal and the impact that other cognitive dissonant activities can have on it. For instance, how diverse verbal activity can affect sentence completion or text generation. (Chenoweth & Hayes, 2003; Kellogg et al., 2007; Levy & Marek, 1999).

Butterfield et al.'s (1996) produced the Procedural Model and the significance of the long-term memory, working memory and metacognitive knowledge. They consider that revisions are mental processes since they are systematically built at a mental level before they are carried out through edition. In this case the knowledge stored in LT memory allows to free up resources for the WM.

Chanquoy (2009, p. 86) asserted that some aspects during the completion of the writing tasks collided in the use of the WM, for instance, the awareness of the fulfilment of the task, the type of vocabulary and grammar structures used are part of the process for revision "necessitates a constant interaction between linguistic knowledge and contextual knowledge and between processes defining the task, evaluating the text, detecting errors and selecting appropriate strategies."

Likewise, Chanquoy (2001) reviewed the role of WM on the cognitive overload that affect primary education students in writing tasks. Later on, WM's role will be a central part of her study on revision processes (Chanquoy, 2009). She joined the current of different authors who have emphasised how WM influences the cognitive and metacognitive processes just as some other scholars (Alamargot & Chanquoy, 2001; Alamargot & Fayol, 2009; Gathercole & Baddeley, 1993; Kellogg, 1996, Hayes 1996, Levy & Marek, 1999;)

Nevertheless, the role assigned by Hayes and Kellogg differed (Hayes, 2008) For Hayes (2006, p. 29) WM is a resource "that's is presumably used by all the writing processes". On the other hand, Hayes (2006) asserted that for Kellogg (1996) verbal and spatial WM affect writing processes differently. For Kellogg, verbal WM affects translating and reading, whereas editing and planning use spatial WM. In fact, Hayes (2006) gave account of several studies in which articulatory suppression and irrelevant speech affect significantly text transcription, Type I texts according to Takala and Vähäpääsi's models (1983).

In some other studies, Chanquoy (2001, 2009) pointed out that the limited capacities of WM constrain the writing process and could lead to a cognitive overload. This author reviewed the role of WM in revision processes (2009) and described different attempts to reduce the excess of cognitive demand and such tasks by stating several stages of online revision, after writing or the day after the task has been completed.

2.4. Writing in L2 / FL

Writing skills are part of the syllabus of foreign language courses and their mastery is the part of the assessment of the competence in any proficiency test. It is present in the vast majority of educational systems from primary education to higher education.

Writing has become relevant most parts of the world and the teaching and learning of a foreign language, even two foreign languages, stands for a common educational policy in many countries. Each one of them must set a longitudinal plan to outline the objectives to accomplish the objectives of the local curriculum. In those terms, writing becomes the most frequent language skill used to evaluate the students' acquisition of the competences and contents to be learned.

Traditionally, writing has been associated with transcribed speech which is a conception on that inspired foreign language methodologies, particularly English, such as audiolingualism (Richards & Rodgers, 2014). Dülger (2011) highlighted this methodological perspective as most of L2/FL students are exposed primarily to the spoken language and its conventions and the written skills are supposed to be acquired later and subsumed to those strategies learnt in the writers' L1 literacy.

2.4.1. L1 vs L2 / FL

Writing in a second or foreign language involves a higher cognitive effort and the problems to be solved are greater and more varied (Manchón et al., 2009). Writers engaged in composing a L2/LE text face a problem in which they must be aware the conditions of the situation, the language conventions and their knowledge of the topic and the world (Dülger, 2011; Weigle, 2002).

The basic writing processes of writing may be similar in L1 compared to L2/FL. Writers need to keep the attention to the task, the reader, but also to activities of a costly cognitive load like the organisation of global textual meaning which is diminished by the priority given to formal aspects. As Weigle (2002) depicted from

research carried out thus far L2/FL writers spent less time planning and revising the content of their texts, as L1 writers without the appropriate metacognitive knowledge (Harris, et al., 2010; Karlen, 2017). Moreover, L1 writers wrote more fluently and accurately.

Schoonen et al. (2003) took into account these findings and theirs and suggested that L2/FL writers kept their attention on formal features of their texts which meant a demanding load for the WM in such a way that the retrieval of the information concerning the metacognitive writing knowledge in the LTM was really constrained in what they defined as the Inhibition Hypothesis. This postulation implied the focalization of cognitive resources in formal, superficial aspects of the language, also known as low-order skills (Tiryakoglu et al., 2019) and a the simplification of the conception of the text by no evaluation of the aspects related to the goals set according to the tasks: the type of readers, the consistency and amount of the content, the organisation of the text and the choice of the appropriate vocabulary.

Weigle (2002) stressed the affective and emotional aspects that L2/FL writing had brought about in diverse settings and pointed them out as part of the constraints that may have an impact on the motivation and the willingness to improve one's writing skills.

2.4.2. Writing in L2 / FL in different contexts

Guasch (2001) made the difference between L2 and FL although in some other studies apart from those in a context of languages in contact. As we have mentioned before, the context need to be set out to determine the implications of the status of languages and the communities involve in the study. In sociolinguistic terms, this can be quite a delicate question and it must be fully contextualized. That may avoid the possibility of generalization of results, in contrast, it provides the account of a particular situation of the participants of studies and the relationship between the environmental languages, school and the attainment of academic skills.

The vast majority of writing studies are in a context in which English is the L2 of newcomers like South American Spanish speakers in the USA (Jones & Tetroe, 1987). Territories in which there is a formal learning the second and foreign language, English as a FL in different parts of the world in Asia (Kodituwakku, 2009; Ruan, 2013, Sasaki & Hirose, 1996, Tsai, 2009; Xiang, 2004, Xiao, 2007, 2016) in Europe

(Van Weijen et al., 2009, Schoonen et al., 2003), English in monolingual communities of Spain (Manchón et al. 2007, 2009). In other contexts in Spain, more than one language is official and English is L3 or foreign language very few instances have been found and those studies are quite often based on HE students.

On the other hand, there are some other studies with the focus of other languages playing the role of the foreign in contexts where English is L2 and German, for instance, is L3 or second foreign language (Knospe, 2017)

In this sense and context the research carried out by different studies in Belgium and the Netherlands did also look for the relationship of different aspects of writing research in L1 and L2/FL. The participants of these investigations have covered different ages and focused on several types of genres although they used argumentative texts at higher education level.

In this particular context, Schoonen et al. (2003) assessed the writing skills of Dutch primary education students compared L1 and EFL. They justified their comparison on the fact that: "Compared to L1 writers, L2 writers will not only differ in their linguistic knowledge of the (second) language, but – due to differences in exposure to the L2 – they most likely will also differ in their ‘fluency’, i.e. the ease with which words and grammatical structures can be accessed during writing." (p.8)

Van Weijen (2008) compared the orchestrating of cognitive skills and text quality in L1 and L2 writing of 20 HE students. And they also gained insight in the differences between the process and product relationship in L2/EFL writing. They identified different cognitive activities: Reading, planning, generating ideas and formulating and its orchestration during the writing process, in other words, when and how these activities took place depending in the way that task representation is changing during the completion of a writing task. They found differences depending on the writing task and the moments when those activities were undertaken by participants, there was a wide inter-writer variability, much greater than the difference between tasks.

Tillema's (2012) offered some conclusions in her attempt to give account a comparable model for the description writing processes in L1 (Dutch) and L2 (English) which is in fact the dominant foreign language in that context. On the one hand, with a remarkable effect on the methods followed in our research, she tried to find a way to measure text quality in both languages. She pointed out that bilingual raters with the

appropriate benchmark assessment references could do since it had not been stated a method to do so thus far.

Tiryakoglu et al. (2019) did also focused on the relationship between the processes in L1 and EFL of Turkish HE students. In terms of product, the texts written by their participants made patent that those with lower EFL proficiency gave up "expressing their intended meaning" (p. 18). With regard with the analysis of the writing processes, data was obtained by means of keylogg software (Inputlog) and it brought about significant differences in fluency in EFL since the writing process in L1 were pretty similar. In EFL higher-level participants took more time formulating ideas and revising then and spent less time, as it could be expected, searching for words. The TAP also showed that higher EFL proficient students had more concerns over rhetorical problems than lower EFL students.

In the Asian context, Sasaki (2000) pointed out the fact that many studies during the late 1980s compared L1 and L2 writers' performances as they realised that the strategies that they deployed in L2 were similar in both languages. The studies accounted by Sasaki, as she cited them, did not cover a huge of sample (Cumming, 1989; Whalen & Menard, 1995, Jones and Tetroe, 1987; Arndt, 1987; Silva, 1993; Skibniewski, 1988). A few conclusions were withdrawn from her review of those up-to-that-date papers (Sasaki, 2000). On the one hand, she highlighted that, in her review, L1 and L2 writing strategies were basically similar, no matter how skilled writers were, which seems to indicate that L1 writing strategies can be transferred to L2 writing. Moreover, L2 texts' quality is linked with the quality of the students' general writing strategies rather than with their L2 proficiency.

Sasaki (2000) did also suggest some limitations on the research offered by those studies. First of all, she admitted that participants were from heterogeneous backgrounds, and their L2 proficiency was rather high. Secondly, the questions of skilled writers to contrast their writing strategies. Her proposal pointed at a "novice versus expert contrast where expert were those who used L2 writing for professional purposes" (p. 263). In a similar way, different studies have also targeted the differences between skilful or expert writers and less-skilled writers to stablish the discrepancies in writing skills (Baker et al., 2003; Chanquoy, 2001; López et al, 2018; McCutchen, 2011; Rijlaarsdam & Van der Bergh; 2006; Sasaki, 2000; Sommers 1980; Stevenson et al., 2006; Van Gelderen et al., 2003; Van Steendam et al., 2010). Finally, she

asserted that the use of think-aloud methods exclusively to gather data to describe the L2 writing processes would be in need of a more robust research design with instruments to triangulate those findings.

In her study of the writing process in L1 and EFL, Sasaki's (2000) findings in her study can be summarised as follows:

1. The experts wrote longer texts with more complex development at greater speed than the novices.
2. The experts spent a longer time before starting to write, planning a detailed overall organization, whereas the novices spent a shorter time making a less detailed plan.
3. Once the experts made their global plan, they did not stop and think while writing as frequently as the novices. In contrast, the novices tended to stop and plan what they were going to write every time they finished writing one semantically coherent chunk.
4. L2 proficiency or lack of it appears to explain part of the difference in strategy use between the experts and the novices. The novices often stopped to translate the generated ideas into English whereas the experts often stopped to refine their English expression.
5. After 6 months (two semesters) of process writing instruction, neither the quality of the students' compositions nor their writing fluency appear to have improved. Their relatively low L2 proficiency still constrained their writing speed: They still had to stop to translate often. Although the number of strategies they used decreased by half for some reason, some of the students started to use skilled writers' strategies such as "rereading" and "global planning".
6. Both "global planning" and "local planning" monitored/guided the participants' writing processes.
7. The experts' global planning and partial adjustment of such planning while writing was based on their elaborated but flexible goal-setting and assessment of the characteristics of the given task for successfully achieving the task. Such behavior appears to be a manifestation of writing expertise that cannot be acquired over a short period of time. (p. 282)

Zamel (1983), in her study case of six Chinese students of English as L2/FL, makes the difference between skilled and unskilled writers in EFL. She states that (p.

180) "the skilled writers know what to anticipate, how to pace themselves, and what to focus on as they write and rewrite. [...] They all considered how to make meaning first, then how to order it, and finally how it can best be expressed". On the other hand, the least skilled writer of her study "seemed to view writing as a static transcription of a series of parts—words, sentences, paragraphs".

Manchón et al. (2009) described the problems of L2/FL writing in terms of the availability and accessibility of the linguistic knowledge and described the solutions to two main problems: compensatory and upgrading.

2.4.3. Chenoweth and Hayes' (2001) model of written language production

Chenoweth and Hayes came up with an adaptation of the model of written language production proposed by Hayes (1996). In this model the written production breaks down into three levels as presented in Figure 9.

As they defined it (Chenoweth & Hayes, 2001) the resource level intertwines the internal memories and general purpose processes so that they may well be used in other levels.

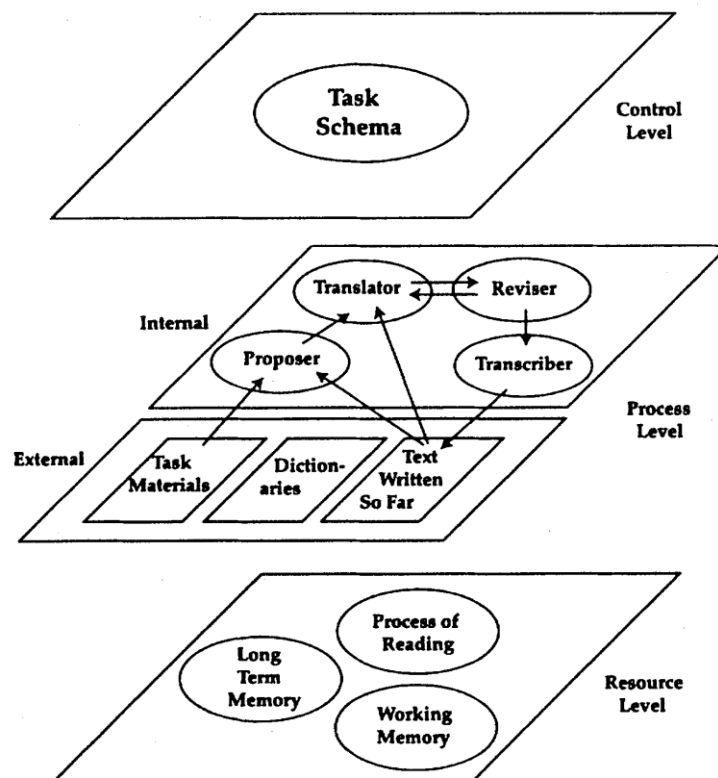


Figure 9. Chenoweth and Hayes (2001).

They split the process level into two different processes: internal and external. For them the internal processes are a proposer which comes up with the ideas to be conveyed, the translator turns these ideas into language in the appropriate morphological and syntactical features, the reviser assesses the language that may be ready to be used and the writer writes up to that moment, and finally, the transcriber puts it altogether into written language (Chenoweth & Hayes, 2001). The external environment as they defined it:

includes the audience, the text the writer has written so far and task materials such as source texts, critic's comments or notes. The environment may also include dictionaries, style guides, computer interfaces, spelling checkers and so on. The external environment described here is roughly equivalent to the task environment described by Hayes (1996) which includes both the social and the physical environments of the writer. (p. 84)

The control level covers the task schema and comprises the task goals and the interactions of the processes, and, finally, at the process level, Chenoweth & Hayes (2001, p. 84) detailed "a typical set of interactions that might be activated by the task schema".

2.5. Revision

The very difference between writing and speech – the possibility of revision.

Nancy Sommers

Writing is rewriting but it is also rereading and rewriting again. Revision occupies one of the most prominent places in writing research. It has even been awarded with a special status in the whole process and has been described as a parallel or even different process from writing (Hayes et al., 1987). It consists basically in taking advantage of the evaluation process of reading comprehension and detect and diagnose those problems in the online text to carry out a series of strategies to reduce the distance between the actual text and the intended text by editing or "transforming" it.

Revision as part of the writing process has been included in the different and influential models of writing. It must also be noted that it has also been included in paradigms related to metacognition and self-regulated writing since writers "writers have to prepare and plan what and how to write, monitor their draft writing process, and evaluate and revise what they have written." (Karlen, 2017, p. 62).

The concept has evolved through time and the different authors have emphasized aspects that had not been included in some of those models: the use of cognitive and metacognitive regulation, the influence of the type of tasks, the role of the readers, etc.

2.5.1. Flower and Hayes' models: where it all started

Flower and Hayes (1981) in their reconsideration of their previous writing model named revision what they had labelled as reviewing an activity that involved checking and editing the text. It also had the influence of the monitor, a self-regulation mechanism that led the whole process. Revision also depended, on the text written up to that moment and the environment of the task. Revision entailed an internal and external process. Internal revision would stand for the evaluation of the current text and the external revision would correspond to the actual correction of the text.

In a later approach, Hayes et al. (1987) worked out what revision entailed and described the strategies carried out by writers when they engaged in it. They proposed a different status for revision as a process in itself rather than just a part of the whole writing process. The role of the task at hand was also highlighted and the impact it could have on revision due to its changing nature during the process and the differences in the representation of the task: goals, criteria, constraints, etc., as portrayed in Figure 10 below.

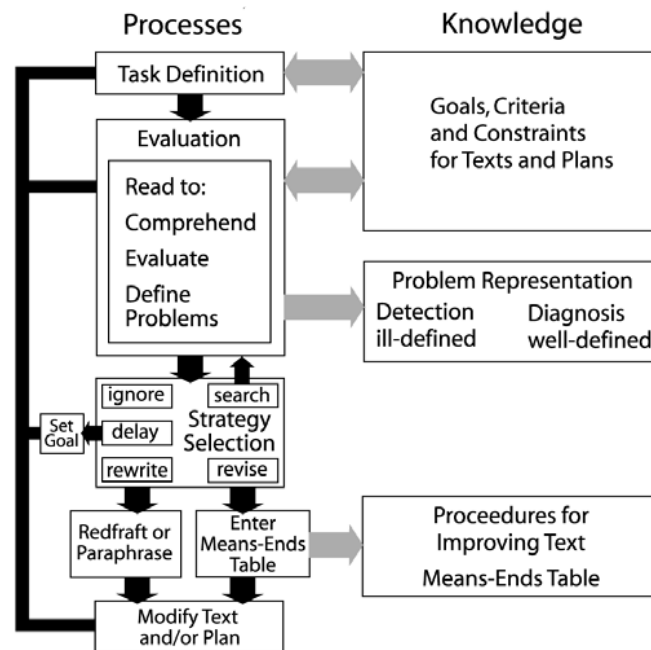


Figure 10. Model of revision process. Hayes et al., (1987).

In connection with the representation of the task, the strategies to be implemented are as follows (Hayes et al., 1987, p. 187): "1. Those that modify or control the revision process itself: ignoring the problem, delating the action, searching for information to clarify the problem representation 2. Those that modify the text: revising the text or rewriting it."

They also made a difference between when the writers decide to actually modify the text they may go for *revising* or *rewriting*. They proposed *rewriting* as a process that engages writers into a deeper analysis and edition of the text, far from formal changes. Rewriting could be undertaken because the strategies chosen had not worked according to the purpose intended or the text does not pay to be revised but rather *rewritten*.

Chanquoy (2009), in her review of *revision*, stated that this process is demanding in terms of cognitive load. She associated Flower et al.'s (1987) model with Scardamalia and Bereiter's (1987) Compare, Diagnose and Operate (CDO) cycle, described later on. Hayes et al. added a pre-writing stage in which writers activate and bring about their previous knowledge of the task they are to implement.

Chanquoy (2009) highlighted the role of the writers' memory and the interaction of writers' knowledge and the strategies in Hayes et al.'s (1987) model of revision and summarized it in the Figure 11 as follows:

Revision	Task definition	Writers decide the strategy and will be part of the conscious decision-making process. Writers put up their textual and contextual knowledge and metacognitive knowledge about revision. Writers represent the task mentally which guide them through revision.	
	Text evaluation	Writers need to read, evaluate to identify possible problems in their texts. This stage entails two sub-processes: problem detection and diagnosis.	Evaluation levels: <ul style="list-style-type: none"> • Comparison between intended and actual text. • Comparison between text plan and writers' goals. • Text evaluation (spelling, grammar...)
	Selection of the strategy	Writers engage in a decision-making stage: It involves four revision strategies.	<ul style="list-style-type: none"> • To postpone the problem-solving. • To look for more information to better understand the problem. • To rewrite the text or a text segment with the goal of preserving the basic idea. • To revise the text with the goal of preserving and enhancing the expression of the already produced text.
	Execution	Writer undertakes the required modifications.	

Figure 11. Summary of Hayes et al.'s (1987) Model of revision.

Becker (2006) asserted that the discovering a mismatch between the mental representation of the text and the text written becomes the main point to direct the revision task in line with Hayes' proposal. In a subsequent approach, Hayes (1996) highlighted the importance of reading in the evaluation of the text process. It was

considered as a process of reading comprehension which allowed writers to detect and diagnose text problems.

In his last proposal of a writing model, Hayes (2012) equated planning and revising to textualising and described all of them as processes that applied under a particular schema (see figure 10 above)

There are three levels of influence, the control, the process and the resource level. Each level includes several factors that behave in process-like way:

The control level involves the representation of goals and writers' state of mind to establish a definite plan. In the process level, the task environment and the writing process interact in a similar way as the orchestration of the generation of sentences that are evaluated and translated and then transcribed according to the task constraints and the coherence with the text written thus far. Finally, the resource level is regulated by the supplies stored in the LTM and readily available at the WM under the frame of the attention and the recurrence to reading.

2.5.2. Berninger and Swanson (1994): the rise of self-regulation

For Berninger and Swanson (1994) revision, which they call 'reviewing' is the third step of the integration of the writing process alongside with planning and translating. They conceived 'reviewing' (revision) as an external process as it only concerns the actual edition of the text and not the eventual mental representation.

In their model, the writers' working memory (WM) to keep the long-term memory information retrieved gains importance and so does the metacognitive knowledge (the self-regulation). Besides, the levels of text involved are also crucial in text generation and revision: word, sentence and discourse.

2.5.3. Scardamalia and Bereiter: the CDO cycle

In terms of theoretical models on revision, Scardamalia and Bereiter (1987) established a sequence for revision and state its cyclical, recursive rather than linear character. It gave rise to the CDO process: Compare, Diagnose, Operate.

Hayes et al. (1987) elaborated on this model and specified and added some essential aspects. The CDO process was revisited and the widened as strategies are

made explicit. Later on, Hayes will move his focus to the role of reading in revising processes, a role that has been dealt with in recent research and backtracking has been a feature on the writing stage for a while. More recently and certainly more linked to our research Hayes (2006) and Chanquoy (2001, 2009) gave emphasis to the role of the memory (Long-term memory and working memory) in revision processes. As proposed by Butterfield et al. (1996). On the other hand, these authors and their fellow scholars (Flower & Hayes, 1981; Hayes et al., 1987) drew attention to the importance of the task definition or the mental representation of the task as a previous step.

For Scardamalia and Bereiter (1987), revising is a self-regulated procedure composed of three recursive and cyclic operations. The so-called CDO cycle, which stands for compare, diagnose and operate. These three operations take part consciously in the cycles of revision and let the writer revise the text sentence per sentence during writing pauses. For task purposes and cognitive needs, these pauses can be modified or even delayed as later studies have illustrated, particularly when related to the working memory overload (Chanquoy, 2001).

Revision entails the actual and the intended representation of the text in the long-term memory. When both differ, the CDO protocol operates as follows:

1. Compare. Contrasting the actual and intended representation of the text.
2. Diagnose. Detects the nature of the problem and finds a solution.
3. Operate. Carries out the correction through two components: choosing a strategy and editing the text.

When the edition of the text has reduced, minimized or finished with the differences between the intended and the actual text a new CDO cycle starts again.

Chanquoy (2009) stated the resemblance between Hayes and his co-workers' model (1987) and this model. For her, text evaluation, selection of the strategy and execution stand for the CDO. Hayes' model added a pre-writing stage in which writers activate and bring about their previous knowledge of the task they are to implement.

2.5.4. Kellogg (1996, 2013): the role of the working memory

In a subsequent model Kellogg (1996) emphasized the role of WM in writing and its influence in what he termed as 'monitoring', the impact of WM on a cognitive demand in writing tasks will be elaborated on later in this section. The claim made by Hayes (2006) of the need of further insights into the impact of WM in the writing

process was heard by Kellogg and his colleagues. They revisited the topic, they defined the editing part as revision which involves the "detection of mistakes, that is, some mismatch between the writer's intentions and output of another writing process" (Kellogg, et al., 2013, p. 165). They also assumed that the editing process could take place at the end of the planning section as proposed by Hayes et al. (1987).

The cognitive demands of this part of the process of writing in terms of WM resources have also been called into question. The load on the central executive as the only resource during edition had been underestimated (Kellogg et al., 2013).

Chanquoy's revision on revision

Hayes (1996) also highlighted the intertwined and important nature of reading and writing in revision as he defined revision as "a composite of text interpretation, reflection and text production." (1996, p. 15). In his first approach, Hayes (1996) pointed out at the control structure for revision, i.e. revising criteria and strategies, the processes of those activities involved in revising, i.e. critical reading and the resources available in the long-term memory and the working memory in line with the emphasis put up by Kellogg (1996).

Later on, Hayes (2004), as cited by Chanquoy (2009) came up with three kinds of activities. The first one, reading to evaluate is related to the deployment of evaluation as a metacognitive strategy and sets the awareness of writers between the text written so far and the intended text. In a second position, reading source texts, enable writers to raise consciousness of the origin and, finally, reading in revision is also used to define the task at hand or future task and help set the goals.

As Chanquoy (2009) remarked, reading and writing as necessary activities in revision entail a substantial burden on the cognitive resources. Accordingly the metacognitive knowledge plays an essential role as described since writers may not revise properly due to a lack of the how to revise or a lack of use of the knowledge they have about revision.

Revision might fail due to a lack of revision skills or coordination or an inappropriate definition of the task, Chanquoy (2009) also suggested that previous research showed that appropriate training would help writers to modify their task definition which, in turn, would entail to consider the improvement of metacognitive knowledge in the development of writing skills. She asserted that in her previous

studies (Chanquoy, 1997) revision focused mostly on superficial aspects such as grammar and spelling and suggested that deferring the revision after the writing process had been completed would entail a lower demand of resources which means, in turn, that writers would engage in deeper text changes. This kind of deferred revision of writing was labelled as to be more efficient than on-line since it would comprise it would free up space of the WM capacities.

The results of the experiments she carried out (Chanquoy, 2001) showed deferring the revising process helped primary school students increase the frequency and the depth of their revisions. In fact, the youngest group in her experiment (3rd graders) benefited largely from delayed revising conditions. They revised more thoroughly when they had no choice between writing or revising. By and large, the delay between writing and revising enabled students to have a more distant and unbiased view of their texts.

Types of revision (Alamargot and Chanquoy, 2001)

In their revision of the models of writing, these authors made the distinction between internal and external revision. They stated that internal revision was to be undertaken at the early stages of the writing process, during the planning phase or at the beginning of the translating part. They also assigned the external revision as the actual reading and editing at the end. However, they assigned the revision of the text plan as mental and the revision of formal aspects would necessarily be external. In other words, for these authors what matters is the level of mental representation rather than the nature of revision.

A second conceptualisation of revising process would entail the difference between autonomous and recursive revision. The authors stressed the complexity of validating up to which extent those process take place at the same time of others as “revision being an autonomous process could interrupt all the other writing activities. In the same way, revision considered as a recursive process could appear in parallel with other writing processes” (Alamargot & Chanquoy, 2001, p. 118)

Another question for discussion is the automaticity of the process. They reported that some authors envisaged the superficial editions as an activity managed almost unconsciously whereas revisions concerning the content, the structure of the text would require more cognitive efforts.

Nonetheless, they posed that if revision was to be understood as by “Daiute and Kruidenier (1985), that is to say, as an internal dialogue between the writer and the writer reviser.” (Alamargot & Chanquoy, 2001, p. 119) It is clear that for revising that writers must be able to reread their texts and to have sufficient resources and appropriate reading skills.

In conclusion, revision can be considered as a particular activity in the overall writing process (Scardamalia & Bereiter, 1987), and as a particular writing activity in itself. Indeed, during revising, as during the composition of a text, the writer has to plan ideas, to translate them and to programme necessary motor movements for making the changes to the textual surface. Thus, postponing this complex activity is a good way to lead children to a more careful reading and revision of their texts. These results could open up interesting pedagogic perspectives. Postponing the revision seems a powerful strategy, allowing the children to free cognitive resources and to focus on the text to be corrected.

Rereading and backtracking

In the first Flower and Hayes’ (1981) model, revision was conceived as reviewing and editing. The actual review would entail the act of reading and reading the text. For Myhill and Jones (2007) rereading is a revision strategy in the process of writing. It can help idea generation, “it can be a way of facilitating the translation of thoughts into linguistic structure; or it can be a revision and evaluation process.” (Op. cit. p. 334). In her study, writers admitted that they reread as a learned behaviour from formal instruction although writers perceived it as an extra work as their texts seem to please them and tend to focus their revision up to a sentence level, being the local, superficial level the usual attention of correction.

In fact, recent research has emphasized in the role of backtracking as a strategy in L2 writing Manchón et al. (2009). They found that this is a feature of the interplay between the actual text and the successive mental representation of the intended text was ever-present and defined as the "continuous movement backward and forward between what we have written and what will write next" (2009, p. 113). Besides, they described the different ways backtracking takes place either in L1 or L2/LE. In a linear fashion: reread or backtranslated or selective way: involving reprocessing rather than reiterating. Interestingly enough, these authors portrayed the purposes of backtracking with perspective or retrospective uses:

Retrospectively:

- Fulfilment of task requirements
- Appropriateness of the intended plan
- Match between the original plan and its implementation
- Correspondence between meaning and form

Prospectively:

- Attention to requirements of the task at hand
- Generating ideas to be brought into the text
- Solve language-related problems

2.5.5. Revision in L2 / FL

Van Steendam et al. (2010) stated that revision in L2 /FL had been found to focus on surface-level errors even though that revision were more frequent than in L1. These authors affirmed that L2 or FL writers focused on the linguistic demands of a text and may overlook other aspects and since they struggle with they fall short in their FL competence or they have a "knowledge of the target language on the part of the L2 writer/reviser and poor writing skills and/or a lack of knowledge of task schemata" (Van Steendam et al., 2010, p. 317). They concluded that as some other studies had concluded that efficient the process of revision in FL entailed "critical reading, detecting, diagnosing and modifying a text often results in cognitive overload in working memory" (2010, p. 317).

In their study, Van Steendam et al. (2010) 247 undergraduate Dutch L1 speakers who followed an instruction under a socio-cognitive model. Emulation, observation and practice were correlated with individual and peer revision. Dyadic writing has proved to improve text quality and it needs instruction to be effective and go beyond superficial, formal changes. Such findings were enlarged in a way those put forward by Stevenson et al., (2006) with secondary school students writing in Dutch and EFL and as Van Steendam et al. (2010, p. 317) put it with respect to L2/FL "writers and revisers are, in a sense, similar to inexperienced and poor revisers" in their study of university students research. Stevenson et al. (2006) also showed that the amount and depth of revisions had no major relationship to the language.

In spite of the role of the developed by the process of revision in the writing, revision in L2 or FL has not played a specific role in the field of writing research. Writing was conceived as whole and research in L2 and, particularly FL (in which EFL occupies the enormous majority of them). On the one hand, revision and writing processes have been part of the realm of psychological studies and has concentrated the interest of psychologists and psycholinguists at best. On the other hand, L2 and FL has been the object of attention and research of teachers and lecturers who sought for evidences to support their teaching methods and the other way around. The studies on revision have also been embedded in those concerning the development of the regulation of metacognition and have been included alongside other processes involved in writing as we mentioned before (Farahian, 2015; Kodituwakku, 2009; Ruan, 2014; Xiao, 2007, 2016)

Most of them have been carried out in contexts of what Krachu (1998) labelled as the expanding circle, especially Asia and the growing interest in the last ten to fifteen years of Chinese universities and students in the acquisition of English and the writing skills it involves as part of their traditional assessment based on written texts.

In that particular context Sasaki & Hirose's (1996) and Sasaki's (2000) shed some light on the way revision was faced by Japanese students who wrote in their L1 and EFL. Revision in EFL was conceived as an unfrequent activity since only 10% of participants revised and they did so since they had been instructed.

2.4.2. The temporal dimension in revision

Revision entails the judgement of the writers on their own texts and the way they decide to reduce the differences from the actual text to the intended text, the way writers carry out the successive changes in their texts (Chanquoy, 2009). It is also a process that can take place at several points of the writing process (Dülger, 2011).

In their approach to revision, Roussey and Piolat (2005) asserted that it is a costly cognitive process as it has been described above as it stand for a control process. They suggested it paid to break it down into phases. This conception of the recursiveness of the writing process highlighted by Witte (1985) put forward the

temporal dimension of this writing subprocess. This author suggested a temporal categorization of revision based on the moment at which writers review and transform their texts. This proposal entails three different points, the pre-textual revision takes place during the planning stage and reveals a dynamic mental representation of text that may be adjusting to the goals, the task, the audience and so on.

The on-line revision deals with what writers have already put into actual words and combines the former aspects with those formal ones: grammar, vocabulary and spelling. This particular moment entails a great use of WM (Kellogg, 1996) in L1 and, particularly in EFL which attend to goals, task, and audience in terms of content, coherence in the development of ideas, cohesive resources and those formal features mentioned.

A third moment for revision concerns once the writer believes that the text in-so-far has completed the whole meaning of the text and it has adapted to the goals set for the writing task. Deferred offers writers the possibility of avoiding the overload of cognitive resources by freeing up some room at the WM as Chanquoy (2001) suggested when she compared these different types of revision of expository texts in primary school students.

From this last perspective, deferred revision was considered as an activity for the teaching and learning of writing from a process-oriented approach. For Galbraith and Rijlaarsdam (1999, p. 97) deferred revision may “promote fluent translation” which emphasised the features explained before: the recursiveness of the process and the need for alleviating the cognitive load.

There are scarce examples of the use of effects of the temporal dimension of revision and basically in primary education. Three of them are given account of, two of them are Chanquoy’s (1997, 2001) in Switzerland with French as the mother tongue of participants and the third in America by Cameron et al. (1997) involving reading and writing.

In the first one, Chanquoy (1997) studied which type of revision turned out to be more efficient in L1 of primary school students in different grades. She suggested that revision during writing would mainly lead to surface modifications (i.e. spelling, punctuation, etc.) while revision after writing which would be less resource demanding, would lead to deeper modifications. Correction after writing would be more efficient than during writing and as there would be no competition between writing and revising processes for the limited WM capacities. She carried out an

experiment with two groups of third and fifth grade revise their text either during or after writing. Pre and post texts were written without any instruction about revision.

Her findings showed that children revised their texts even if they were not told to do so. Older children made more revisions than younger. The experimental group more than the control group as precise instructions to do revision were given. Surface revisions were more frequent than meaning. Correct revisions were always more frequent than neutral or erroneous. Few differences between on-line and after groups. After that, Chanquoy (2001) designed a new experiment with three different times for revision in which she aimed to modify the load associated with revising process according to timing of revision. Primary students from third, fourth and fifth grades were requested to write a text and carry out an online revision (texts were simultaneously written and revised), an after-writing revision (writing – revising – rewriting) or a postponed revision (texts were written on a draft on one day then revised and recopied the day after). The findings this time showed an effect on children's grade level of revision and that postponing the revising process helped children to increase the frequency and the depth of their revisions. Third-graders benefited largely from delayed revising conditions when they did not have to choose between writing or revising they revised more intensively. Globally, the delay between writing and revising allowed children to have a more detached view of their text and to evaluate their texts for a reader in order to anticipate possible sources of ambiguity

Similarly, Cameron et al. (1997) compared students' revision of their own as well as another's text flaws. Fifth-graders wrote a narrative text and revised both their own and inserted flaws. The assessment of semantic and superficial revisions were slightly lower as opposed to another's text errors. However, the frequency of revision was relatively high and correlated with texts' quality; In other words, children who revised more often wrote higher quality texts.

Alamargot and Chanquoy (2001) conceived text revisions as the visible results of complex mental activities entailing decision-making at different stages and ending in possible edition of the text. They also stressed the metacognitive character of revision as it is a decisional activity.

Several researchers in EFL writing from different contexts have advocated for a deferral of the process of revisions. Chanquoy (2009) suggests that revising after the text has been written would lead to more corrections as writers would engage in two tasks, a writing task and a revising task. In the Asian EFL context different researchers

Maftoon et al. (2014) and Ruan (2014) came up with similar suggestions to Chanquoy's (2001, 2009) as she suggests that in order to improve the quality of texts and free up space in the WM it is possible to combine postponed revision with instruction about how to carry it out by specific resources such as revision guides or revising cards (2009, p. 92).

2.5.6. Metacognition in Revision

Revision is defined as a very complex activity which weighs heavily on the limited capacities of a writer's working memory and particularly verbal WM, as the whole writing process does. Revision and evaluation are two steps of the cognitive and metacognitive knowledge that writers put into practice while composing a text, it has also been quoted as the stage at which the real text meets the intended text, whether consciously or unconsciously. Chanquoy (2001, p. 19) asserted that "the cognitive and metacognitive part comprises working memory and long-term memory". Deliberate processing takes place in working memory and corresponds to those steps proposed by Hayes et al. (1987): representation of rhetorical problems and of texts, detection and diagnosis of textual problems, strategies to solve these problems. They are constrained by the working memory's limited capacity.

Long-term memory is mainly used to free up resources in the working memory. For example, the already revised text could be sent to be stored in long-term memory, which is considered as being composed of two separate levels, cognition and metacognition as depicted in Figure 12 below.

Cognitive level	Knowledge	Topic knowledge	
		Linguistic knowledge (rules and conventions)	
		Writing knowledge	
	Strategies	Thinking	
		Comprehending what one reads	
		Writing and revising	
		Evaluation	Allow to reread a passage, look back at a prior text, make predictions about the text compare ideas
		Control	Summarise or clarify information and correct the text
Metacognitive level	Models of knowledge		
	Comprehension of strategies and knowledge	Allows writers to know when, where, how and why using evaluating and controlling cognitive strategies	

Figure 12. Long-term Memory Chanquoy, 2001 (apud Butterfield, et al., 1995; Hacker, 1994, 1997)

Chanquoy (2009) reviewed how thinking, reading and writing were monitored and controlled when they were stored in the LT memory and retrieved in the WM in the depletion of metacognitive processes that take part in revision:

- a. Defining the task
- b. Evaluating the text
- c. Detecting errors
- d. Selecting strategies to solve errors

These processes enhance the importance of the metacognitive knowledge that will allow fail to revise if there is a lack of use of their stored knowledge about revision. Besides, the failure in revision can be due to the lack of revision skills; lack of coordination or inappropriate definition of the revision task or activity. Wallace & Hayes (1991) point out that metacognitive factors play a key role in revision practices

in college writers since relevant training can lead writers to change their task definition and it is possible to consider the possibilities of metacognitive training in writing.

Metacognitive regulation in revision

The changes carried out in texts during revision have been given account by some studies at different moments of revision (Allal, 2000; Chanquoy, 2001; Faigley & Witte, 1981, Monahan, 1984, Sommers, 1980; Stevenson et al., 2006; Van Steendam et al., 2010). Those editions that aim at reducing the distance between the actual text towards the intended one can take place while writing: online or can take place once the texts has been considered to have ended. In the latter moment, the revision can be implemented right after the completion of the writing task, immediate revision, or some time after that, hours or days (Chanquoy, 2001).

On the one hand, Sommers (Op.Cit) in their comparison of expert and novice writers in an American university, based her analysis on "four revision operations were identified: deletion, substitution, addition, and reordering." (1980, p. 45). She also observed four levels of changes "word, phrase, sentence, theme (the extended statement of one idea)" (1980, p. 45). Sommers' classification was extended by Faigley & Witte's (1981) model as portrayed by figure 13.

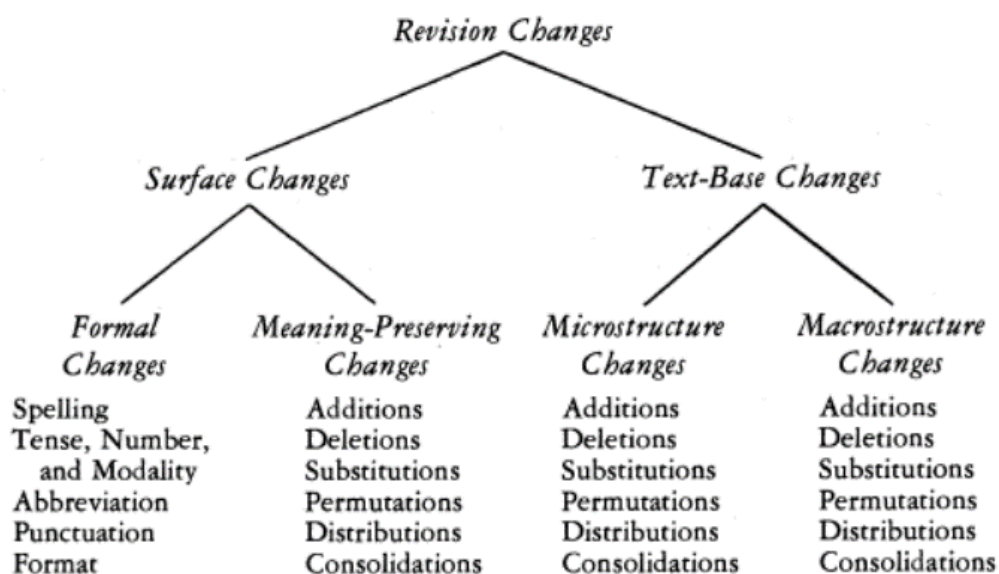


Figure 13. Faigley and Witte's (1981) Taxonomy of revision changes.

Faigley and Witte's (1981) based their taxonomy in the earlier works of Kintsch and Van Dijk (1978) on meaning construction on reading. Changes in the microstructure or macrostructure, that is to say meaning or text-based, were opposed to surface changes. These superficial ones would be related to spelling, writing conventions, verb tenses and so on plus the meaning-preserving changes, synonyms and use of different syntactic structures to convey the same meaning. Stevenson et al. (2006) made the distinction in their "revisions" (as they called them) between content and language and added the typographic revisions since they used a keylogg software for their study and videotaped their session. The type of transformations and the level of language affected has influenced the later models accounted below. Faigley and Witte's offered a wider range of possibilities in terms of changes or "transformations" or "modifications" in Allal's (2000) and Chanquoy's (2001) taxonomies. It must be noted that rearrangements, as it can be observed below, would include permutations distributions and consolidations in Faigley & Witte's words:

Permutations involve rearrangements or rearrangements with substitutions (*springtime means to most people =>springtime, to most people, means*). *Distributions* occur when material in one text segment is passed into more than one segment. A change where a writer revises what has been compressed into a single unit so that it falls into more than one unit is a distributional change (*I figtlred after walking so far the least it could do ujould be to provide a relaxing dinner since I was hungry. =>I figured the least it owed me was a good meal. All that walking made me hungry.*). *Consolidations* do the opposite. Elements in two or more units are consolidated into one unit (*And there you find Hamilton's Pool. It has cool green water surrounded by 50-foot clgfs and lush vegetation. =>And there you find Hamilton's Pool: cool green water stlrrotlnded by JO-foot clgfi and lush vegetation*). (p. 403)

Besides, Monahan's taxonomy (1984) indicated four dimensions of revision. First of the (1) the revision moment (on their draft, on the final moment...). The second dimension stood for (2) the revision text level (to revise a word, a phrase, a clause, a

sentence or the whole text). In the third place, (3) the nature of revision (addition, deletion, rearrangement and embedding) and, finally, (4) the revision objective (to revise for a better text presentation, for checking spelling, for improving the style, in order to emphasize transition...)

In terms of meaning, Chanquoy (2009) noticed that Sommers and Monahan taxonomies could merge into a model that could be the base for future research. These two broad categories were surface revision, modifications concerning the task surface and deep or semantic revisions modify the text meaning. Moreover, for Chanquoy (2009) there are

two more indicators: the off-line location, which refers to the part of the text in which text edition takes place, that is to say, the beginning, the middle or end of text and the on-line location which refers to revision during the writing activity, during the elaboration of a plan, draft writing... (p. 86-87)

In addition, their model of the level of text affected by the changes is similar in a way to Allal's (2000). Her first level would include the Faigley and Witte's (1981) surface level and Chanquoy's taxonomy would keep the main distinction between surface changes and meaning changes.

Stevenson et al. (2006) included the typos as part of the revision since they used keylogg software for their study and they made a difference between the language or content dimensions which narrows down the specificity of impact of the edition in the text. On the other hand, the types of "revisions" described were very much like the taxonomies described above and so were the results in their groups of teenagers.

Van Steendam et al. (2010, p. 323) found that even in peer revision that "analyses of the detections and revisions students made revealed that they rarely considered the text holistically and mainly focused on the word and sentence level" in a similar way as Monahan (1984) had found that competent and basic writers implemented similar revision changes up to a sentence level, however the audience they addressed their texts varied as basic writers aimed at the teacher audience and competent focused on the peer audience.

Allal and Chanquoy (2004) justified their support to the term coined by Allal (2000): 'transformations' stand for "the changes actually carried out" (2004, p. 3). That we have used all over our dissertation. They suggested that by using 'transformation' the term revision keeps an inclusive meaning as it entails processes that may result in transformations or not of the ongoing text.

A system for coding transformations occurring between successive drafts of a text (notes or outline, initial draft, subsequent revised drafts, final version) is outlined in Figure 14.

The main differences between these two approaches lie in the next issues:

- Allal named the changes "transformations" as they were conceived it as an including concept for the whole process of revision, this conceptualisation was proposed by both later on (Allal & Chanquoy, 2004)

- The type of changes and the level of language affected was actually very similar and shiftings and transformations stood for rearrangements and substitutions. In other words, the changes of place of a particular chunk of language were the shiftings / rearrangements and partial or total replacement of those chunks by some new ones were the transformations / substitutions.

- With respect to the relationship with the language conventions, Allal went deeper into the effect and the objective of the changes. Optional and conventional had to do with the language rules but they also pointed out the objective and the focus of the change, whether the writers looked into the formal aspects or the meaning of the text in a greater or lesser extent. Meanwhile, Chanquoy's model overlooked the possibility of the intentional changes in the meaning of the text and their observance of the language conventions.

- There are also slight differences in the object of the changes. Whereas Chanquoy distinguished formal (grammar and spelling 'modifications') and semantic changes (micro and macro structural). Moreover, Allal's proposal was followed in this section so that it included the possibility of bringing new info to the text and its effect on the whole text.

- The metacognitive regulation in writings during the revision should be also associated with the attempt by the writer of modifying the mental representation of the text and its quality. Therefore, according to the Kintsch's (1998) and Otero and Graesser's (2000) models, each transformation may be associated with a metacognitive representation about control of textual meaning at: a) surface level or Word; (b) semantic level of micro-ideas and local coherence; (c) semantic level of macro-ideas and overall coherence; (d) reference level (situation model).

	Allal's taxonomy (2000) "Transformations"	Chanquoy's taxonomy (2001) "Modifications"
Level of Language	<ul style="list-style-type: none"> • Word • Group • Sentence • Text 	<ul style="list-style-type: none"> • Word • Phrase • Clause or sentence
Type of change	<ul style="list-style-type: none"> • Addition • Deletion • Substitution • Rearrangement 	<ul style="list-style-type: none"> • Additions • Deletions • Shiftings • Transformations
Relationship to language conventions	<ul style="list-style-type: none"> • Conventional transformation: correctly or incorrectly • Optional transformation not required by language conventions: correctly or incorrectly 	<ul style="list-style-type: none"> • Correct • Erroneous • Neutral
Object of change	<ul style="list-style-type: none"> • Spelling (both lexical and grammatical aspects) • Semantics (lexical variations, changes of meaning) • Text organisation (primarily operations of segmentation, connection, cohesion) 	<ul style="list-style-type: none"> • Surface or formal revisions, with formal changes; • Meaning or deep revisions, with microstructure changes and macrostructure changes

Figure 14. Allal (2000) vs. Chanquoy's (2001) taxonomy of 'transformations'.

All in all, these studies offer similarities in different ways. Allal's and Chaquoy's offer a similar model to Sommer's in the level of language and the type of changes (transformations or modifications in their taxonomies, respectively). Alternatively, Faigley and Witte explicated with greater depth the concept of rearrangement or reordering as to describe the action exactly. The level of language was similar in all cases. Allal's and Chanquoy's resembled Faigley and Witte's in the interest in the level of language affected although their lines are drawn up to a higher amount in terms of the impact in the meaning of the text.

Finally, Allal (2000) Chanquoy (2001) and Stevenson et al. (2006) included a judgement of the changes on the text whether it may affect in a positive or negative way. Allal's seemed to provide researchers with a tool to infer the writer's representation of the text and how they *anticipated* the changes to be done to reach the final state of their intended text

2.6. Writing tasks

The choice of a particular writing task in this field of research has been adapted according to different educational stages, the languages used when composing the texts and the writing traditions. In this dissertation the concept of text has been understood as a written production rather than a wider multimodal communication construct in line with Lindgren, Westum, Outakoski and Sullivan's (2019) and the writing research scholar literature reviewed.

In primary education contexts, the writing research has been conducted with expository or narrative texts as main characters in L1 (Allal, 2000; Cameron et al., 1997; Chanquoy, 2001; López et al., 2018). These texts involve the use of a knowledge-telling strategy (Scardamalia & Bereiter, 1987). However, Schoonen (2005) with higher primary students (11-12 year-old students) used essays to establish a base for the generalizability of the assessment of text quality.

In secondary and higher education in L1 the predominant texts essays or argumentative texts. These productions are linked with the knowledge-transforming strategy (Scardamalia & Bereiter, 1987) that more-skilled writers use. Those studies entailing the use of different languages (L1 and L2/EFL) or only the foreign language, usually English, have also had essays as predominant tasks.

However, in some scarce cases, the analysis of the deployment of cognitive or metacognitive activities in the writing process has comprised not only the use of a writing task but the comparison of two distinctive types of texts.

The relationship of the texts as products and the variables that come into play according to the experimental conditions are compared and the statistical effects analysed. In this regard, the fact that participants wrote two different kinds of texts in

two different languages connects it with those that faced the comparison of the deployment of writing skills along the process of writing in more than one language either L1 and L2 or FL (Beauvais et al., 2011; Chenoweth & Hayes, 2001; Manchón et al., 2009; Rinnert & Kobayashi, 2009; Roca de Larios et. al, 2006; Sasaki, 2000, 2009; Sasaki & Hirose, 1996; Stevenson et al., 2006; Tillema, 2012; Tiryakoglu et al. 2019; Schoonen et al., 2003; Van Weijen et al., 2009) or L1 or L2 and more languages (De Angelis & Jessner, 2012; Knospe, 2017).

Languages and types of writing tasks

Essays or argumentative texts have been the predominant genre in writing research to portray the deployment of cognitive or metacognitive strategies in L1 and L2 or EFL along the writing process. The choice of essays in may be justified due to the academic requirement of the courses or modules the participants may be involved and also the cognitive effort needed to envisage this kind of task. Expository and narrative texts are also part of the texts but they constitute a minor amount.

Writing tasks L1

The majority of studies conducted in L1 had English as L1 and some others focused on some different aspects by comparing L1 and mostly EFL or some other languages. In the American context in experimental or quasi-experimental conditions in undergraduate HE, Crossley and McNamara (2016) used two essays in L1 (English) to correlate writing quality and text cohesion only to highlight the significant relevance of the elements of cohesion in text quality. In secondary students, Midgette et al. (2008) also reviewed the goals in terms of persuasiveness in essays.

Van der Bergh and Rijlaarsdam and their colleagues in the Netherlands and Belgium have also made use of argumentative texts for their research to identify the changes in the cognitive activities in the writing process and the quality of text (2001). They also used it in the reading and writing activities involving this type of texts (2001). In the same context, Schoonen (2005) did also focus his study on the assessment of the writing performance and how text quality was determined in four essays written by primary school students.

Sommers (1980) and Faigley and Witte (1981) used essays to compare the ways that expert and less-skilled writers carried out the revision of essays of essays with very similar results: expert writers revised in a very different way among themselves and also when compared to less-skilled writers. In a similar way, Baijen, Galbraith and De Glopper (2010) engaged their university students in writing articles related to university background with higher education students in which their L1 was Dutch

In a postgraduate context, Castelló et al. (2010) focused in academic texts in L1, either Catalan or Spanish, such as the doctoral dissertations to deal with collaborative peer revision of doctoral students in their writing processes and their training in different disciplines, mostly in social sciences (Castelló, 2008; Castelló et al., 2010). She has also been in charge of a study (Castelló et al., 2016) in which they shed some light on the evolution and state of affairs of academic writing in Spain in the last decade.

In French as L1, Allal (2000) used expository and narrative texts for her papers on revision with primary and secondary students and focused on different aspects related to revision. Chanquoy (2001) in her examination of three different types of revision in primary school students did also make use of narrative texts with three different topics.

Letters were used by Van Steendam et al. (2010) used letters, a combination of letter of enquiry and letter of application to compare the influence of individual or dyadic revision under two different kinds of instruction. Leijten et al. (2014) analysed professional writing types like emails, reports, proposals... both studies had Dutch as L1.

Writing tasks L1 & L2/EFL

Guasch (2001), in his review of the writing processes in the so-called L2, synthesised the works of Ardnt (1987) with Chinese students who learn EFL in the USA who wrote articles for a university magazine in EFL and Chinese, on the other hand, and Jones and Tetroe (1987) with American students who wrote in English and Spanish and whose compositions were influenced by interventions regarding narrative and argumentative texts.

Whalen and Menard (1995) compared L1 & L2 French of 12 English-speaking participants' argumentative texts in their L1 and L2 (French) they assessed different stages of the writing process and level of discourse. On a similar basis, Sasaki and Hirose (1996) unveiled the curtain by comparing the influence of their university undergraduate participants L1, Japanese and its influence over the L2/EFL performance in expository texts comprising several dimensions: L1 writing ability, EFL proficiency, instructional background, etc.

Chenoweth and Hayes (2001) had native speakers of English speakers writing essays in German and French as participants' L2/FL and in English. They presented a new model of written language production process. His research methods inspired later investigation. They counterbalanced languages and participants and participants' language proficiency were the research paper variables. They used TAP to trace participants' writing processes.

The terms of the contributions with respect to writing tasks are similar in studies focusing in the writing processes in second or foreign languages. On the one hand, some studies have tried to shed some light only in the FL writing processes engaging higher education students in essay writing. In the Asian context, Chien compared the strategies used in EFL by high and low achieving student writers with Chinese L1 students through essays. Khuder and Harwood (2015) employed two argumentative texts to assess the effect of time constraints in the writing performance in EFL concerning the process and product of ten postgraduate students. Students did also explained their writing processes in immediate recall interviews and they were also screen recorded. In a very similar fashion to our qualitative study.

In Spain, a group of researchers from Murcia, Manchón, et al., (2009), and Roca de Larios et al. (2008), dealt with different aspects of the EFL writing processes applied to undergraduate participants whose L1 is Spanish in a monolingual context. They used argumentative and narrative texts to assess the temporal dimension of writing, the use of translation or the influence of backtracking. Retrospective questionnaires were the main source of qualitative data. In the same group and the same context, Nicolás (2012) assessed the goals and beliefs in writing processes in EFL and made use of argumentative texts as well.

Different processes have been faced from this perspective from the cognitive processes and in the orchestration of the cognitive activities of first-year student at university in L1 (Dutch) and EFL (Stenvenson et al., 2006; Tillema, 2012; Van Weijen et al., 2009). They compared L1 and EFL and found out the differences between the the way teenagers faced revision of argumentative texts, how undergraduate students' processes of orchestrating cognitive activities were like, and differences in text quality in Dutch and EFL, respectively.

More recently, Knospe (2017, 2018) used the argumentative texts to assess secondary students' relationship between fluency and text quality and the deployment of their metacognitive strategies in German as L3 or second foreign language. She did it, though, after instruction.

As it has been exposed, a steady and firm interest must be highlighted in the last twenty years in the comparison of the processes of completion of different writing tasks in different languages, especially between writers' L1 and L2 which is, as a matter of fact, EFL.

2.7. Writing interventions in L1 and L2 / FL

Writing has become one of the most salient features in education. It occupies a central role as a means to convey the meaning in different subjects and has gained importance under the communicative, pragmatic methods in both L1 and EFL/L2 teaching (Weigle, 2002). The claims of the increasing relevance of writing as a linguistic ability and the way research has showed that it can produce an improvement in cognition, writing to learn (Canagarajah, 2011; Manchón & Roca de Larios, 2011). What is more, the acquisition of writing skills is “crucial for students’ academic success, and one of the basic requirements for our participation of society” (Rietdijk et al., 2017, p. 174).

In a wide sense, teachers, curriculum makers and syllabus designers are to take into account the specificity of writing and bear in mind how the explicit knowledge of metacognition can benefit writers, L1 or EFL learners after all, and how

it can have a positive influence in the quality of text. Such knowledge may also be transferred to other academic or learning activities in which problem-solving and decision-making as two of the highest order thinking skills (Marzano & Kendall, 2008) or cognitive discourse functions (Meyer & Coyle, 2017) are crucial. Activities such as presenting a paper, preparing and participating in a debate, designing a lesson... can take advantage of the implementation of a regular and guided use of metacognition.

Teaching revision

Revision as part of the writing process and as a metacognitive strategy requires a systematic methodological proposal for its acquisition, development and practise and there is a need for its instruction (Van Steendam et al., 2010). Indeed, Chanquoy (2001) stated a demand for instruction after having revisited different experiments and pointed out the need to "teach children how to revise, both with specific instructions about revision (and perhaps specifically about grammatical rules and how to correct grammar errors) and by delaying the revising process." (p. 36).

A deeper insight of what this stage of the writing process comprises and how to deploy the strategies that writers have at hand brings about a demand in the teaching of writing but, particularly, the teaching of revision. This instruction should be faced from an L1 setting (López et al., 2018) to a L2/FL context (Kodituwakku, 2008; Ruan, 2014; Xiao, 2007) and included in the teaching of writing and revision as part of the communicative skills.

To start with, it is important to back writers when addressing the foci of the text and the difference between the correction of formal errors and the meaning of the text (Chanquoy, 2009). Practitioners, and especially pre-service teachers, should face the process of their students' compositions as dynamic as possible, however a self-regulated writing and has proved to be a key to writing quality (Ruan, 2014) and the learning of strategies to manage it efficiently is essential in writing instruction, particularly at a higher education stage in L1 (Castelló, 2008; Escorcía et al., 2017). In terms of metacognitive awareness, it seems relevant to include and systematise in a deep extent the conscious reflection on self-regulation in writing, from a broader methodological scope to concrete procedures comprised in previous proposals.

The need for instruction, teaching evidence-based efficient writing

The interventions designed to acquire and improve writing skills have become vital in initial pre-service teacher education. These skills will serve them to carry out their assignments and pass their degrees in a first stage. They will also need to put them into practice if they want to apply for positions as state-school teachers, will be used in their jobs and, particularly, when they will make their future students learn these skills.

Different models of interventions have been developed in the last 30 years, they have evolved and some of them guide evidence-based models of teaching writing skills. Their conception of entails the acquisition of the conceptual knowledge of the process of writing into a procedural and conditional knowledge refined through repetition in the transfer to other contexts (De Keyser, 1998). In other words, practice makes perfect.

Fidalgo et al. (2017) coordinated an extensive revision of evidence-based interventions in writing skills the models examined by different contributors who bring about a wide variety of interventions which have been validated up a certain extent. As Murphy, Firetto, Li, Wei and Croninger (2017) analysed almost all of them had their roots in a socio-cognitive approach and proposed the acquisition of self-regulating skills of writing to provide writers with the ability to perform texts autonomously. They came up with a series of stages which include explicit instruction with individual support to foster writers' generalizations and ability to transfer in future practices.

These interventions comprise different instructional models. The most profusely tested across ages and educational contexts has been the Self-Regulated Strategy Development (SRSD) updated by its authors, Graham & Harris (2017), who extended with strategies for revision. This intervention consists of six stages: 1. Develop background knowledge; 2. Discuss it; 3. Model it; 4. Memorize it; 5. Support it; 6. Independent performance.

It has been adapted and used by some teachers and researchers as Foxworth and Mason portrayed (2017) and stressed the readers' component of the intervention and how the instructions can be summarised for mnemonic purposes. For instance, TREE (Topic, Reasons, Explanations and Ending); POW (Pick your ideas, Organise

your notes, Write and say more); WRITE (Work from your plan, Remember your goals, Include transition words, Try to use different kinds of sentences and Exciting words).

On the other hand, Robledo-Ramón & García (2017) gave account of some other models, Cognitive Strategy Instruction in Writing Model (CSIW), Strategy Content Learning (SCL), Social Cognitive Model of Sequential Skills Acquisition (SCMSSA), Cognitive Self-Regulation Instruction (CSRI). They all share similar features alongside with the SRSD and some of them have experimented fewer evidence supports. In addition, Rijlaarsdam et al. (2017) conceived a model to report effective writing interventions. They conceived the intervention as a construct which involves building theories, the likelihood of replication of teaching and learning activities and the dissemination of the effective interventions. Their model set the design principles, the intended learning activities and the learning outcomes. Such design can entail to break the intervention process down into pieces that can be referred to and properly explained as well as act as mediating variable in writing research.

Interventions, designs of instructions, in writing skills have been widely described into the writing literature and are on the base of the corpus of studies, from L1 to L2 or EFL (Sasaki, 2009; Sasaki & Hirose, 1996) and comparing, contrasting both (Chenoweth & Hayes, 2001; Knospe, 2017; Rinnert & Kobayashi, 2009; Van Steendam et al., 2010)

Collaborative writing and dyadic writing

The interventions in writing also embed collaboration in the implementation of revision in different contexts and languages. Van Steendam (2016, p. 186) stated that collaboration stood for “either pupils or students, from primary school to higher education, or adult professionals writing (planning, composing, revising) collaboratively, either in a face-to-face context”

In this sense, in this section several interventions in L1 in primary education are reported, Allal (2000) engaged their students in peer dyadic revision in which the interactions successfully improved the quality of texts in French. Besides this type of interactive, collaborative revision were successfully implemented by López et al. (2018) in the same age in Spanish. Students learnt different revision procedures which

improved their metacognitive skills towards revision. At university level, Philippakos and MacArthur (2016) had also stressed the role of pair feedback when dealing with essays and the way that under instruction, writing efficacy and text quality may be improved. Shi et al., (2019) did also report an intervention in which they approached the improvement of argumentative skills by fostering a year-long dialogic interaction of secondary school students in English following the intervention reported by Hemberger et al. (2017) as they cite them. They found that these teenagers recognised the power of evidence-based claims or arguments and used them more frequently when writing essays.

On the other hand, Van Steendam et al. (2010) cited some other authors (Berg, 1999; De Guerrero & Villamil, 1994; Min, 2005) with respect to L2/FL studies which focused on peer revision, these Dutch researchers also stressed that peer revision requires instruction to be effective and the interaction the need of individual observation of the writing tasks by peers for an efficient emulation in the revision technique based on the spot of flaws and inconsistencies in different texts.

Lopez-Serrano et al. (2019) referred to Storch's works (2013, 2016) to highlight the importance of collaborative writing. The cooperation between writers leads them to engage in reflection and discussion on the alternatives which, in turn, enables them to gain insights on the relationship between text form and meaning in EFL at university level.

SECTION 1.

Analysis of the use of metacognitive regulation actions by pre-service teachers in two languages and two writing tasks, and their impact on text quality and errors

3.1. Introduction

This section includes two exploratory studies on the transformations carried out during the deferred revision, each participant revised the first version of their texts a couple of days later (Chanquoy, 2001; Galbraith & Rijlaarsdam, 1999), in two writing tasks: essays and summaries.

The participants, pre-service teachers with different EFL proficiency, composed those texts in two languages. In this respect, the focuses of this research are twofold. On the one hand, the identification and quantification of the dimensions that metacognitive regulation entails comprised in text transformations. That is to say, the changes in the text that "orient the production processes in a manner compatible with the subject's representations, and they modify his representations to take into account the outcomes of production processes" (Allal, 2000, p. 149) have been measured and the statistical effects of the type of writing task, language and EFL proficiency have been calculated.

Additionally, the effects on text quality as an indicator of accomplishing the writing task goals (Tillema, 2012) and types of errors, the deviations from language conventions in different grammatical levels as well as vocabulary (Castillejos, 2009), made before and after revision have also been reckoned under the same variables.

In this sense, the mastery of metacognitive regulation during the writing process and, particularly, during revision has showed to be a predictor for text quality and it has also been reported to be an indicator of writers' awareness to realise their inability to complete the writing tasks or the quality of their productions (Negretti, 2012; Lopez et al., 2018). Besides, the completion of different writing tasks which entail different cognitive efforts (Scardamalia & Bereiter, 1987; Kellogg, 2008) and communicative functions (Takala & Vähäpääsi, 1983) has said to be an asset for this type of investigation (Schoonen, 2005) and necessary to bring some insights into writing research as writing strategies are sensitive towards task variation (Van Weijen et al., 2009).

In higher education courses and in pre-service teacher training, in particular, essays are the preferred assignment to assess the students' writing ability and their

efficiency. They entail organising information known to the writer and close to Kellogg's (2008) 'knowledge crafting' in which writers keep the reader in mind at all times and expect interpretations from the readers. This is a necessary skill for pre-service teachers to be acquired since written production is the institutional practice to assess the development of the ability to “gather and interpret relevant data in order to explain ideas that support their reasons in topics related to social issues, science or ethics” (Universitat de València, 2011) which is stated as a compulsory competence in teacher education at the university of València.

3.1.1. Assessment of metacognitive regulation: transformations

Revision as portrayed previously is a salient feature of the writing process and its research has been the core of some researchers. It has also stood for a strategy of the regulation of cognition in its cyclical, recursive nature (Kellogg, 1996) and its conceptualizations have evolved as depicted in the general literature review, some authors had also stressed its metacognitive character (Allal & Chanquoy, 2004).

Sommers (1980) pioneered a research in which twenty first-year undergraduate students and twenty experts writers were compared for essay writing in their L1 (English), their texts were triangulated with a TAP. She categorized the changes in the texts according to four dimensions: deletion, addition, substitution and reordering. They are identical to those we used from Allal (2000). She also identified for levels of change from word to theme, a sort of notion of text these days. Faigley and Witte (1981) developed by this taxonomy and adapted by Chanquoy (2001).

Sommers concluded that the differences between those groups of participants were in the aim of revision as it was to "clean up speech" (1980, p. 381), a kind of “house cleaning” (Graham et al., 1995, p. 237). She also found that rewording was the key to solve the writing problems in essays. She pointed out that this group of writers (undergraduates) had a quality in common: the inability to consider revision as a process and the review their texts from a different angle. On the other hand, experienced writers relied mostly on their drafts and perceived their revisions as a constant process. The most relevant point was the fact that these writers always bore in mind a reader and manipulate their text in order to communicate to them. Another important issue was the likelihood of experience writers to create meaning in revision

whereas for the students revision was time to match the text with a predefined meaning.

Allal (2000) sought to define the use of the metacognitive regulation in revision of drafts of short, informative texts performed by high and medium achievers primary students and in revision and dyadic revision. Allal studied the cases of several students and how they anticipated, monitored and adjusted their texts. She did so by assigning those roles to the different transformations those participants had carried out in their texts (Allal & Saada-Robert, 1992, cited in Alall, 2000).

Allal's (2000) taxonomy entailed four dimensions: the level of language affected by the transformation, the type of transformation, the relationship to language conventions and the object of the transformation. These categories bear resemblance with the features that Sommers (1980) described from his study in which students and experienced writers are compared: four revision operations and four level of changes. That study stands out as the starting point to classify the changes from different versions of texts. Faigley and Witte (1981) expanded the scope of the amount of types of transformations when their writers engaged in descriptions and essays in a succession of revision in three days. Whether they were surface changes or text-based changes and how they affected the structure of the text. They identified additions, deletions, substitutions and permutations, in line with Sommer's and added distributions and consolidations.

Chanquoy (2001) employed a model, inspired in Faigley and Witte's (1981) and Monahan's (1984) as she quoted it, which was implemented in her study on on-line, after-writing and postponed or delayed revision for narrative texts on personal experiences of primary education students. Chanquoy based her analysis on Faigley and Witte's although she reduced the modifications to two main types: surface or formal and meaning or deep revisions. She focused on the changes in spelling, grammar, script and punctuation in superficial changes and micro and macro structure changes that included in a very similar way to Allal's type of transformation and level of language.

In a later study, Stevenson et al., (2006) examined online revision by using keylogg software. They had teenagers writing essays in L1 (Dutch) and EFL and made the distinction between content and language and added the typo mistakes. They also did account the error-triggered mistakes and the type of actions carried out in their

"transformations" or revision as they called them, in a way resembled the distinction of the conventional and optional mistakes used by Allal (2000). They found out that higher skilled writers did not carried out more revisions than less skilled writers. Besides, revisions in EFL were more numerous than in L1 and, in both languages, substitutions were found more often than any other types of actions.

3.1.2. Text quality

Text quality is a much discussed issue in writing research. It does stay in a very salient place in writing research as it is the decisive variable in the vast majority of studies to assess the success of the writing process in terms of efficiency. The deployment of cognitive and metacognitive strategies is also linked to writing performance in terms of text quality.

It is assumed that the assessment of the product is the visible result of the aforementioned features and traditionally it has been conceived that the higher the text quality the more appropriate the processes (Schoonen, 2005; Tillema, 2012). In other words, text quality is the main constituent to determine someone's writing ability. However, it is constrained by some other conditions. Van Weijen (2008, p. 13) points out that "to adequately determine the writing ability on an individual level, multiple texts by the same author must be assessed by several judges". She also concedes that the amount of texts may vary depending on the type of writing tasks, she stated that the range can be from four to twenty. Some aspects of the textual properties (Cassany, 2009) - coherence, cohesion, adequacy and correction - have been established as predictors of text quality. For instance, Crossley and McNamara (2016) reported that cohesion and text organisation are definitive predictors of text quality. Besides, correction in terms of metalinguistic awareness on grammar and vocabulary has also been reported as the main predictor for text quality in L2/FL writing (Hyland, 2003).

Reliability of assessment

As far as the assessment of writing is concerned, Weigle (2002) offered an overview on the whole process of scoring texts. She made a slight difference in terms of the language used for the writing tasks and assumed that L2/FL writing resulted in

a higher level of cognitive load. In the same line, she showed the roles of different aspects to be taken into account in the rating of text quality that have also merited a place in teaching writing, such as task, the genre, materials for the generation of ideas, time limits, use of external aids: dictionaries, etc.

On the other hand, Weigle (Op. cit.) did not get further into the use of ICT that have undoubtedly changed the way facing computer assisted writing: spelling and grammar checkers, online dictionaries, thesaurus and translators. Furthermore, all this technological improvements had also gave researchers the chance of designing keylogg software to measure different features from the writing process: fluency, frequency, some types of actions during revision, etc. Moreover, the use of computer-led assessment software is a trend in writing research in an attempt to reduce the time spent in this particular task and the accountability of the generalization of these results as Schoonen (2005, p. 4) put it "raters often diverge in their ratings of the same texts and often do not agree with themselves at different points in time".

Raters

Reliability of text quality assessment is said to depend on the number of samples, the choice of topics, the genres, the amount of samples, how familiar writers are with the type of assessment, and the agreement between judges that should be over 75%. Weigle (2002) collected experiences from studies with novice and expert writers and their implications in L1 and L2/FL. She pointed out that studies revealed the importance of raters' background in terms of experience, culture, training and, particularly in ESL approach to the scoring activities whether from a content-expert on a discipline or an ESL practitioner.

As pointed out by Van Weijen (2008) and in consonance with Schoonen (2005) a minimum of two judges are said to be necessary to provide the research with the required quality standards. The design of writing research shows different ways of posing the role of raters. On the one hand, they may be involved in the rating process as part of a body of judges and there can be also independent ones. In this case the workload and scope of the research may well determine how many judges will rate the texts.

In Schoonen et al. (2003) six raters assessed around three hundred Dutch primary school students, sixth grade, in L1 and EFL. In the same context but at the university level, Van Weijen (2008) employed five raters to assess twenty Dutch first year students who wrote four texts in L1 and another four texts in EFL.

In Knospe's research (2017) four judges took part to assess seven secondary students who produced five texts in German as L3 and one in EFL. The inter-rater reliability was placed at a 70% (Crossley & McNamara, 2016) or 75% (Knospe, 2017). However, the rating procedures: amount of benchmark texts, writing tasks and, particularly, the rubrics used to do so can have an impact on the assessment of text quality and by being so, in the determination of an individual's writing proficiency.

There is also an issue in the measuring of text quality in a foreign language as there can be native and non-native speakers of the language being part of the assessment body list. Eckstein et al. (2018) showed that ESL raters from different backgrounds using the same benchmark scoring reference behaved in a different way whether their training had come from writing skills or linguistics. They differed greatly in the rhetorical aspects, namely, "clarity of overall message and purpose, sophistication of support and elaboration, sense of audience awareness and control of voice" (Eckstein et al., p 22).

Holistic vs. analytic assessment

There has been a broad debate in terms of what to and how to measure text quality. The importance of the criteria and the validated models for rating texts was already stated by Olive and Piolat (2003, p. 194) as it seemed to be an "essential [asset] for progressing in writing studies". Time has gone by and even though experiments are being carried out in computer-assessed texts, the rating of texts in more recent studies shows that there is still need for a real benchmark or a wider consensus if that was to be the main factor to prove writing performance improvements (Crossley & McNamara, 2016; Eckstein et al., 2018; Khuder & Harwood, 2015; Knospe, 2017; Liu, 2005; Van Weijen, 2009).

There is still an ambivalence for both types of scoring with recommendations for the use of one or the other according to the assessing objectives. Liu (2005) showed how holistic and analytic could have a different "audience" or the same altogether to

offer an alternative approach if used at the same time in the same study for the purpose of assessing text quality. In the same line, Tillema (2012, p. 122) asserted that "as holistic ratings are probably more valid, as they are more efficient (i.e. faster), and as they have been shown to be quite reliable – if carried out by multiple raters and with the aid of benchmark essays".

Weigle (2002, p. 112) defines it as "the assigning of a single score to a script based on the overall impression of it". Holistic scoring offers the chance of a quick, first-glance assessment and the possibility of a general overview judgment. On the one hand, it relies mostly on the raters' expertise in terms of formal aspects of the language mostly but also on the raters' knowledge of the topics covered. It can be of great help when there is a need to provide a quick result and no specific feedback from the text. Moreover, it may shorten the scoring process.

Analytic assessment involves the rating of "several aspects of writing or criteria rather than given a single score" (Weigle, 2002, p. 114). Analytic scoring provides raters with the chance of breaking up the text into those categories and estimate the extent of fulfilment of the text on that particular. In contrast, with holistic, analytic shows an insight into different categories that can be of great use for either an accurate description of the writers' ability in those aspects assessed and it can be a valuable help for teachers in both L1 and L2/FL (Weigle, 2002).

Even though analytic assessment is predominant as it offers a more detailed view over the writing skills of writers, different studies use both methods to ensure this particular overview. Crossley and McNamara (2016) used both methods to assess overall text quality and the correlation with text cohesion to gain inside in the particular cohesive features involved. They also explored the impact of the improvement of text coherence in text cohesion of first-year undergraduate students in America.

It is, nevertheless, a controversial topic in writing research. Different scoring methods can place the object of research in different positions and wide open to aspects that the writing task and the research, if that is the case, aim for.

Although holistic rubrics are easy to use and emphasize on achievement rather than text or language deficiencies, holistic assessment can entail a loss in the information relevant of the stage at which participants have reached. On the other

hand, analytic scoring provide more information, assists reliability, can be used a diagnostic and teaching tool and forces raters to address to the same features and reach a consensus. Trait-based methods would also stress the assessment of one or several particular and relevant aspects to the texts (Hyland 2003).

In sum, the amount of raters and their training and background is a key factor in assessing text quality. Besides, the methods used to reach an agreement between different judges are essential to set the basis of robust research. Liu's research shows little difference between analytic and holistic scoring in terms of determining text quality, however the purpose and scope of research determine which approach is more relevant whether text quality is a central issue in a writing study or a variable to be correlated.

Moreover, the aspects to be assessed within analytic features also provide a deeper insight into the writers' development of writing skills and could be of great help to define a particular evidence-based instruction.

Comparing L1 and L2 / FL

The question of text quality when comparing the outcomes of writing tasks in two different languages has been an issue to which researchers have addressed. In some occasions different judges where used to rate the texts in each separately.

Some authors showed their concerns when faced the question of comparing text quality in multiple language writing (Schoonen, 2005; Tillema, 2012; Van Steendam et al., 2010; Van Weijen, 2008). They put forward the need for an evaluation of text quality that enabled the comparison between L1 and L2/FL. Tillema (Op. Cit) reported that after a process of statistical comparison of results, it was very difficult to establish a method that allowed to assess with the same benchmark rating as Van Weijen (2008) had already done. Tillema suggested that in order to give account and compare the text quality from writing tasks of those subjects whose L1 and L2/FL were at stake, judges should be almost bilingual in both languages and it was compulsory to find an inter-rater reliability as high as in those languages separately. That was the case of the studies presented in both sections of this dissertation.

3.1.3. Errors: deviations from the language conventions

After Corder's (1967) seminal work on errors, the relevance of errors in EFL/ESL research have been largely a focus of the so-called applied linguistics research. An error understood as the discrepancies between the subjects' productions and the target language rules. Corder (op. cit.) makes the difference whether this discrepancy is temporary or permanent. In the case of the former, the label of "mistake" is given as such discrepancy can be corrected straight away or later on during the linguistic output either oral or written. In the case of the latter, the term "error" was coined and reflected the learner's ignorance of the grammar rule not observed.

The EFL writing skills research has covered, as it could not be otherwise, the issue of errors. One of the main research interests is the influence of the L1 in the EFL/ESL errors. The inter-lingual transfers that writers and EFL/ESL students implement and deviate them from the target language rules, in this case English. In this sense, Pichette & Leśniewska (2018) updated Ellis (1985) study on the amount of errors depicted by researchers and the heterogeneity of their classification. Even though their scope is enlarged the focus of research is mostly colonised by morph-syntax mistakes and the percentage of L1 errors calculated.

Errors in writing skills research have also lured different researchers in diverse geographical, educational contexts around the world (Abdulmajeed, 2017; Castillejos, 2009; Chelli, 2013; Díaz, 2015; Sarfraz, 2011; Wang & Wen, 2002).

Typology of errors

Castillejos (2009) tailored Dagneux et al.'s (1996) coding and types of errors for her study. The different mistakes are identified as concerning grammar, lexicogrammar or lexis mistakes, syntax discrepancies are also contemplated as the aspects affecting the register and style. The latter ones occupy a very scarce number of them, though. In our study, we have adapted the model employed by Castillejos (2009) and reduced the amount of features by merging some categories.

Uses

First of all, errors are said to give an account of the development of the successive representations of the target language grammar conceived as the interlanguage by Selinker (1972). The classification and analysis of errors can portray the way of the acquisition of these aspects. This conception obeys to a rather formal paradigm of learning a language and leaves aside aspects concerning communication. In a way, such postulates inspired later research in the 1980s, particularly, on the order of acquisition of different grammatical forms as Lightbown and Spada (2006) summarised and the hypothesis posed by Krashen (1985) on the developmental sequences.

The diagnosis of learners' errors has been used for a teaching, pedagogical uses. The question of feedback: what, when and how are key points that the identification and knowledge of mistakes bring about. It involves methodological implications that may influence the design of courses syllabuses and school curriculums.

The type and amount of errors are the starting point in the assessment of the text quality. The errors have been frequently arranged according to the linguistic level ranging from grammatical, morpho-syntactic errors to semantic and even pragmatic errors.

3.2. Methods

3.2.1. Participants

A total of ninety-eight ($n=98$), twenty-five male students ($N=25$) and seventy-three ($N=73$) female university students (aged 18-46) from the Faculty of Primary Education at University of Valencia and from Florida Universitària in Catarroja (València, Spain) took part in the experiment. They belonged to four intact groups in years 1, 2 and 3 of a 4-year degree. Students' proficiency in English ranged from A1 to C1, according to CEFRL, and was distributed as follows: A1. 4.1%; A2: 27.6%; B1: 32.7%; B2: 30.6%; and C1: 5.1%. For statistical reasons students in this chapter were grouped in two levels: LOW (A1, A2 and B1) and HIGH (B2-C1).

Each participant carried out one of the writing tasks, either an essay or a summary, in two languages their L1, either Spanish or Catalan and EFL. In terms of writing tasks the percentage of participants who wrote a summary was 37.8% and 62.2% wrote an essay.

3.2.2. Design and variables

It is an experimental and empirical study with different variables whose statistical effects have been calculated. A mixed ANOVA was performed, 2 (writing tasks: essay & summary) X 2 (languages: L1 & EFL) X 2 (EFL proficiency: low & high) for the account of the transformations, the actions that indicate the metacognitive regulation during revision. In addition, it was also carried out an ANOVA for the effects of those variables on the text quality. In this case it was a mixed 2 (writing tasks: essay & summary) X 2 (languages: L1 & EFL) X 2 (EFL proficiency: low & high) X 2 (phases: version 1 & revision).

In the last part, the analytic scoring concerning mistakes in surface and meaning errors, an ANCOVA was carried out. The design was a mixed 2 (writing tasks: essay & summary) X 2 (languages: L1 & EFL) X 2 (EFL proficiency: low &

high) X 2 (phases: version 1 & revision) plus two covariables 2 (words written in L1 and words written in EFL)

Similar studies have also used the EFL proficiency and the languages as this sort of variables (Chenoweth & Hayes, 2001; Manchón et al. 2009, Rinnert & Kobayashi, 2007; Tiryakoglu et al., 2019).

The dependent variables were the kind of dimensions of transformations students performed and the text quality. The quality of the writings was also analysed before and after the revision of texts.

The independent between-subjects variables were the writing tasks, as each participant wrote only a type of text, and the participants' English proficiency. On the other hand, the within-subjects variables were the Language (L1 & EFL) and the Phase (version 1 and revision), as all participants wrote a first version and the revision of their texts in both languages.

3.2.3. Materials, instruments and measures

3.2.3.1. Materials

Writing tasks and films

Participants performed one of the two writing tasks proposed, either a summary or an essay both in L1 (Spanish/Catalan) and in EFL. Scardamalia and Bereiter's (1987) and Takala and Vähäpääsi's (1983) taxonomies were observed in order to design the tasks. Their models confer a different cognitive load to each one of them. According to their paradigms, a summary, a narrative text, places fewer attentional demands during the writing process (Johnson et al., 2012). In contrast, an essay involves a higher demand of attention and requires knowledge-transforming strategies and belongs to type III.

It was decided to use films as the source of information to perform the tasks. Since films convey image and linguistic information, they seem easier to be recalled

than written texts (Höffler & Leutner, 2007). As time goes by, literal linguistic information is less available in Long Term Memory (LTM) (Kintsch et al, 1990) and the subject can only access the Situation Model built, which consists of images and segments. There was a two-day delay between phases, Session 1 (writing the text) and Session 2 (revising the text), so a good episodic memory should help perform the tasks proposed.

Likewise, when writing a summary writers do not need to ‘invent’ new information on the basis of the information stored in their memory, but they tell what they know (episodic information available in their LTM), in the order it comes to their minds, with genre constraints and the preceding text as the principal retrieval cues (Scardamalia & Bereiter, 2010). Then, they turn the content of their Situation Models into linguistic code. This task would correspond to what Scardamalia and Bereiter call knowledge-telling. Thus, it is expected that participants describe characters and events watched in the films in a time order similar to the order in the films.

Nevertheless, writing an essay would imply (re-)elaborating the material stored in LTM in order to meet the external demand (the task). This would correspond to what Scardamalia and Bereiter (op.cit.) call knowledge-transforming. The writer's knowledge and beliefs are involved in the composing process. This differs from knowledge-telling in the fact that the writer's knowledge has little or no effect.

Symbolic elements were taken from the films in order to propose the topics for the essays. They should be explicitly present in films but their meaning should be implicit (neither seen nor verbally expressed) so that there was room for knowledge transforming.

In this ‘knowledge-transforming task, writers are expected to use their prior stored knowledge (both from the film and from other inner sources such as their own beliefs, general knowledge, readings, etc.) so that they are able produce new information which is not explicit in the films watched. This new information would result in, at least, the thesis for the essay statement and the supporting ideas.

Selection of films

Initially, participants were asked to brainstorm films that had caused an impact on them. A list of 5 pre-selected films by the researchers was given to each participant

who had the chance to include some other films. Participants were then asked to select up to 3 movies among the pre-selected by the researchers and to add up to 3 more films they liked and they could remember very well.

After that first step, a group of films were shortlisted according to participants' preferences: *Harry Potter*, *the Lord of the Rings*, *The boy in the Striped Pyjamas*, *Avatar*, *Star Wars*, *Charlie and the chocolate Factory*, *Forrest Gump*, *Gladiator*, *Life is Beautiful* and *Pirates of the Caribbean*. Four class sessions were used for data collection. In the first session, students completed the questionnaire on their familiarity with the proposed films. Given a list of movies they were asked to mark with an 'X' the films on the list that they had seen. It lasted for 15-20 minutes.

Finally, participants made their decisions and the films selected eventually were Harry Potter's films, *The Boy in the Striped Pyjamas* and *Avatar*.

Thus, three topics for the essays were proposed: *The fight between Good and Evil in Harry Potter's world*; *The symbolism of the metal fence in The Boy in the striped pyjamas*; *Humans replacement by Avatars in certain tasks*. The languages used in each task and the films were counterbalanced as in other similar studies (Van Weijen et al., 2009). As a result there were 12 experimental conditions as portrayed below by Table

Cond	Film	Lgg	Film	Lgg
1	Harry Potter	EFL	Avatar	L1
2	Harry Potter	EFL	The boy in the striped pyjama	L1
3	Harry Potter	L1	Avatar	EFL
4	Harry Potter	L1	The boy in the striped pyjamas	EFL
5	Avatar	EFL	The boy in the striped pyjamas	L1
6	Avatar	L1	The boy in the striped pyjamas	EFL
7	Avatar	EFL	Harry Potter	EFL
8	The boy in the striped pyjamas	L1	Harry Potter	EFL
9	Avatar	EFL	Harry Potter	L1
10	The boy in the striped pyjamas	EFL	Harry Potter	L1
11	The boy in the striped pyjamas	L1	Avatar	EFL
12	The boy in the striped pyjamas	EFL	Avatar	L1

Table 1. Experimental conditions: films and languages counterbalance.

First versions and revision templates

Two templates were designed for students' first production and for the revision phase. For the first version, the template consisted in a piece of paper with numbered

lines for writing the text. The film, the kind of task (summary/essay), the language (L1 or EFL) and the topic of the essays were made explicit in the template. For or the revision phase, the template consisted in a sheet of paper where students had to state not only the transformations they would perform to improve their first version of their texts, but also the line or lines affected by these changes. They were also compelled to state the type of change.

3.2.3.2. Instruments and measures

Text quality assessment

Text quality is a recurrent object of study in writing research and in EFL. Schoonen (2005) highlighted the interest in the effect of the task on writing performance, he also pointed at "the topic, the rhetorical factors and the background knowledge" (2005, p. 5) as features to cover when assessing writers' performance. The design of the writing tasks or the intervention will definitely have an impact on text quality.

In our case, the participants were pre-service teachers who produced different types of texts and genres. Moreover, the topic was known to participants as they had seen three different films. However, they had no information about which types of texts or genres they will be facing in the writing tasks. Neither were they provided with the rubric as they could remember the expected outcome.

The first step when measuring the quality of a text is the assessment. In this study, text quality has been approached from different perspectives:

1. What: text quality was rated using holistic and analytic scores. Holistic stands for the addition of the five aspects that bring about the analytic scoring. The extent to which they were assessed is explained below.
2. When: text quality was assessed in the first version of the text as well as after revision. This enabled the comparison of the text quality before and after deferred revision.

L1 Text Quality

Similar studies on writing dealing with L1 vs EFL faced the issue of the assessment of text quality in L1 followed the same steps and criteria as in EFL (Hirose & Sasaki, 1996; Tillema, 2012; Tiryakoglu et al., 2019; Van Weijen, 2008).

The same categories were assessed and the same agreements on the criteria were used for the content and organization of texts in both languages. On the other hand, in quantitative terms, by stating the amount of mistakes or misuse of features related to grammar, vocabulary and mechanics brought a comparable contrast.

Holistic assessment

In order to give account of the quality of students' productions it was agreed to use a holistic assessment scale. Particularly, Liu's (2005) rubrics assess the written text taken into account 5 predominant features, as Hyland (2003) indicates: content, organisation, grammar, vocabulary and mechanics.

Validation of coding

In the original rubrics the score for each category had 3 or 4 levels of correction, depending on the feature, which ranged from 'very poor' (0 points) to 'excellent' (5-4) points. Before their implementation, rubrics were tested and validated by two experts. They were asked to assess the writings of 11 subjects using these rubrics on their own. The participants were randomly chosen and writings from both experimental conditions (summary/essay) were taken. Cohen's kappa coefficient was calculated to obtain the rater's inter-agreement index in the implementation of the categories. The mean kappa for the rubrics was insufficient (<0.65). Raters solved out disagreement by discussion and revised the implementation criteria on these 11 writings. After discussion, the levels of correction were simplified to three in each of the 5 items of the rubrics (from 0 to 3 points: high, medium, low). Criteria were rewritten in order to fulfil this new simplification and examples from subjects were provided in each level within each category.

Again, ten new texts were randomly chosen from each experimental condition and experts applied the holistic scale with the new agreements. Figure 15 shows the resulting adapted holistic scale with the agreements taken. On this occasion, the mean kappa in the rubrics was quite good ($k=0.96$).

Features	Scores	Descriptors
Content	High	Excellent to very good: well-stated thesis related to the assigned topic with relevant, substantive, and detailed support
	Medium	Good to average: limitedly-developed or vague thesis with irrelevant statements
	Low	Fair to poor: poorly-developed or obscured thesis; too much repetition of limited relevant sentences
Organisation	High	Excellent to very good: well-organized structure with beginning, development, and ending; effective transition with logical sequencing and coherence.
	Medium	Good to average: loosely-organized structure with imbalanced beginning, development, and ending; less effective transition that obvious affects logical sequencing and coherence
	Low	Fair to poor: choppy ideas scattering without logical sequencing and coherence. Very poor: no organization, no sequencing and coherence; or not pertinent
Grammar	High	Excellent to very good: well-structured sentences with variety; appropriate rhetoric; few grammatical errors. Good to average: less well-structured sentence with some errors of tense, agreement, etc.; but meaning seldom obscure
	Medium	Fair to poor: major errors of conjunctions, fragments, or ill-structured sentences that make meaning confused or obscured
	Low	Very poor: being dominated by errors that blocks communication
Vocabulary	High	Excellent to very good: specific and effective wording; idiomatic. Good to average: dull and repeated wording; occasional errors of word/idiom form, choice, usage but meaning not obscured
	Medium	Fair to poor: inappropriate wording; meaning confused or obscured.
	Low	Very poor: some relevant words found, but meaning incomprehensible.
Mechanics	High	Excellent to very good: no errors of format, punctuation, or capitalization, no spelling error / tildes. Include capital letters and handwriting.
	Medium	Fair to poor: limited errors of format, punctuation, or capitalization, but meaning not obscure, some spelling error.
	Low	Very poor: too many errors of format, punctuation, or capitalization; violating basic conventions of writing, overwhelming spelling mistakes.

Figure 15. Rubrics and the score range scale. Adapted from Liu's (2005).

Some of the raters agreements used for each descriptor for the assessment of *essays* were the following:

- a. Content has to do with the thesis of the essay and how it is supported by different reasons. It was also agreed to bear in mind up to which extent the writers stick to the topic and the task.
- b. Organisation. In this feature, the structure of the text and the coherence in the transition of the ideas were assessed. It was agreed to take into account the topic progression and the accurate use of paragraphs and sentences. It was combined in the lowest average mark the fair to poor and very poor criteria.

c. Grammar. This was the aspect in which kappa's were higher. The two highest scores were also merged.

d. Vocabulary. Exactly the same as in grammar in agreement and combination of criteria.

e. Mechanics. In this particular feature, agreement was reached when reduced to countable instances. It was decided that spelling and punctuation mistakes would be counted up and depending on the amount of mistakes a score would be given. 3 for texts with no mistakes, 2 for texts with 1 to 5 mistakes and 1 for texts with 6 or more mistakes.

Likewise, some of the raters agreements used for each descriptor for the assessment of *summaries* were the following:

a. Content. The text includes mostly a comprehensive summary and focuses on main ideas/events in the films. It should not include personal judgements or detailed descriptions.

b. Organisation. As in essay.

c. Grammar. In this case, it took the raters longer to set a criteria and for this type of text they established a grading scale: high: 0-10 mistakes; Medium: 10-15 mistakes; Low: 16 or more mistakes.

d. Vocabulary. In a very similar way, the pilot brought the raters more disagreement than in the essays and it was agreed the following grading scale: high: 1-3 mistakes; medium: 3 - 5 mistakes; low: more than 5 mistakes.

e. Mechanics. As in essay.

Analytic assessment

The present study complements its focus on text quality and, particularly, on the metacognitive regulation that guided the deferred revision of texts with the analysis of errors made by writers. These errors were quantified and categorized after each session and in each language in both writing tasks.

Categories	Type	Subtypes	Instances
SURFACE	1. Spelling and punctuation.		
	2. Verbs	2.1. Morphology 2.2 Use of structures modals, gerunds, infinitives, etc. 2.3 verb tense. Feature used for inconsistencies in tense agreement with regard to text cohesion. 2.4 verb voice	
	3. Nouns & pronouns (possessive)		Names and surnames have been counted up in revision: Howards, Samuel, Jack.
	4. Adjectives & adverbs	4.1. Saxon genitive	
	5. Article & demonstrative		This/these the confusion between these two terms has been assigned to this particular type of error. The use of the article “the” has been also included in this type of error rather than in the syntax section.
	6. Syntax	6.1 Word redundant 6.2. Word order 6.3. Word missing	
MEANING	7. Semantics	7.1. Local words 7.2. False friends / semantic calques Words understood as interferences, false friends and direct translations. 7.3. Connectors / super structure cohesion 7.4. Referential / ambiguity / No subject pronoun reference. Passage which makes no sense or unintelligible sentences.	

Figure 16. Types of errors adapted from Castillejos, (2009). Apud Dagneux et al., (1996).

The aim of this study is not to focus on errors and their taxonomies (this is the scope of some other ELT research), but on the kind of mistakes students are able to correct after revision. That is to say, the interest lies on analysing what kind of transformations participants performed in their writings in order to improve the quality of their texts.

Alternatively, the amount of mistakes will help define which parts of the speech the participants made more mistakes on. The major findings in the participants' texts

after each task and their revision and in L1 and EFL are accounted for. In order to carry out the analysis, Castillejos' (2009) taxonomy of errors was adapted. Figure 16 above shows the resulting categories of errors after the adaptation. Errors were split into two main categories: surface and meaning. In a similar way as some other authors (Allal, 2000; Chanquoy, 2001; Faigley & Witte, 1981; Manchón et al., 2009; Stevenson et al., 2006).

Transformations

Textual transformations reflects the metacognitive regulation performed by participants in their revisions of texts. The codes employed for transformations followed the dimensions stated by Allal's taxonomy (2000) and Chanquoy's (2001). The adaption of the categories were as follows and they are depicted in Figure 17 below:

1. Level of language affected by the transformation: word, group, sentence, text.
2. Type of transformation: addition, deletion, substitution, rearrangement.
3. Relationship to language conventions: transformation required by convention (which can result in correct information or in a new mistake); optional transformation (not required by language conventions).
4. The level of mental representation affected by the transformation: Word or Surface level (only form, not meaning); semantic level micro-ideas (meaning is affected locally); semantic level macro-ideas (meaning is affected from sentence to sentence...); text organisation. Referential level (prior knowledge).

DIMENSIONS	CODE	FEATURES
1.The level of language affected by the transformation	1.1.	Word
	1.2.	Group
	1.3.	Sentence, a whole unit with a conjugated verb
	1.4.	Paragraph / text
2.The type of transformation	2.1.	Addition
	2.2.	Deletion
	2.3.	Substitution
	2.4.	Rearrangement.
3.The relationship to language conventions	3.1.	Incorrect to correct (conventional transformation)
	3.2.	Incorrect to incorrect (conventional transformation)
	3.3.	Correct to incorrect (optional transformation)
	3.4.	Correct to correct (optional transformation)
4. The object of the transformation	4.1	Word or Surface level
	4.2.	Semantic level: micro-ideas meaning-preserving
	4.3.	Semantic level: macro-ideas
	4.4.	Text organisation. Referential level.

Figure 17. Dimensions of transformations, coding and features. (Adapted from Allal, 2000).

In the process of assessing, spotting and classifying errors and transformations some questions are considered:

Texts that added one or more paragraphs and whose content was coherent to the rest of the texts but contained formal mistakes. Followed Allal's (2000) judgement on that by stating:

For this fourth dimension, language convention is considered in a restrictive sense corresponding to rules of spelling, syntax, and punctuation for which no variation is accepted by authoritative references [...] At the textual level, two major types of conventions are taken into account: correct signs of segmentation between sentences (capitalisation and final punctuation) and correct anaphoric referencing.
(p. 151)

Some criteria and issues are to be born in mind after having set and completed of the identification of the features in the revision of the texts:

1. The level of language affected by the transformation: in order to make the difference between a group of words and a sentence, it was noted that a conjugated verb was needed.
2. The type of transformation: some participants deleted a word, group, sentence or paragraph and added other features instead. Even though,

they considered as two different features, once we counted them up, these transformations were regarded as substitutions.

3. The relationship to language conventions:

3.1. This type of conventional transformation (from incorrect to correct), that is to say, observing the language rules in terms of grammar and spelling, became a decisive feature when counting errors as it was the most recurrent feature of its type.

3.2. In our assessment of these transformations it must be noted, as it may be relevant, that in some cases in long sentences or even paragraphs. The criterion is to follow the language rules to the letter.

3.3. In this section, improvements that needed special care lead to a 3.3. Very few came from meaning mistakes, they were mostly spelling.

3.4. This kind of optional transformation did not include changes with respect to the language conventions.

4. The object of the transformation

4.1. Word or Surface level. They were the predominant object of the transformations as results show. They entailed mostly synonyms or similar expressions as well as spelling or punctuation.

4.2. Semantic level-Micro-ideas (meaning is affected locally). In some cases it was difficult to tell the difference between 41 and 42. Meaningful words excluding connectors.

4.3. Semantic level-Macro-ideas (meaning is affected from sentence to sentence...). Sentences, paragraphs bringing new info as mentioned above.

4.4. Text organisation. Referential level (prior knowledge)

Four numbers were assigned to each transformation according to the key above. A few examples of the coding system:

Table 2. Example of transformation 1.

Dimension	Feature
1.The level of language affected by the transformation	Word
2. The type of transformation	Addition
3.The relationship to language conventions	Incorrect to correct (convention)
4. The object of the transformation	Surface Level

Renglon 18/19 → Elimino lo subrayado y
 al inicio del renglon 18 añado
 - In our real life).
 She only adds a comma → 11/21/31/41

Table 3. Example Example of transformation 2.

Dimension	Feature
1.The level of language affected by the transformation	Paragraph/text
2. The type of transformation	Addition
3.The relationship to language conventions	Correct to incorrect (optional)
4. The object of the transformation	Referential/textual

LÍNIA 14: (afegir informació)
 → La mare s'adona ⁶³que el fill passa molt de
 temps fora de casa i decideix seguir-lo per
 veure què fa. Quan s'assabenta ⁶³que el fill
 està veient al jueu al camp de concentració
 li prohibeix acostar-s'hi. 14 21 (31 41
 33) ...

Table 4. Example of transformation 3.

Dimension	Feature
1.The level of language affected by the transformation	Word
2.The type of transformation	Deletion
3.The relationship to language conventions	Correct to correct (optional)
4. The object of the transformation	Surface level

LÍNIA 11: (eliminar xquets)
 → entre els dos. 11 22 34 41

Table 5. Example of transformation 4.

Dimension	Feature
1.The level of language affected by the transformation	Paragraph/text
2. The type of transformation	Addition
3.The relationship to language conventions	Incorrect to correct (optional)
4. The object of the transformation	Referential Textual

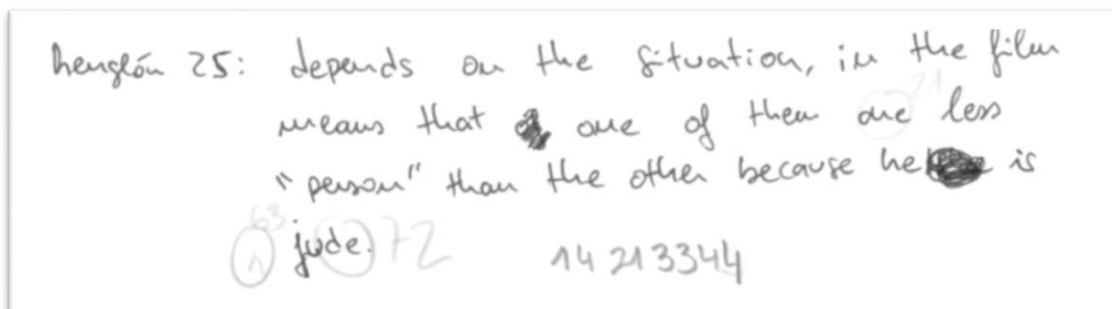


Table 6. Example of transformation 5.

Dimension	Feature
1.The level of language affected by the transformation	Sentence
2. The type of transformation	Substitution
3.The relationship to language conventions	Incorrect to incorrect (conventional)
4. The object of the transformation	Semantic Microstructure



Validation of coding

In order to validate the rubrics for the codification of the dimensions of the metacognitive as stated above, 5 pairs of participants' productions were randomly selected (summary and essay).

Similarly to the text quality, two experts were asked to apply Allal's rubrics and classify independently the regulatory actions (transformations) performed by students to improve the quality of their compositions. Cohen's kappa was calculated for each of the four global categories (level of language affected; type of transformation; and relationship to language conventions) to analyse the inter-rater's agreement on the application of the rubrics. The four of them were considered sufficient: Level of language affected by the transformation, $k=.86$; Type of transformation, $k=.89$;

Relationship to language conventions, $k=.71$; Level of text object of the transformation, $k=.72$.

3.2.4. Procedure

After the selection of the films (see Materials and Measures), participants were informed about the experimental sessions to be conducted without detailed information. Four weeks before the sessions, participants were asked to watch all three films in order to maximize the differences between tasks and reduce the influence of the memory of the base material. Participants were strongly encouraged to watch the films, either in their L1 or in English, at least two weeks before the writing activities so that the explicit linguistic information they could remember was scarce at the time of the experimental session (Kintsch et al., 1990).

Two 90-minute sessions were needed to implement all the writing tasks. No extra aids were allowed: no dictionaries, no mobile phones, no laptops or PCs were at the participants' reach. Researchers did not provide any type of feedback on the task and advised participants to stick to the conditions stated on the paper.

Participants were informed that the aim of the study was to assess pre-service teachers' ability to write texts in their L1 and in EFL and compare it. The results would help researchers to suggest recommendations to improve future pre-service teachers' text quality.

In the first session, they should write a summary or an essay, depending on the group, on a film they had previously watched in English. In the second session, they would have the possibility of going back to their texts and transformed them to improve their quality.

Session 1

In this session, participants were given the instructions in writing and orally. It was highlighted that they should write freely and the way they could, because they would have a second session to change, correct and improve their texts. They were given the writing templates for the first text and the first task (See appendix).

Once students had completed the first text, they should hand it in and they were given the template for the second task, the same type of text but on a different topic and in a different language. As it has been mentioned before, films, tasks and languages were counterbalanced.

The templates consisted of sheets of paper with numbered lines. This would allow students to pinpoint the transformations performed when they undertook the second session. Texts were limited to two pages (one sheet).

At the end of session 1, texts were collected and participants were told they had the chance to look for the information they might need at home either in terms of meaning or form or other resources. In session 2, they would have the opportunity to correct their texts to improve their quality.

Session 2

For the second experimental session, the participants' texts from session 1 were photocopied. Instructions were given both in writing and orally as in session 1. After that, participants were given their two photocopied texts from the first session, together with a template to write down the improvements. They consisted of sheets of paper with lines (but not numbered) where students should write down the changes (also known as transformations for the sake of this study) performed from each text from session 1. Researchers kept a hard copy of all the first versions of all types of texts and languages.

Participants were asked to read the texts they had written in the previous session and underline or mark the pieces of the original text they would like to modify. Then, they handwrote the pieces of text they had pointed out in their original text. In order to help the identification and location of the transformations performed, students should point out the number of line in the original text where they have changed something and report the kind of transformation performed (e.g. addition of information, etc.).

3.3. Results and analysis

Study 1

3.3.1. Length of texts

Globally speaking, in the first version of their texts participants wrote more words in L1 than in EFL, as expected, both in the summary and in the essay: EFL $M_{\text{totalsum}}=195.2$ (SD=61.1); L1 $M_{\text{totalsum}}=264.03$ (SD=122.9); EFL $M_{\text{totalaessay}}=211.3$ (SD= 78.3); L1 $M_{\text{totalaessay}}=240.4$ (SD=74.8). They wrote longer texts in the summary.

There was a global effect of Language ($F(1,94)=15.631$; $p<.001$; $\eta^2=.14$; $P=.98$) with a medium size effect, as well as of Language X Task ($F(1,94)=4.897$; $p=.029$; $\eta^2=.05$; $P=.59$), but in that case the size effect was small. This means that the number of words students wrote in each language was different and within each language, the number of words were also different in each task. In fact, students wrote many more words in the summary in L1 ($M=264.03$) than in English ($M=195.19$).

Particularly, in the Low-level group (A1- A2-B1) the texts in L1 were longer, as expected, than those ones they wrote in EFL for both tasks: $M_{\text{sumEFL}}=186.9$ (SD=51.2); $M_{\text{sumL1}}=283.7$ (SD=103.4); $M_{\text{essayEFL}}=198.9$ (SD=67.5); $M_{\text{essayL1}}=234.3$ (SD=68.3). However, the length of essays was, on average, higher than summaries in EFL and the other way around by far in L1.

In the high-level group (B2-C1), the texts in L1 were also longer than EFL texts in both tasks. Indeed, means showed that essays were longer $M_{\text{essayL1}}=263.2$ (SD=94.8) than summaries: $M_{\text{sumL1}}=250.6$ (SD=135.2). On the other hand, in EFL essays $M_{\text{essayEFL}}=257.2$ (SD=99.3) were also longer than summaries $M_{\text{sumEFL}}=200.8$ (SD=67.7).

To sum up, the mean length of texts was higher in both groups and tasks when they produced their texts in L1. Participants with lower EFL proficiency wrote more words in their L1 than high-level participants did. They also wrote more words in the

summary in both languages. However, Low-levels wrote longer essays than summaries in EFL. Differences in EFL proficiency did not turn out to be significant.

3.3.2. Transformations

In this part, the amount of transformations are counted up and the results of the statistical analysis (ANOVAs) are showed. The next subsections report the effects of the tasks, EFL proficiency of writers and language on the dimensions contained in the transformations (Allal, 2000).

With regards to the amount of transformations, the Language produced significant differences on the amount of transformations ($F(1,94)= 16.650$; $p<.001$; $\eta^2=.15$; $P=.98$) with a large size effect. In fact, participants made a higher amount of changes in English ($M=9.45$; $SD=.50$) than in L1 ($M=7.08$; $SD=.45$). Table 6 shows the mean values of students' transformations both in L1 and in EFL in relation with the English proficiency level and the task.

Table 7. Mean of transformations per language, task and EFL proficiency.

Task	EFL proficiency	L1-Mean (SD)	EFL-Mean (SD)
Summary	Low-level	4.93 (3.22)	6.27 (3.53)
	High-level	6 (4.45)	9.05 (4.20)
	Total	5.57 (3.98)	7.92 (4.13)
Essay	Low-level	6.19 (2.62)	9.44 (4.11)
	High-level	11.23 (6.83)	13.08 (6.13)
	Total	7.26 (4.37)	10.21 (4.80)
Total	Low-level	5.89 (2.80)	8.68 (4.18)
	High-level	7.94 (5.94)	10.54 (5.30)
	Total	6.62 (4.28)	9.37 (4.67)

The same analysis showed a significant effect of the Task ($F(1,94)= 20.670$; $p<.001$; $\eta^2=.18$; $P=.99$) and the EFL proficiency ($F(1,94)=17.317$; $p<.001$; $\eta^2=.16$; $P=.99$), both of them with a large size effect. Students made more transformations in the essay ($M=9.98$; $SD=.51$) than in the summary ($M=6.56$; $SD=.55$) and the ones with a higher EFL proficiency outperformed those with a low level ($M_{high-level}= 9.84$; $SD=.56$; $M_{low-level}=6.71$; $SD=.49$).

There was an interaction effect Language X EFL Proficiency ($p=.052$) though the size effect was very small ($<.06$) and it lacked statistical power. This meant that PSTs with a higher level of English performed more changes in their revision than

PSTs with a lower level in both languages (L1: $M_{\text{high-level}}=8.61$; $M_{\text{low-level}}=5.56$; EFL: $M_{\text{high-level}}=11.06$; $M_{\text{low-level}}=7.85$) and both groups performed more transformations in EFL than in L1.

3.3.2.1. Level of language affected by the transformation

In general, word-based transformations are dominant in high-level and low-level participants for both tasks and languages. Table 8 shows the mean values regarding the level of language affected by the transformations in L1 and in EFL and in relation with the tasks.

Table 8. Level of language affected. Means of transformations per task and language.

	Task	L1-Mean (SD)	EFL-Mean (SD)
Word	Summary	2.48 (.45)	3.86 (.53)
Group		1.18 (.31)	1.91 (.34)
Sentence		.70 (.20)	1.16 (.26)
Text		1.11 (.21)	.73 (.19)
Word	Essay	3.50 (.42)	5.16 (.49)
Group		2.80 (.30)	2.5 (.32)
Sentence		1.49 (.19)	2.40 (.24)
Text		.96 (.19)	1.19 (.18)

The Language produced significant differences with a large size effect ($F(1, 94)=16.650$; $p < .001$; $\eta^2=.15$; $P=.98$), as well as the Transformation ($F(1, 92)=28.984$; $p < .001$; $\eta^2=.49$; $P=1$). Students made more transformations in EFL ($M=2.36$; $SD=.13$) than in L1 ($M=1.77$; $SD=.11$), and they performed more actions which affect Word and Group categories than they do to Sentence or Text level.

Moreover, there was a global effect of the Task ($F(1, 94)= 20.670$; $p < .001$; $\eta^2=.18$; $P=.99$) with a large size effect. The interaction Transformation X Task produced significant differences ($F(1, 92)= 20.670$; $p=.025$; $\eta^2=.09$; $P=.73$) but with a small size effect. Participants performed many more actions in the essay ($M=2.50$; $SD=.32$) than in the summary ($M=1.64$; $SD=.14$) and the levels of language affected by the transformation showed more variety in their distribution in the essay than in the summary. Thus, in the summary they focused on words and groups of words mainly, and in the essay, too, but they also performed many more actions affecting sentences and text than in the summary.

The level of EFL proficiency brought about significant differences too ($F(1, 94)= 17.317$; $p<.001$; $\eta^2=.17$; $P=.99$) with a large size effect. There was an interaction effect Transformation X EFL proficiency, even though the size effect was medium-size ($F(1, 92)=2.759$; $p=.047$; $\eta^2=.08$; $P=.65$). Participants with a high level of English performed more actions in each category than participants with a low level of English. Both groups focused their revisions mainly on word and groups of words. However, students with a high level also performed many more actions related to sentence and text than those with a low level of English. Figure 18 shows the mean values of transformations in English regarding the level of language affected and the EFL proficiency level.

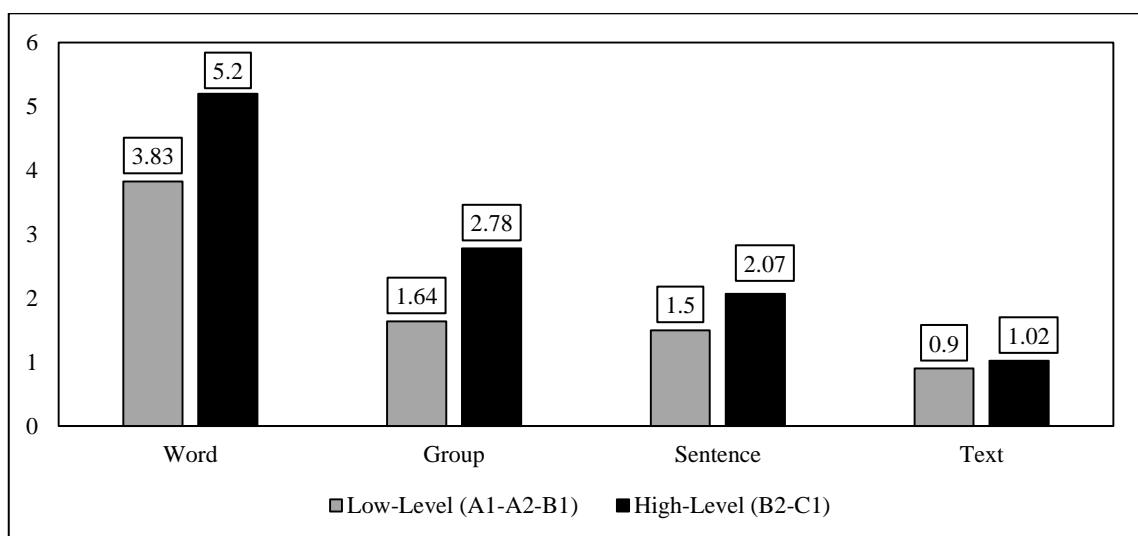


Figure 18. Mean of transformations per level of language affected by EFL proficiency.

3.3.2.2. Type of transformation

The results revealed the predominance of the substitution, followed by addition, as the most frequent type of transformations in L1 and in EFL, and in both tasks (summary and essay). They outnumbered the rest of actions (deletion and rearrangement). Table 8 shows the mean values of the kind of metacognitive action performed in relation with the language and the task.

Table 9. Type of transformation. Means of transformations per task and language.

	Task	L1-Mean (SD)	EFL-Mean (SD)
Addition	Summary	2.75 (.36)	2.28 (.38)
Deletion		.35 (.18)	.64 (.34)
Substitution		2.30 (.47)	4.71 (.60)
Rearrangement		.06 (.04)	0.00 (.03)
Addition	Essay	2.85 (.34)	3.77 (.36)
Deletion		.99 (.17)	.99 (.24)
Substitution		4.83 (.44)	6.40 (.56)
Rearrangement		.04 (.04)	.11 (.03)

The Language produced significant differences ($F(1, 94)=46.497$; $p<.001$; $\eta^2=.15$; $P=.98$) as well as the type of Transformation ($F(1, 94)=121.904$; $p<.001$; $\eta^2=.57$; $P=1$) with a large effect size for both of them. There was also a global effect of the Task ($F(1, 94)=20.751$; $p<.001$; $\eta^2=.15$; $P=1$) with another large-size effect. As mentioned before, participants performed more actions in EFL than in L1, many more substitutions and additions than the rest of categories, and the amount of actions was higher in the essay than in the summary.

The EFL proficiency brought about significant differences too ($F(1, 94)=17.145$; $p<.001$; $\eta^2=.15$; $P=.98$) with a large size effect. There was an interaction effect Transformation X EFL proficiency, even though the size effect was small ($F(3, 94)=4.524$; $p=.004$; $\eta^2=.04$; $P=.88$). High-level participants performed many more actions in each category than low-levels, except for rearrangement, but the mean values in both groups were very low as Table 9 displays. The types of transformations in both groups were mainly substitutions, and slightly fewer additions. Figure 19 shows the mean values of metacognitive actions in English, regarding the type of transformation and the EFL proficiency.

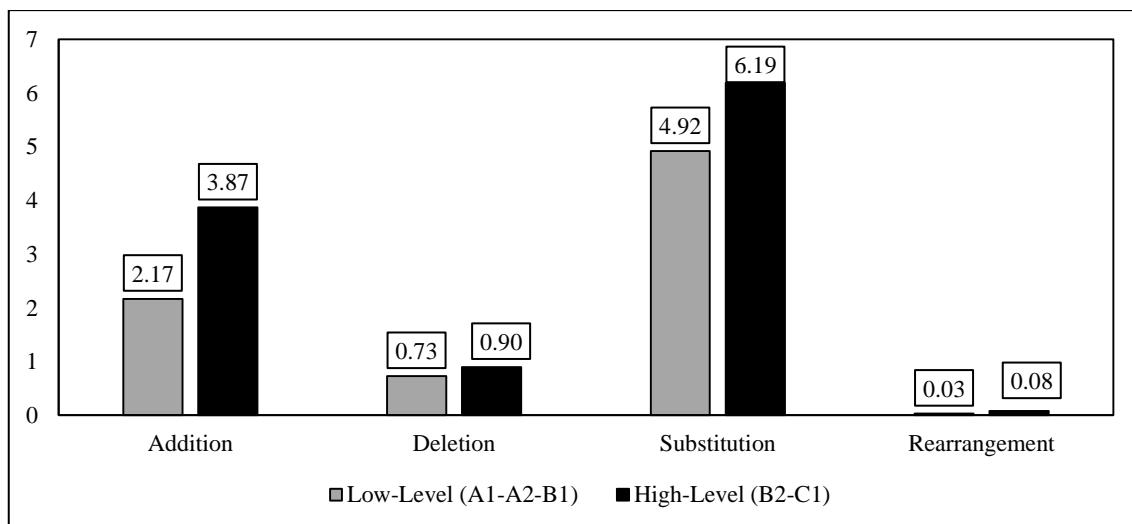


Figure 19. Mean of transformations per type by EFL proficiency.

3.3.2.3. Type of relationship with language conventions

The transformations implemented with regard to the observance of the language conventions had different impact depending on the Task and the Language, as portrayed in Table 10. In both, the summary and in the essay participants performed many more actions to correct conventional mistakes (incorrect-correct, incorrect-incorrect) in EFL than in Spanish, and most of them were successful in the summary.

In fact, there was an interaction effect between the type of Transformation X Language with significant differences and a large size effect ($F(3, 92)=10.374$; $p<.001$; $\eta^2=.25$; $P=1$) as well as an interaction between the Transformation X Task ($F(3, 92)=8.233$; $p<.001$; $\eta^2=.21$; $P=.99$). These statistical effects suggest that the distribution of the type of transformation was different in each language and in each task. Regarding mistakes that needed to be fixed (Incorrect-correct, incorrect-incorrect), in the essay in EFL, students committed a higher amount of new mistakes ($M=1.47$; $SD=.23$) than in the summary ($M=.97$; $SD=.25$) when they tried to correct the errors they had made in their writings. It did not occur in L1, where the amount of new mistakes was very small and slightly superior in the summary.

Table 10. Relationship with language conventions. Means of transformations per task and language.

	Task	L1-Mean (SD)	EFL-Mean (SD)
Incorrect-Correct	Summary	1.27 (.29)	3.29 (.49)
Incorrect-Incorrect		.33 (.14)	.97 (.25)
Correct- Incorrect		.72 (.16)	.98 (.29)
Correct - Correct		3.14 (.59)	2.39 (.45)
Incorrect-Correct	Essay	1.56 (.27)	3.53 (.46)
Incorrect-Incorrect		.04 (.13)	1.47 (.23)
Correct- Incorrect		.51 (.15)	1.48 (.27)
Correct - Correct		6.76 (.55)	4.80 (.42)

Regarding the optional transformations (correct-incorrect and correct-correct), both in L1 and EFL the amount of *correct-correct* actions was higher in the essay than in the summary. Such result suggests that when participants tried to modify many more pieces of information or generated more ideas were mostly substituted or added in their essays than in their summaries. However, they flawed the conventional rules at times.

The level of English proficiency brought about significant differences too ($F(1, 94)=17.368$; $p<.001$; $\eta^2=.16$; $P=.99$) with a large size effect. There was an interaction effect between the Transformation X EFL proficiency, with a large size effect ($F(3, 92)=9.372$; $p<.001$; $\eta^2=.23$; $P=1$). High-level participants performed many more actions in each category than low-level participants. The types of transformations in relation to language conventions in both groups were mainly from *correct-correct*, particularly in high-level students, followed by *incorrect-correct*. Figure 20 portrays the mean values of metacognitive actions in English, regarding the type of transformation and the EFL proficiency.

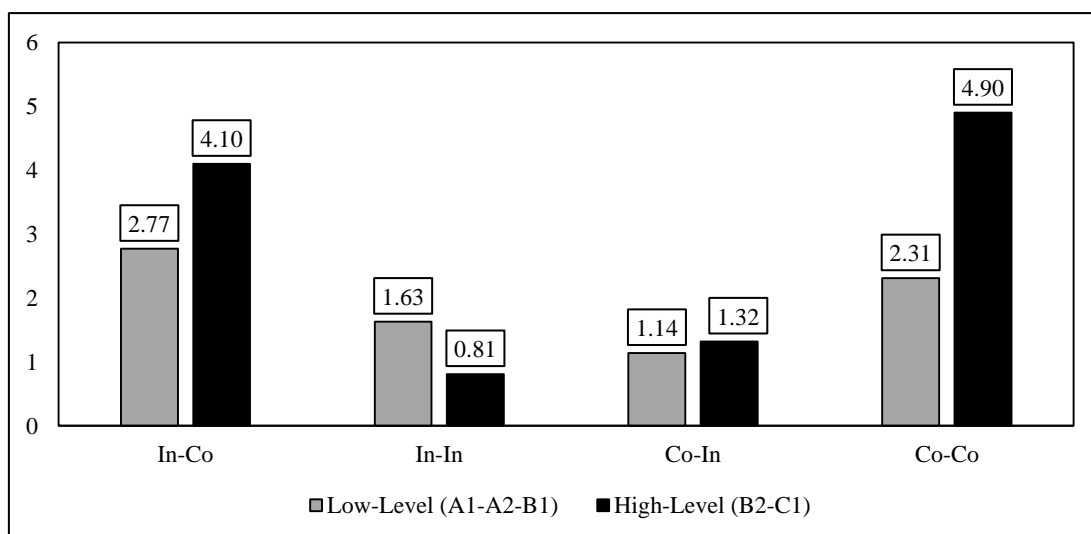


Figure 20. Mean of transformations per relationship to language conventions by EFL proficiency.

As it is portrayed, high-level students carried out more actions to correct their mistakes than low-level students. Moreover, their actions went beyond the formal aspects of the text, and they attempted to improve their writings in issues not related to form and linguistic conventions, and they were successful. According to Allal's (2000) interpretation based on Allal and Saada-Robert's (1992) proposal, correct-correct transformations suggest a more dynamic representation of the task. It can be explained as the changes in mental representation of the texts involved a change in their global meaning. In other words, high-level writers focused their attention on the meaning of the text more often than they cared about the formal changes in both tasks and both languages.

It also stands out that those changes were especially profuse in the essays which almost doubled this type of transformations in both languages in the summary. On the other hand, low-level students focused on formal changes mostly

3.3.2.4. Object of transformation

Results obtained regarding the level of textual meaning involved in the transformations showed that participants mostly implemented changes related to the Surface level (word level) of the language in both their L1 and, particularly in EFL. Table 11 shows the mean values of the object of the transformation in relation with the task and the language. Generally speaking, revision focused mostly in low-order skills, spelling, grammar and vocabulary, rather than high-order like content and organisation (Schoonen et al., 2003; Silva, 1993; Tiryakioglu et al., 2019).

Table 11. Level of language affected. Means of transformations per task and language.

Object	Task	L1-Mean (SD)	EFL-Mean (SD)
Surface	Summary	3.23 (.56)	5.50 (.59)
Micro		1.15 (.21)	1.30 (.37)
Macro		.47 (.14)	.37 (.17)
Referential		.60 (.17)	.38 (.18)
Surface	Essay	5.80 (.52)	5.55 (.55)
Micro		1.79 (.19)	3.21 (.34)
Macro		.76 (.13)	1.30 (.16)
Referential		.77 (.16)	1.20 (.17)

The Language produced significant differences ($F(1, 94)=16.141$; $p<.001$; $\eta^2=.15$; $P=.98$) as well as the type of transformation ($F(3,92)= 76.956$; $p<.001$; $\eta^2=.72$; $P=1$) with a large effect size. There was also a global effect of the Task ($F(1, 94)= 21.213$; $p= <.001$; $\eta^2=.18$; $P=1$). As it is said before, participants performed more actions in English ($M=2.35$; $SD=.13$) than in L1 ($M=1.77$; $SD=.12$), many more Surface ($M=5.02$; $SD=.30$) and Microstructural-level transformations ($M=1.90$; $SD=.15$) than Macro-structural ($M=.62$; $SD=.08$) or Referential ($M=.74$; $SD=.10$), and the amount of actions was higher in the essay ($M=2.50$; $SD=.13$) than in the summary ($M=1.62$; $SD=.14$).

There was also a triple interaction effect Language X Transformation X Task ($F(3, 92)=3.973$; $p<.05$; $\eta^2=.12$; $P=.82$) with a medium size effect. This effect may imply that in each language the distribution of metacognitive actions was different as well as in each task. In L1 Students performed many more Surface transformations in the essay ($M=5.80$; $SD=.52$) than in the summary ($M=3.22$; $SD=.56$), whereas in EFL, students' Surface actions were more or less the same in both tasks, though slightly higher in the essay ($M_{sum}=5.50$; $SD=.59$; $M_{essay}=5.56$; $SD=.55$). Moreover, Micro-structural actions in the English essay ($M=3.21$; $SD=.34$) doubled the amount of these actions in the summary ($M=1.30$; $SD=.37$), whereas in L1 participants' micro-structural actions were also only a little more numerous in the essay ($M_{sum}=1.15$; $SD=.21$; $M_{essay}=1.79$; $SD=.19$).

Macro-structural and Referential actions were not so common but their distribution in each language and in each task also varied. In L1, they performed more macro-structural actions in the summary ($M=.47$; $SD=.14$) than in the essay ($M=.37$; $SD=.13$), and more referential actions in the essay ($M=.77$; $SD=.16$) than in the summary ($M=.56$; $SD=.17$). In EFL, participants implemented more macro-structural and referential actions in the essay ($M_{macro}=1.30$; $SD=.16$; $M_{referent}=1.20$; $SD=.17$) than in the summary ($M_{macro}=.37$; $SD=.17$; $M_{referent}=.38$; $SD=.18$).

The level of EFL proficiency brought about significant differences too ($F(1,94)=17.084$; $p<.001$; $\eta^2=.15$; $P=.98$) with a large size effect. Globally, participants with a high level of English performed many more actions than participants with a low EFL proficiency. The types of transformations in both groups were mainly Surface level, followed by Micro-structural. However, the amount of Surface and Micro-structural transformations of students with a high EFL proficiency was higher in the

essay than in the summary, and higher than those of students with low level of English. Figure 21 shows the mean values of metacognitive actions regarding the object of transformation and the EFL proficiency level.

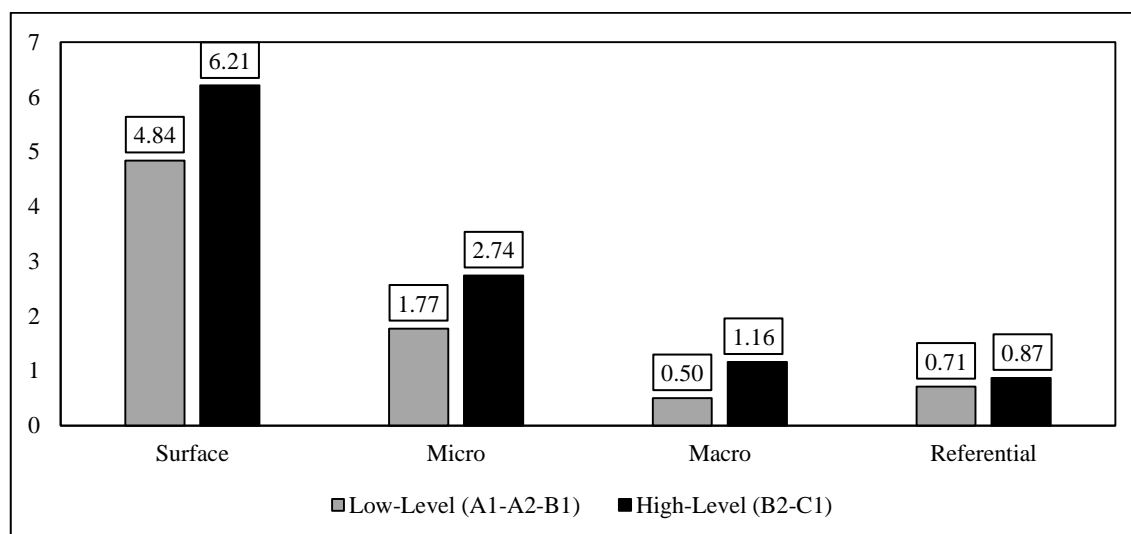


Figure 21. Mean of transformations object of transformation by EFL proficiency.

3.3.3. Text Quality

3.3.3.1. Holistic assessment

After revision, as expected, the quality of texts improved in both languages. Table 12 below shows that texts in L1 got better scores than those in EFL. This difference is significant ($F(1,94)=27.350$; $p<.001$; $\eta^2=.23$; $P=.99$) with a large size effect.

Table 12. Means for L1 and EFL before and after revision by EFL proficiency.

	L1 Version 1	L1 Revision	EFL Version 1	EFL Revision
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Low-Level	12.28 (1.58)	12.38 (1.62)	9.38 (2.25)	9.76 (2.42)
High-Level	12.28 (1.77)	12.35 (1.83)	11.60 (2.32)	12.15 (1.76)

Participants' texts scored higher in L1 than in EFL in both EFL proficiency levels as Table 11 shows. On the one hand, the low-level participants' wrote better quality texts in L1 than in EFL. In L1 this group's means went up from $M_{L1GlobalV1}=12.28$ ($SD= 1.58$) to $M_{L1GlobalREV}=12.38$ ($SD= 1.62$); on the other hand, in

EFL, results were $M_{EFLGlobalV1}=9.38$ ($SD=2.25$) in the first version of the text and $M_{EFLGlobalREV}=9.76$ ($SD=2.42$) after revision.

In contrast, high-level participants' texts were also better in L1 than in EFL: $M_{L1GlobalV1}=12.28$ ($SD=1.77$) and $M_{EFLGlobalV1}=11.60$ ($SD=2.32$) before and after revision ($M_{L1GlobalREV}=12.35$ ($SD=1.83$) and $M_{EFLGlobalREV}=12.15$ ($SD=1.76$), respectively).

There was also a global significant effect of the EFL proficiency level ($F(1, 94)=34.511$; $p<.001$; $\eta^2=.26$; $P= 1$) with a large size effect, which points out that text quality improved consistently as EFL proficiency was higher. An interaction between Language X EFL proficiency ($F(1, 94)=75.970$; $p<.001$; $\eta^2=.22$; $P=.99$) with a big size effect was also found. Participants with a lower level of English performed better in their L1 than in EFL, whereas high EFL proficiency participants with a high level of English performed in a similar way in both languages as Table 11 above shows.

Differences in the Tasks: summary vs. essay

According to the means concerning the holistic assessment of text quality (scores may range from 5 to 15) the deferred revision of all texts in both languages and tasks improved their quality as Table 13 below depicts. There are, nonetheless, two exceptions. The quality of summaries worsened slightly in L1 in both groups by 0.2 in the low-levels, from $M_{L1summaryV1}=12.00$ ($SD=1.41$) to $M_{L1summaryREV}=11.80$ ($SD=1.37$), and 0.05 in the high-levels, from $M_{L1summaryV1}=12.55$ ($SD=1.85$) to $M_{L1summaryREV}=12.45$ ($SD=1.92$).

Table 13. Means of text quality per EFL proficiency group, phases, tasks and languages.

		L1 Version 1	L1 Revision	EFL Version 1	EFL Revision
		Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Summary	Low-level	12.00 (1.41)	11.80 (1.37)	8.27 (1.98)	8.33 (1.84)
	High-level	12.55 (1.85)	12.45 (1.92)	11.86 (1.52)	12.27 (1.61)
Essay	Low-level	12.25 (1.67)	12.44 (1.71)	9.67 (2.44)	10.23 (2.14)
	High-level	12.23 (1.59)	12.62 (1.66)	12.23 (2.01)	12.77 (1.36)

Texts in L1, no matter the task, had better quality than in EFL, as expected, and essays got upper scores than summaries did, except for the first version of the high-levels $M_{L1essayV1}=12.23$ ($SD=1.59$) and the EFL revision of high-levels which got the best score $M_{EFLessayREV}=12.77$ ($SD=1.36$). It must also be noted that the means for text

quality of the high-levels' writings was very similar in both languages, tasks and before and after revision, being their $M_{EFLsummaryV1}=11.86$ ($SD=1.52$) the lowest and their EFL revision of essays the highest as mentioned above.

As far as the tasks and languages are concerned, the means on Table 12 show that the quality of texts was higher in the essay in L1 in the low-level group $M_{L1essayV1}=12.25$ ($SD=1.67$) and $M_{L1essayREV}=12.44$ ($SD=1.71$), $M_{EFLessayV1}=9.67$ ($SD=2.44$) and $M_{EFLessayREV}=10.23$ ($SD=2.14$) before and after revision than they were in EFL and even in L1 in the summaries. However, the text quality of EFL essays improved more in both groups than summaries did and their quality was higher before and after revision than the quality of summaries. In the low-level group, the means rose from text $M_{EFLessayV1}=9.67$ ($SD=2.44$) to $M_{EFLessayREV}=10.23$ ($SD=2.14$) and in high-levels, from $M_{EFLessayV1}=12.23$ ($SD=2.01$) to $M_{EFLessayREV}=12.77$ ($SD=1.36$).

On the other hand, the summaries in L1 got higher scores in the high-level group. However, in EFL the essays got better results in the same group before and after revision.

3.3.3.2. Features of text quality

The features of text quality were assessed according to the rubric in which the content, the text organisation, the accurate used of grammar rules, the use of the appropriate vocabulary and the spelling and correct punctuation were rated. The scores ranged from 1 to 3. The global means per languages and phases are given account of below in Table 14.

Table 14. Global means of text quality features per phases and languages.

	L1 Version 1	L1 Revision	EFL Version 1	EFL Revision
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Content	2.04 (.72)	2.21 (.76)	1.90 (.73)	2.04 (.72)
Text Org.	2.16 (.76)	2.18 (.74)	2.01 (.73)	2.07 (.72)
Grammar	2.98 (.20)	2.98 (.20)	2.33 (.72)	2.45 (.66)
Vocabulary	2.96 (.25)	2.97 (.22)	2.24 (.72)	2.41 (.69)
Mechanics	2.01 (.61)	2.02 (.67)	1.81 (.59)	1.77 (.59)

The score of every feature of text quality improved in both groups and the high-level participants outperformed the low-level ones, as expected. Nonetheless, both groups of participants obtained their poorest scores in mechanics (spelling and

punctuation) after revision in EFL. In L1, low-levels barely improved the results in this feature after revision and high-levels kept the same score. The means of all features are shown in Table 15 below.

Table 15. Means of text quality per EFL proficiency group, phases and languages.

		L1 Version 1	L1 Revision	EFL Version 1	EFL Revision
		Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Content	Low-Level	2.14 (.80)	2.19 (.76)	1.67 (.69)	1.79 (.70)
	High-Level	2.20 (.79)	2.25 (.78)	2.23 (.66)	2.40 (.59)
Text	Low-Level	2.16 (.75)	2.17 (.73)	1.76 (.66)	1.78 (.65)
Organisation	High-Level	2.18 (.78)	2.20 (.76)	2.38 (.67)	2.50 (.60)
Grammar	Low-Level	3.00 (.00)	3.00 (.00)	2.07 (.70)	2.21 (.70)
	High-Level	2.95 (.32)	2.95 (.32)	2.70 (.56)	2.80 (.40)
Vocabulary	Low-Level	2.98 (.13)	3.00 (.00)	2.12 (.70)	2.24 (.71)
	High-Level	2.93 (.35)	2.93 (.35)	2.43 (.71)	2.65 (.58)
Mechanics	Low-Level	2.00 (.56)	2.02 (.67)	1.76 (.51)	1.74 (.52)
	High-Level	2.03 (.70)	2.03 (.70)	1.88 (.69)	1.80 (.69)

Content

Differences were found in the means of the content, a significant effect of Language was found though with a small-size effect in ($F(1, 94)=4.072$; $p=.046$; $\eta^2=.04$; $P=.52$). The means per language and phase, before and after revision, portray the distance that turned out to be significant as in L1 they ranged from $M_{L1V1}=2.04$ ($SD=.72$) to $M_{L1REV}=2.21$ ($SD=.76$), while in EFL, the scores were lower $M_{L1V1}=1.90$ ($SD=.73$) to $M_{L1REV}=2.04$ ($SD=.72$).

There was also a significant interaction of Language X EFL proficiency ($F(1, 94)=7.932$; $p<.010$; $\eta^2=.08$; $P=.80$) with a medium-size effect. The means in EFL illustrate these differences before and after revision between low-levels' texts $M_{low-level-EFLV1}=1.67$ ($SD=.69$), $M_{low-level-EFLREV}=1.79$ ($SD=.70$) and the high-levels whose means were greater than their texts in L1: $M_{high-level-EFLV1}=2.23$ ($SD=.66$) and $M_{high-level-EFLREV}=2.40$ ($SD=.59$). In this sense, high-levels scored in this feature significantly higher than low-levels and maintained their scores in similar figures to what they obtained in L1.

The Task also brought about significant differences with a small-size effect ($F(1, 94)=3.658$; $p=.059$; $\eta^2=.04$; $P=.47$) which entails that the means in terms of content were significantly different in both tasks when languages, groups of participants' EFL proficiency and phases are collapsed. The content in the summaries had better quality

$M_{\text{summary}}=2.27$ ($SD=1.82$), as it could be expected, than the essays: $M_{\text{essay}}=1.97$ ($SD=.76$).

Text Organisation

A significant interaction was found with a large-size effect between Language X EFL proficiency ($F(1, 94)=16.958$; $p<.001$; $\eta^2=.15$; $P=.98$) which pointed out significant differences in the means. In L1, the differences were very scarce, low-levels ranged from $M_{L1V1}=2.16$ ($SD=.75$) to $M_{L1REV}=2.17$ ($SD=.73$) and the high-levels the same tendency was observed, from $M_{L1V1}=2.18$ ($SD=.78$) to $M_{L1REV}=2.20$ ($SD=.76$). In EFL, on the contrary, the low-levels barely increased their results from $M_{EFLV1}=1.76$ ($SD=.66$) to $M_{EFLREV}=1.78$ ($SD=.65$) and the high-levels augmented the scores a little bit more than their counterparts: from $M_{EFLV1}=2.38$ ($SD=.67$) to $M_{EFLREV}=2.50$ ($SD=.60$).

Grammar

As expected, for instance, the scores in L1 grammar were higher than in EFL. There were significant differences of Language with a large-size effect ($F(1, 94)=79.207$; $p<.001$; $\eta^2=.46$; $P=1$). In L1, the means were close to the highest score possible. Moreover, no changes in the global means were observed $M_{\text{GlobalL1V1}}=2.98$ ($SD=.20$) $M_{\text{GlobalL1REV}}=2.98$ ($SD=.20$), alternatively in EFL the global means were more than 0.5 below: $M_{\text{GlobalEFLV1}}=2.33$ ($SD=.72$) and $M_{\text{GlobalEFLREV}}=2.45$ ($SD=.66$). The difference in the means before and after revision did end up being significant since an interaction with a medium-size effect of Language X Phase ($F(1, 94)=9.367$; $p=.003$; $\eta^2=.09$; $P=.86$) was also encountered.

A significant effect Language X EFL proficiency was also encountered ($F(1,94)=32.559$; $p<.001$; $\eta^2=.26$; $P=1$) with a large effect size, which seems to imply that the high-levels obtained better scores in EFL and lower in L1. The difference of means in EFL turned out to be significant. In terms of means, in L1 in both groups of participants the scores stayed the same, however, in EFL it improved, in low-levels: $M_{\text{low-levelEFLV1}}=2.07$ ($SD=.70$) to $M_{\text{low-levelEFLREV}}=2.21$ ($SD=.70$) and the high-levels moved from $M_{\text{high-levelEFLV1}}=2.70$ ($SD=.56$) to $M_{\text{high-levelEFLREV}}=2.80$ ($SD=.40$).

Finally, an exceptional triple interaction EFL proficiency X Language X Task ($F(1, 94)=8.698$; $p=.004$; $\eta^2=.09$; $P=.83$) with medium size effect took place. It all suggests that writers from both groups of EFL proficiency got significantly different scores depending on the task and the language in which the text was composed.

Vocabulary

Language produced significant differences with a large-size effect ($F(1, 94)=86.017$; $p<.001$; $\eta^2=.48$; $P=1$). As Table 13 displays, L1 mean scores were higher $M_{L1V1}=2.96$ ($SD=.25$) to $M_{L1REV}=2.97$ ($SD=.22$) than they were in EFL: $M_{EFLV1}=2.24$ ($SD=.72$) and $M_{EFLREV}=2.41$ ($SD=.69$).

In addition, a significant interaction effect between Language X EFL proficiency ($F(1, 94)=16.961$; $p<.001$; $\eta^2=.15$; $P=.98$) with a large-size effect was encountered. It seems to suggest that high-level participants obtained higher scores in EFL and L1 figures were very similar for both groups: before and after revision: $M=2.93$ ($SD=.35$). The high-level students improved their EFL texts, from $M_{high-levelEFLV1}=2.43$ ($SD=.71$) to $M_{high-levelEFLREV}=2.65$ ($SD=.58$) whereas low-levels means went from $M_{low-levelEFLV1}=2.12$ ($SD=.70$) to $M_{low-levelEFLREV}=2.24$ ($SD=.71$).

Larger, meaningful improvement in EFL portrayed in the interaction effect encountered Language X Phase ($F(1, 94)=9.418$; $p=.003$; $\eta^2=.09$; $P=.86$) with a medium size effect. High-levels improved +0.22 which almost doubled the low-levels in EFL whereas low-levels just +0.12 as means in the previous paragraph.

The differences in the vocabulary scores were also significant according to the Task as it resulted to bring significant differences with a medium-size effect ($F(1, 92)=10.438$; $p<.002$; $\eta^2=.10$; $P=.89$). It suggests that participants, in general, performed differently in each task. In fact, in the essays they obtained globally better results $M_{essay}=2.73$ ($SD=.73$) than in the summaries $M_{summary}=2.53$ ($SD=.64$).

Finally, a significant interaction was found Language X Task ($F(1, 94)=9.547$; $p<.003$; $\eta^2=.09$; $P=.86$) which points out that participants' performance in this feature differed whether they wrote a summary or an essay in their L1 or EFL.

Mechanics

Language brought about significant differences with a small size effect ($F(1, 94)=4.191$; $p=.043$; $\eta^2=.04$; $P=.53$). The global means were $M_{\text{GlobalL1V1}}=2.01$ ($SD=.61$) before revision and $M_{\text{GlobalL1REV}}=2.02$ ($SD=.67$) after revision, alternatively in EFL the global means increased after revision: $M_{\text{GlobalEFLV1}}=1.81$ and ($SD=.59$) and $M_{\text{GlobalEFLREV}}=1.77$ ($SD=.59$).

COMPLEMENTARY ANALYSIS

Another statistical analysis was carried out. First of all, all the features of text quality assessment were considered as an intra-subject factor: Holistic Scale.

The factor Holistic Scale produced significant differences with a large size effect ($F(4, 91)=74.156$; $p<.001$; $\eta^2=.77$; $P=1$) which means that there were differences some features in the scale: some of them got higher scores than others and, statistically, a difference among the items occurs. From lower to higher scores these are the items: Mechanics < Text Organisation < Content < Vocabulary < Grammar. No task effect was found, which means that this kind of score was stable across the writing tasks.

With respect to the results of the analytic items across tasks, an effect of the Holistic Scale X Task ($F(4, 89)=5.682$; $p<.001$; $\eta^2=.20$; $P=.98$) was found. This effect appears to indicate that writers got different scores in each feature of text quality of each task. The summaries scores brought the following results, from the lowest to the top: Mechanics < Text Organisation < Content < Vocabulary < Grammar and the essays as follows: Mechanics < Content < Text Organisation < Grammar < Vocabulary.

It stands out that mechanics, as expected, received the lowest marks in both tasks. At the same time, it highlights the need to emphasize the teaching and learning of spelling rules as it seems to have become an issue in writing. On the other hand, the dissimilar distribution of content and text organisation according to the tasks seems to suggest that the participants did not pay as much attention to the organisation of ideas and macro-textual progression in the summary as they did in the essay. It may be inferred that the fact that the essay requires a special genre structure was a fact that participants were aware of.

Besides, it must be stated that an interaction effect of the Holistic Scale X Language was found ($F(4, 91) = 11.590$; $p < .001$; $\eta^2 = .34$; $P = 1$). On the one hand, the mean scores per languages unveiled the reasonable difference that could be expected in formal aspects such as spelling and grammar and, in a different extent, vocabulary. Language looks like it had an impact on the content and the text organisation as the statistical effects show, even though the items for L1 and EFL from the bottom to the top follow the same order: Mechanics < Text Organisation < Content < Vocabulary < Grammar. The difference lies on the fact that the scores were higher in Grammar and Vocabulary in L1 after revision, which did not happen in English.

A triple interaction was also found in the Holistic Scale X Task X Language ($F(4, 89) = 5.152$; $p = .001$; $\eta^2 = .19$; $P = .96$) with a large size effect. This effect seems to imply that each item got a different performance across languages and tasks, that is to say, participants did differently in each item in summary and essay in L1 and EFL. This finding may suggest that the scores differed significantly depending on the task and the language which seems to denote a particularly different writing behaviour.

The triple interaction between the Holistic Scale X Language X EFL proficiency was also significant ($F(4, 91) = 5.098$; $p = .001$; $\eta^2 = .18$; $P = .96$). This effect suggests that each group of participants in each language got significantly different scores among them. High-level participants did better in EFL: text organisation and content and, as expected, grammar, vocabulary and mechanics turned out to be better in L1 although divergences were slight. The order in L1 was as follows: Mechanics < Text Organisation < Content < Vocabulary < Grammar; on the other hand, the order in EFL Mechanics < Content < Text Organisation < Vocabulary < Grammar, as Table 13 above shows.

In the low-levels from the lowest score to the top the order in L1 was as follows: Mechanics < Text Organisation < Content < Vocabulary < Grammar. In EFL, the means went like this: Mechanics < Text Organisation < Content < Grammar < Vocabulary. It stands out that Mechanics (spelling) became an issue in both languages and pays to be included explicitly as the features to be revised carefully. At the same time, content and text organisation got the lowest scores after mechanics. Means show that scores in L1 for both groups were similar. However, even though, the means of the different features are ranked in the same order, higher-levels got significantly greater scores.

3.3.3.3. Analytic assessment

In this particular part, two covariables were introduced as the relationship of the analytic aspects with the length of texts was also reviewed. An ANCOVA analysis was performed in this case. By and large, the amount of mistakes, whether related to formal features or linked to the meaning of words or pieces of text, was reduced after the revisions of texts in both languages. Differences were found, though, across groups of participants, high and low EFL proficiency, in both languages. EFL texts reached greater means than they got in L1 in both tasks and languages.

3.3.3.3.1. Superficial errors

As far as these deviations from language conventions are concerned, the predominant mistakes were those ones regarding the spelling in both languages and groups. In EFL, spelling errors were followed by mistakes in verbs, in terms of formation and use of tenses and syntactical inaccuracies. The latter came second before and after revision in L1, as can be observed in Table 16 below.

In L1, in global terms, the means moved from $M_{\text{low-levelL1V1}}=4.19$ ($SD=4.72$) $M_{\text{high-levelL1V1}}=3.43$ ($SD=3.03$) to $M_{\text{low-levelL1REV}}=4.05$ ($SD=4.85$) and $M_{\text{high-levelL1REV}}=2.90$ ($SD=2.56$). High-level participants managed to reduce the mean amount of mistakes more than the low-level ones. On the other hand, the mean figures unveiled significant differences when mistakes were made in each language and compared in both groups of participants and phases (version 1 and revision). In these cases, EFL texts contained more formal errors. The low-level participants went from $M_{\text{low-levelFLV1}}=12.00$ ($SD=5.37$) to $M_{\text{low-levelEFLREV}}=11.62$ ($SD=4.99$) and reduced the mean in a greater extent than high-level participants did, from $M_{\text{high-levelEFLV1}}=8.13$ ($SD=5.53$) to $M_{\text{high-levelEFLREV}}=7.90$ ($SD=5.04$).

With respect to the analysis of the features included in the formal mistakes, the focus has been placed on those ones whose means stood out and were predominant. The mean total of mistakes in the use or formation of nouns, adjectives or adverbs and articles are to be found in Table 16. No major differences or statistical effects have been found with respect to these features.

Table 16. Means of surface errors before and after revision per languages and EFL level.

		L1		EFL					
		Low-level (A1-A2-B1)	High-Level (B2-C1)	Low-level (A1-A2-B1)	High-Level (B2-C1)				
		Mean	SD	Mean	SD				
Version 1	Spelling	3.59	(4.50)	3.10	(2.80)	4.03	(2.93)	3.93	(2.90)
	Verbs	.14	(.40)	.10	(.30)	3.57	(3.02)	1.78	(1.97)
	Nouns	.05	(.29)	.03	(.16)	.67	(.91)	.38	(.74)
	Adj/Adv	.02	(.13)	.05	(.22)	.69	(1.11)	.43	(.85)
	Articles	.07	(.26)	.05	(.32)	.45	(.92)	.20	(.61)
	Syntax	.33	(.80)	.10	(.30)	2.59	(1.72)	1.43	(1.60)
	Global	4.19	(4.72)	3.43	(3.03)	12.00	(5.37)	8.13	(5.53)
Revision	Spelling	3.67	(5.05)	2.90	(2.73)	3.97	(2.93)	3.95	(2.98)
	Verbs	.12	(.46)	.08	(.27)	3.38	(2.86)	1.79	(2.04)
	Nouns	.03	(.18)	.00	(.00)	.66	(.91)	.30	(.61)
	Adj/Adv	.02	(.13)	.03	(.16)	.59	(.99)	.35	(.58)
	Articles	.00	(.00)	.00	(.00)	.55	(.86)	.15	(.53)
	Syntax	.19	(.58)	.15	(.53)	2.48	(1.61)	1.40	(1.34)
	Global	4.05	(4.85)	2.90	(2.56)	11.62	(4.99)	7.90	(5.04)

Spelling

With respect to this feature, there was an effect of the interaction of Language X Length of texts that turned out to be small-size in both languages, in EFL ($F(1, 92)=4.766$; $p=.032$; $\eta^2=.05$; $P=.58$) and in L1 ($F(1, 92)=5.533$; $p=.021$; $\eta^2=.06$; $P=.64$). It all together suggests that, in both languages, the longer the texts the more spelling mistakes participants made.

There was also an interaction effect Language X Task ($F(1, 92)=6.665$; $p=.011$; $\eta^2=.07$; $P=.72$) with a medium-size effect and a triple interaction Language X Task X EFL proficiency ($F(1, 92)=10.494$; $p=.002$; $\eta^2=.10$; $P=.89$) medium-size as well. It all together suggests that some participants scored differently in a language and task in particular. More spelling mistakes were found in the summary than the essay in L1.

Verbs

On the one hand, Language produced significant differences ($F(1, 91)=12.044$; $p=.001$; $\eta^2=.12$; $P=.93$) with a medium size effect. Means display the differences, more mistakes in EFL were found in both groups and tasks before and after revision.

A large-size interaction effect was found between Language X EFL proficiency ($F(1, 91)=20.477$; $p<.001$; $\eta^2=.18$; $p=.99$) and it turned out significant. The higher the EFL proficiency the fewer the mistakes related to verbal features in EFL made as means above portray. At the same time, the means in L1 were very similar for both groups of participants as Table 16 above shows. In fact, low-levels, $M_{\text{low-levelEFLV1}}=3.57$ ($SD=3.02$) produced a more numerous amount of this type mistakes in EFL than high-levels did, $M_{\text{high-levelEFLV1}}=1.78$ ($SD=1.97$). Revision only saw the former group reducing the amount of these errors: $M_{\text{low-levelEFLREV}}=3.38$ ($SD=2.86$) in contrast with $M_{\text{high-levelEFLREV}}=1.79$ ($SD=2.04$).

In addition, a significant interaction Language X Task was found ($F(1, 91)=15.674$; $p<.001$; $\eta^2=.15$; $P=.98$) with a large-size effect. Participants made more verb mistakes significantly in the summary in EFL. It seems that writers struggled with the use of past tenses (conjugation and formation).

Syntax

An interaction effect Language X EFL proficiency of participants was found ($F(1, 92)=6.823$; $p=.011$; $\eta^2=.70$; $P=.73$) with a large size effect. In EFL, the differences stood out more clearly. Low-levels moved down from $M_{\text{low-levelEFLV1}}=2.59$ ($SD=1.72$) to $M_{\text{low-levelEFLREV}}=2.48$ ($SD=1.61$), however, the distance with the high-levels almost stayed at the same figures, from $M_{\text{high-levelEFLV1}}=1.43$ ($SD=1.60$) to $M_{\text{high-levelEFLREV}}=1.40$ ($SD=1.34$). The errors made with respect to syntactic features in L1 were very low compared to EFL. They were the second in terms of means and low-levels kept higher figures than their counterparts after revision: $M_{\text{low-levelL1V1}}=.33$ ($SD=.80$) for $M_{\text{high-levelL1REV}}=.15$ ($SD=.53$).

3.3.3.3.2. Semantic errors

With regard to the semantic errors, it must be noted that the use of L1 words was only accounted for in EFL. That is the reason why no value for that item in the L1 columns can be found on Table 17 below. The amount of mistakes is significant between languages.

Broadly speaking, more errors were encountered overwhelmingly in EFL than in L1. High-levels reduced the amount of mistakes in both languages and made fewer mistakes than their counterparts after the deferred revision. On the other hand, low-levels improved in EFL and augmented the mean of errors in L1 from $M_{\text{low-levelL1V1}}=.76$ ($SD=1.02$) to $M_{\text{low-levelL1REV}}=.83$ ($SD=1.05$).

Table 17. Means of semantic errors before and after revision per languages and EFL level.

		L1		EFL	
		Low-level (A1-A2-B1)	High-Level (B2-C1)	Low-level (A1-A2-B1)	High-Level (B2-C1)
		Mean SD	Mean SD	Mean SD	Mean SD
Version 1	L1 Words	-	-	1.02 (5.37)	.68 (1.56)
	False friends	.40 (.70)	.45 (.78)	3.48 (2.68)	2.70 (3.05)
	Connectors	.10 (.45)	.23 (.42)	.16 (.45)	.13 (.52)
	Referential	.26 (.52)	.18 (.55)	.79 (1.81)	.58 (1.16)
	Global	.76 (1.02)	.98 (1.35)	5.45 (3.79)	4.08 (3.83)
Revision	L1 Words	-	-	.53 (1.41)	.63 (1.55)
	False friends	.41 (.73)	.28 (.51)	3.47 (2.85)	2.73 (3.17)
	Connectors	.10 (.45)	.15 (.36)	.14 (.44)	.10 (.30)
	Referential	.24 (.51)	.13 (.40)	.74 (1.02)	.35 (.70)
	Global	.83 (1.05)	.63 (.93)	4.88 (3.63)	3.80 (3.57)

Words in L1

No statistical effects were found in this feature. Nonetheless, it must be pointed out that the low-levels used more words in L1 in their first versions and reduced them after revision $M_{\text{low-levelL1V1}}=1.02$ ($SD=5.37$) and $M_{\text{low-levelEFLREV}}=.53$ ($SD=1.41$). Using their L1 as a strategy in EFL writing will be described later in the second section of this dissertation.

False friends

This is the feature that occupies the central part of the semantic mistakes in EFL and when counted up in L1 referred to semantic calques, interferences from other languages (either English or the subject's L2: Catalan or Spanish) or direct translations from those languages.

In EFL, fewer errors were encountered in high-level participants' texts. Besides, there was a global, interaction effect Language X Length of texts in EFL ($F(1, 92)=7.051$; $p=.009$; $\eta^2=.07$; $P=.75$) with a medium size. As it might be expected, the longer the texts the more false friends were employed in both languages

There was a significant interaction between the Language X EFL proficiency ($F(1, 92)= 4.736$; $p<.032$; $\eta^2=.05$; $P=.58$) with a medium size effect. Low-levels used more false friends in both phases: $M_{\text{low-level EFLV1}}=3.48$ ($SD=2.68$) to $M_{\text{low-level EFLREV}}= 3.47$ ($SD=2.85$) whereas their counterparts $M_{\text{high-levelEFLV1}}=2.70$ ($SD=3.05$) to $M_{\text{high-levelEFLREV}}= 2.73$ ($SD=3.17$) In L1 these differences were rather scarce. However, the lower the EFL proficiency, the more likely the writers were to make use of false friends in EFL.

Referential ambiguity

In this particular part, the mistakes regarding the cohesive elements with respect to the previous reference were accounted. In EFL there was a significant interaction Language X Length of texts in EFL ($F(1, 92)=4.258$; $p=.042$; $\eta^2= .04$; $P=.53$). As stated in the previous feature, the length of texts in EFL indicates higher possibilities of making this type of mistake.

3.4. Discussion

The results of this first section brought about some considerable elements for discussion. First of all, with respect to the length of the texts, they were longer in L1, had better quality and contained, on average, fewer errors in both groups compared to the texts in EFL, as it was expected.

By and large, during the process of deferred revision, the actions of metacognitive regulation that writers performed were word-based, substitutions mostly or, in a lesser extent, additions, which successfully corrected errors that writers had detected in terms of language conventions or content. Nonetheless, they had a rather superficial impact on the global meaning of the whole text. Previous research had also encountered substitutions as the prevalent feature in university students (Faigley & Witte, 1981; Monahan, 1984) and teenagers in L1 and EFL (Stevenson et al., 2006). Alternatively, expert writers in Sommers (1980) and primary education students in Allal (2000) and Chanquoy (2001) used additions and deletions mostly. Only in the L1 summaries, the addition is more numerous than the substitution. Besides, addition was the second most common kind of this feature after substitution across languages and tasks.

Furthermore, the EFL proficiency of participants entailed significant differences in most of the actions of metacognitive regulation. Participants with higher EFL proficiency carried out more transformations in the texts in L1 and EFL and focused on textual meaning more often than their counterparts in line with previous research (Stevenson et al., 2006; Tiryakoglu et al., 2019). In fact, their transformations implied more optional changes which suggests a more dynamic mental representation of the text in the deferred revision (Allal, 2000). High-levels were able to modify the content and the text organisation in both languages in similar ways as their assessment showed. On the other hand, participants with a lower level of EFL proficiency carried out revisions that focused more often on the substitution or addition of words and barely affected the meaning of the text as they were related to the observance of language conventions.

Deferred revision allowed writers, in general, to reduce the amount of mistakes in, mostly grammar or spelling in a so-called “house cleaning task” (Graham et al.,

1995) or "cosmetic changes" (Monahan, 1984) as they were labelled in the studies in L1 (English). Similar results were also accounted by Van Steendam et al. (2010) in a study on collaborative revision. Other studies, either comparing L1 and L2 or EFL or just reporting on L2 /EFL, came across similar actions (Cresswell, 2000; Sasaki & Hirose, 1996; Silva, 1993; Whalen & Menard, 1995) with even less attention to text meaning and organisation in the L2 /FL.

These previous findings reported in this study may stand for a claim to support Stevenson et.'s (2006, p. 202) Inhibition Hypothesis in which "linguistic revising is thought to detract from the attention FL writers devote to higher level revising". Despite the time for online, immediate and deferred revision, in particular, most efforts were placed in amending those formal conventions or local meaning discrepancies from the text written to the intended text. There seems to be a recurrent, as the aforementioned studies highlight, that most of the attentional resources are devoted to linguistic form, no matter the moment when revision takes place. Nonetheless, the EFL proficiency of the speakers did also reveal that Higher-levels tended to pay more attention to content and organisation in both languages and tasks.

With respect to the quality of texts, it improved in both languages, groups and tasks after deferred revision from a holistic point of view as it happened in Chanquoy's study (2001). Although there was an exception, the summaries written in L1 did not improve their global quality. The scores in Mechanics were lower than they were before revision which suggests that writers overlooked some of the mistakes they had made and ignored some of the language conventions when they wrote new words or text.

As far as the Content and Text Organisation are concerned, the features assessing the genre-related aspects in the texts, improved in both languages in very similar terms. However, the differences in the means between languages turned out to be substantial, L1 texts score significantly higher. High-levels improved this part in a greater extent than low-levels. The EFL proficiency showed the significant differences between groups, whereas high-levels scores were similar to their L1; their counterparts' scores were almost 0.5 lower. It might suggest a different way of facing texts in both languages and paying attention to these features as the Inhibition Hypothesis mentioned above suggested. In addition, the complementary analysis revealed that Low-levels struggled with the organisation of the text and the content,

right after the mechanics, in this order and the High-levels got lower scores in content in EFL and the organisation of the text in L1.

With respect to Grammar and vocabulary were the features that got the highest scores in L1, however, a significant difference was found when compared to EFL in both groups of participant. After revision, both groups improved them in a similar way in both languages so the distance remained the same way. It suggests a steady attitude of attention towards these elements in deferred revision and points out the difference of proficiency between L1 and EFL.

The assessment of Mechanics, comprising spelling and punctuation, obtained the lowest scores in both groups in L1 and seems to indicate that writers either did not care about it much or overlooked those mistakes even though it is the actual focus of their revision. It seems to imply that writers lacked of knowledge of some of these conventions.

The means did not improve it significantly in any language and task. In EFL, they decreased a little after revision, even though the majority of the changes were word-based superficial substitutions aiming at correcting a mistake or willing to be more accurate, the spelling did not improve and provides some food for thought. The High-levels took more advantage of deferred revision than the Low-levels as it had happened in previous studies where writers with lower EFL proficiency carried out similar revisions and managed not to write texts with higher quality (Manchón et al., 2009; Tiryakoglu et al., 2019; Rinnert & Kobayashi, 2009).

As far as the analytic features covered in this study are concerned, spelling turned out to be the major issue in terms of mistakes as its presence remained steady before and after revision across tasks, languages and EFL proficiency groups. Their decrease in the revised texts was minor, as a matter of fact, the numbers went up in L1 in the Low-levels' group and in High-levels' text in EFL in line with the results reported in the section of Mechanics above.

Mistakes in verb tenses, conjugation, agreement or formation turned out to be another issue particularly in EFL and the amount of those errors did not decrease significantly after revision. These types of errors had also showed to be very frequent in research where writing in two languages was involved (Castillejos-López, 2009), although in her case, the misuse of articles was more frequent.

The mismatches between the language conventions and the observance of them may seem to be a minor hindrance. Nevertheless, it stands out that participants, pre-service teachers who will be asked to teach the use of such features of the language, failed at amending them even after revision. Either if the participants ignored the mistakes because they focused on some other aspects or if they did not realise they were actual mistakes, these results seem to call for some kind of instruction in this particular question in both languages since some of them were overlooked across languages, tasks and groups of participants.

As for the semantic mistakes, revision also reduced the amount of mistakes that concentrated mostly on false friends and the use of the L1 on the texts. The appearance of such features diminished in accordance with the EFL proficiency as it could be expected. In fact, as it will be developed in the next section, some Low-levels used their L1 in their texts to make sense of them in which Navés and Celaya (2009) coined as 'rejected units' or as tokens to indicate which terms were to be replaced as well. This cross-linguistic influence and its similar uses were also described by Manchón et al. (2009) in higher education students writing in EFL and whose L1 was Spanish.

SECTION 2.

Case study analysis. Perception of frequency and actual use of metacognitive regulation actions during deferred revision of L1/EFL essays: expert writers vs pre-service teachers

4.1. Introduction

In the previous section, the texts were analysed as the final product of the writing tasks and, as such, the final outcome after a deferred revision (Chanquoy 2001; Witte, 1985). In this section, a process-product approach was implemented. Thus, an in-depth analysis of participants' behaviour during the deferred revision process of writing is covered alongside their beliefs metacognitive regulation in both in L1 and in EFL through three different studies (Allal & Chanquoy, 2004; Rinnert & Kobayashi, 2009; Sasaki & Hirose, 1996; Sasaki, 2000). This time the comparison has been established between the experts and the pre-service teachers (PSTs) with different EFL proficiency levels so that differences and similarities between them may be portrayed and expertise characteristics identified.

In this case, the amount of participants was reduced to twelve who were divided into three groups of four. The first group, consisted of four expert writers whose EFL proficiency was B2 or higher. The rest of the participants, eight pre-service teachers, were separated into two groups according to their level of English, whether it was intermediate, B2 or elementary, around A2.

In the first study, the participants' self-perception of the frequency of use of metacognitive regulation before and after revision has been analysed through questionnaires. Different strategies have been examined, particularly if statistical effects had been brought about between the variables: languages, groups of participants and phase. Besides, some other features have been discussed as they have an influence in the other two studies.

The second study gives account of the deployment of operations of metacognitive regulation and the quality of texts. The data collected has been analysed as in the first section, however, statistical tests could no be undertaken due to the small-size sample. Percentatges have been used to portray the operations as Allal (2000) did. Furthermore, the text quality has enabled to align the effects of the operations with their efficiency.

Finally, the actions of metacognitive regulation and the awareness of their use with respect to the textual properties involved have been discussed. The data gathered from the participants was obtained by recording them after they had been asked to say

out aloud all the actions they carried out during the deferred revision of their text. A think-aloud protocol was implemented despite its constraints (Bowles, 2010; Merchie & Van Keer, 2014).

4.1.1. The temporal dimension of writing

Van Den Bergh and Rijlaarsdam (2001) highlighted the temporal dimension of the process of writing, in other words, the amount of time that a writing task takes to implement and when and how long take the subprocesses involved as well as their orchestration (Van Weijen, 2008). Manchón, Roca de Larios and their colleagues (Manchón et al., 2009; Roca de Larios et al., 2006; Roca de Larios et al., 2001) have explored the temporal dimension of EFL writing and the time spent in planning, formulating and revising by preservice teacher writing in EFL with a time limit of an hour.

Roca de Larios et al. (2008) also concentrated in the same topic and counted the time that primary school students of different ages spent in the writing phases. Time matters, particularly in EFL writing, as it may well involve a long activity with more resources devoted to plan and formulate the text in terms of content, structure and form (vocabulary and morphosyntax). Since writing is a cognitive demanding activity, as we have explained before, time-compressed writing implies revisions that take place 4 times often (Manchón et al., 2009). This is one of the points of our research, deferred revision offers writers the possibility of unload the cognitive burden of EFL writing and allows them to continue representing the text.

In deferred, delayed or postponed revision, the time is not such a relevant factor, however, the length of a text can be a sign of time spent reading and rereading and how the intended text takes shape through the transformations. This correlation can also provide information of how the decision-making in revision took place in terms of text planned according to the task set, the representation of text intended and confronted to the actual text and how the writer tackles those variations. In this particular study, time also brings about a notion of how writers envisage this revision in their L1 and EFL and according to EFL proficiency and experience in writing.

4.1.2. Experts / competent vs. less skilled writers / novices

The comparison of the use of the strategies between participants with different training or experience in writing has been developed in writing research in the last forty years. Hayes et al. (1987) affirmed there was much benefit reporting the differences between expert and less skilled writers. The participants in this kind of studies have received different terms according to the degree of proficiency with regard to the writing skills. In this regard, Olive (2010, p. 2) pointed out that the use of syntactic or semantic richness is a sign of skilled writing since it involves a "switch from a parallel to a sequential activation of the processes to decrease the general processing demands of the activity".

On the other hand, 'novice' writers have been appointed as such due to their lack of experience and training in writing particularly compared to others. They have also labelled as 'unskilled' or 'less-skilled' writers (Sasaki, 2000) and their level of unskillfulness was decided after the completion of a background questionnaire on writing.

High writing proficiency writers were identified as such for having written production as part of their jobs and were called 'experts' (Hayes & Flower, 1980; Sommers, 1980) or 'competent' (Monahan, 1984) in L1 writing research because they passed a test on writing skills. In the L2/EFL sphere, the same term was used in the investigation of EFL or comparison of both languages (McCutchen, 2011; Sasaki, 2000; Sasaki & Hirose, 1996). The term 'experienced' could also be equated to the previous ones although as Sasaki and Hirose pointed out "even the good writers could not be called 'experienced writers'." (Op. cit., p. 154). However, these three terms have been used for those writers whose training and dedication to writing is socially recognised. Sasaki (2000) had professors of applied linguistics professors as participants for her comparison.

Sommers (1980) and Monahan (1984) made use of such comparison to describe the differences between university lecturers and undergraduate students. They compared experts or competent writers with less skilled or novice writers in order to identify which where the aspects of their revision that differ. They both did their studies with participants from a university level. With respect to the characteristics they distinguished, Sommers (1980, p. 381) in line with Monahan's findings pointed out that in the early stages writing research, and revision in particular, that students

writers “believe that most problems in their essays can be solved by rewording”. On the other hand, Monahan (Op. cit.) found that “basic” writers had in mind their teacher whereas the competent writers had their peer audience and carried out more extended revisions.

Other studies have, for a change, also focused on the differences between writers with different skills and time of instruction (Baker et al., 2003; Chanquoy, 2001; López et al, 2018; McCutchen, 2011; Sasaki, 2000; Stevenson et al., 2006; Van Gelderen et al., 2003; Van Steendam et al., 2010). This kind of cross-sectional studies have offered a representation of the state-of-affairs in terms of those writing skills.

Becker (2006) summarised the differences between novice and expert writers. She pointed out that inexperienced writers did not care much about planning and faced revision as a punishment that led to concentrate on superficial aspects. On the other hand, she portrayed professional or expert writers as composers who brought revision into every stage of the writing process and had a positive attitude towards the possibility or rewriting. Experts or experienced writers' revisions tended to have a global approach.

In terms of revision, Hayes et al. (1987) reported that experts exhibited the automation of high-level processes and in order to find evidences a triangulation of data verbal reports and textual data needed to be confronted (as this dissertation shows).

The differences between expert and novice writers are also evident in revisions and improvements of their written productions. Revision is a complex process, which requires the writers' full attention and consumes many cognitive resources from the working memory. A skilled writer has a good metacognitive control about what it is written and how it is written (Ruan, 2014). Expert writers exercise metacognitive control to monitor the writing process so that the produced text meets the writers' goals. Novice or less-skilled, less-competent writers use lower level resources available for tasks (activate enough appropriate knowledge and expressing linguistically correct form elementary ideas) caused by the limitations of the WM will also affect the revision of the writing processes. The obstacles mentioned above to generate macro-ideas, or to ensure the overall coherence of the text, also imply a reduction in the monitoring of these processes.

Chanquoy (2009) informed that according to the research up to that moment experts took revision as an activity concerning the global text (whole-text task) novice considered it at a local level (sentence-level task). Inexperienced or beginner writers define revision as consisting in changing words, suppressing errors and deleting parts of the text and therefore make essential low-level revisions. Experienced writers make more sophisticated revising strategies. It is important on an educational perspective to help beginner writers to revise their texts more efficiently and at a deeper level. As Alamargot and Chanquoy (2001) recommended maturity and practice are two necessary elements needed to develop writing expertise.

When low competent students in FL carry out a writing task, they devoted nearly all their efforts to solve low-level problems, such as finding the right word or the appropriate grammar structure. Therefore, there is no availability in the WM for higher level processes: organise or structure the text, generate or plan macro-ideas or summaries, establish local and global coherence, use rhetorical structures appropriate to get ideas or a particular viewpoints across. This straining WM blocks the transfer of strategic knowledge learned in L1 to the FL (Alamargot & Chanquoy, 2001, Kellogg et al., 2013, Perfetti, 1985; Van Gelderen et al., op.cit.). In particular, those metacognitive strategies that writers may have developed in L1 which may not be easily transferred to EFL when writing, if the mastery of the foreign language is low.

Consistently, it has been found that the writers with low proficiency, tend to control and revise their texts in superficial approach more than from language level to textual and pragmatic level (Baker, 2011; Sasaki & Hirose, 1996; Silva, 1993; Whalen & Menard, 1995). Revisions carried out in his texts are basically focused on correcting grammar and spelling, and little attention is paid to other aspects of text as text organisation, coherence and cohesion between the ideas, and so on.

Kintsch (1998) and collaborators (Kintsch & van Dijk, 1978) suggest in their theoretical approach an insufficient mastery of L2 writers brings difficulties to develop high levels of representation of the speech, both semantic (macro-structural) and referential (model of the situation). If a level of representation is elaborated in a deficient manner (for example, due to the lack of available cognitive resources), then it is expected to be monitored in a deficient manner through the metacognitive control.

In addition to the language proficiency, another factor that can influence the performance in writing is the task. When a task set and new ideas are to be generated

(via inference) in it: by bringing in prior knowledge, giving coherence to several ideas to accomplish a communicative purpose (supporting a thesis with arguments, composing a report, etc.) more cognitive resources are required than when setting a simple task, which requires only express literally (in the code) is known. Therefore, the effect of WM overload should depend on the writing. It would increase and, therefore, allow its best observation, when the writers have to "transform the knowledge", with respect to situations in which they have to "tell the knowledge".

4.1.3. Questionnaires

Different methods have been used by researchers in qualitative learner-centred studies, several methods enable researchers to engage in the analysis of reasons of participants' behaviours: think aloud protocols, immediate-recall interviews (Knospe, 2018; Kodituwakku, 2008), semi-structured interviews (Eckstein et al., 2018; Ruan, 2014) audio-recorded/screen-recorded sessions, eye-tracking software (Eckstein et al., 2018), Keylogg software (Knospe, 2017) questionnaires (Cerrato-Lara et al., 2017; Farahian, 2015; Karlen, 2017; Sasaki & Hirose, 1996, Zhang & Qin, 2018) and so on.

Questionnaires are a recurrent method in writing research are a valid and efficient tool for the study of metacognition in writing processes (Yanyan, 2010). This kind of source can provide valuable data on its own and stand for one of the main methods in order to collect information about attitudes, behaviours and routines from informants (Hyland, 2003). This particular method enables researchers to triangulate the results obtained from other sources so that they may altogether "provide for greater plausibility in interpreting results" (Hyland, 2003, p. 252). This kind of self-report measures can complement the data gathered from different qualitative methods that are defined by the observation of the actions that undergo writing processes.

In this study, questionnaires have been produced from the items exposed and stated on the assessment of metacognitive awareness and deployment of several strategies by different researchers for different stages of the writing process (Farahian, 2015, Petric & Czarl 2003, Sasaki & Hirose, 1996). A selection of those items concerning revision was carried out which included the metacognitive strategies deployed by writers while revising.

For its final layout, some items from Farahian (2015) that have to do with the representation of the task were chosen and reproduced to the letter. For instance, "31. I have a specific audience in mind" (Op. cit., p. 50) or "44. When I finish my essay, I check whether the content fits the original plan" (Op. cit., p. 51).

In this case, we adapted the items suggested by the above-mentioned authors and structured them with ranks from one to four depending on the extent of agreement with the statement. From Sasaki and Hirose (1996) we concentrated on aspects related to text quality and related to the way they had been addressed: content, text organisation, grammar, vocabulary... which were in line with Petric and Czarl's (2003). The steps proposed by them to carry out revision and the actions of metacognitive regulation (addition, deletion, substitution and rearrangement) were taken into account and, in addition, the level of text affected by Sasaki and Hirose (Op. cit.). Eventually, some of the strategies Petric and Czarl (2003) looked into such as the use of reading aloud and the use of translation or L1 when editing the text were added in.

Two questionnaires were administered to participants. The first one aimed at gathering information about participants' self-perception of revision when they write texts in their L1 (either Catalan or Spanish in our context). The second one covered the same topics but a last question was added in order to know the use of translation when participants revise texts in L2 or EFL. Both contained identical statement about the actions implement during the process of revision. These actions referred to the reading strategies followed and the attention paid to cohesion, coherence, vocabulary, genre, reader... (Cf. Appendix1 & 2).

Anderson (2008) did also pointed out the use of questionnaires of a useful tool for the teaching and learning of metacognitive skills. In fact, its employments can help writers monitor their writing process and gain awareness of the decisions made during the solving of the rhetorical problem.

4.1.4. Operations of metacognitive regulation in revision

The transformations carried out by participants in their revisions of essays in both their L1 and EFL constitute the instruments through which we have assessed the operations of self-regulation in the writing task. According to the aforementioned analysis and its correspondence to those operations (See Figure 22 below): anticipation, monitoring and adjustment.

OPERATION	TRANSFORMATION	FEATURES
ANTICIPATION	The relationship to language conventions	Incorrect to correct (conventional)
		Incorrect to incorrect (conventional)
		Correct to incorrect (optional)
		Correct to correct (optional)
MONITORING	The level of language affected by the transformation	Word
		Group
		Sentence
		Paragraph / text
	The object of the transformation	Word or Surface level
		Semantic level: micro-ideas
Semantic level: macro-ideas		
ADJUSTMENT	The type of transformation	Addition
		Deletion
		Substitution
		Rearrangement.

Figure 22. Operations of metacognitive regulation. Adapted from Allal (2000).

Anticipation

This operation corresponds to the relationship to language conventions and stands for "the transposition of the subject's representations of the task and the context into goal orientations" (Allal, 2000, p. 149). It can be interpreted that it stands for the mental representation of the intended text in terms of language and content. It deals with the types of transformations according to the writers' perception of observation of the language rules and the contents needed to perform completely the writing task at hand.

This kind of transformations are split into two: conventional and optional. The former is concerned with the language rules and it show the extent up to which the writers are aware of them, an excessive amount of them would imply an improvement on the metalinguistic awareness or a failure to do so. On the other hand, the optional changes would set the interest of the writers in aspects connected with the content, in other words, their attention to the message they try to get across. A predominance of the optional changes over the conventional could be interpreted as if "they interpret their role in a larger perspective" (Allal, 2000, p. 152). It may also show their focus on

formal aspects and a variance from L1 to EFL could be expected as participant have different EFL and writing skills levels.

Monitoring

Allal (2000, p. 149) defined it as "the comparison of the present state of advancement with respect to the task to an anticipated goal-state". The monitoring operation links the several levels of meaning in the transformation, from none (formal change to macro-structure changes) and the level of language affected by the transformation (from the word to the paragraph).

In our analysis the monitoring reflects the percentage of the combination of the aspects mentioned above and its distribution will show the focus of writers on text organisation and meaning and the word-based formal aspects.

Adjustment

It comprises four types of transformations: addition, deletion, substitution or rearrangement. All of those are carried out in revision with the purpose of decreasing the distance between in-so-far text and the intended text (Allal, Op. Cit.). She made the distinction between simple and complex. Simple transformations are those that add or delete elements and complex are those that entail the substitution or rearrangement (a change in the location) of the elements in the text.

4.1.5. Verbal Reports

The use of the concurrent methods is a usual practice in writing research. In order to gather data of the insights of the mental processes taking place while the writing tasks are being carried out, a register of the participants' activity is carried out. As Olive (2010, p. 7) puts it researchers rely on the assumption that "individuals can verbalize about some of the mental processes and that individuals have access to some of their mental operations". If these protocols take place during the implementation of the activity they are called concurrent methods. Olive (Op. Cit.) also suggested that only those processes that take place in the working memory are likely to be put into

words and excluded those cognitive processes that are internalized since they are automatic as it is not the case of writing where everything that takes place leans on the WM mostly. This is one of the parts of the setbacks of TAPs since those LT memory processes are invisible during the verbalisation. Moreover, the think-aloud protocol is an activity that has an impact on the participants' cognitive processes and requires training, as well as the participants' awareness on the fact that it is an essential part of what the research process requires from them.

Concurrent methods have also been told to interfere with the tasks at hand carried out by individuals particularly if an oral output is required. The interference has been related up to a higher extent depending on the cognitive maturity, the complexity of the task or the demands on the verbalization of the participants' thoughts (Bowles, 2010).

On the other hand, retrospection has little interference with the WM as writers retrieve the data from the LT memory, which may entail that the think-aloud protocol misses essential information with retrospection. Indeed, when retrospecting, a writer must retrieve info that can be re-built at the moment of speaking or can be lost if there are any lapses of memory that could, in that case, mislead or bias the researchers' interpretation. Olive also highlights that this kind of interference can reduce the level of performance of participants or slow their pace. He stresses that it can have a special impact on writing as it is an activity that demands verbal responses and involves an intense use of the working memory, especially when writing in a foreign language

However, when the approach to writing research has been a process-oriented one, those methods are present and have been predominant since the very first models of writing to the most recent research papers. In fact, the design of the writing models and the assumptions commonly referred to in writing research on the writing processes comes from this data as Olive (2010) compiled.

Immediate recall interview or off-line think-aloud protocol

The technique mostly used to provide an insight of how writers compose their text is the think-aloud protocol. Besides, immediate recall interviews, retrospective verbal protocols, are less frequently used and that can be depicted as the act of remembering the actions and decisions that writers have taken during a writing task right after it has been completed. The researchers stimulate this recall by showing the participants a copy of their texts or an audiovisual or simply visual recording of their

text. Knospe's (2018) participants' recall of their metacognitive knowledge as writers has been done following this procedure. The think-aloud protocol is, on the other hand, the most common source for data in this field. As its names indicates, participants expressed aloud what they are doing, why and what for so that researchers can gather data on the perceptions of the subjects'.

Think-Aloud Protocol or online TAP

In order to find out the activities that guide the process of revision most of writing research either in the participants L1 or L2 or even L3 or, if so, in a foreign language. Merchie and Van Keer (2014) describe the think-aloud protocol process as a helping tool to reveal the participants text processing and learning activities in their own oral terms. The whole discourse is transcribed and coded for analysis. They also warned of the risk of using such protocol as it could have a strong influence in their concentration, or reactivity and it could even have an influence in the way that participants process the text or represent the writing task (Merchie & Van Keer, 2014).

Advantages	Disadvantages
<ul style="list-style-type: none"> • Uncovers thought processes and reveals the content of working memory. • Data are gathered directly without delay. • The learner does not give thought-interpretations and is not required to bring them into a predefined form. • Reduces memory failure. 	<ul style="list-style-type: none"> • Ability and reactivity to verbalize thought processes can compromise assessment. • Verbalization stops can disrupt comprehension. • Time and labour insensitive analysis, not easily usable or efficient with large samples. • Can influence strategic action or later recalls. • Data-incompleteness: learners can edit or omit thoughts that come to mind.

Figure 23. Overview of advantages and disadvantages of think-aloud protocol. (Merchie & Van Keer, 2014, p. 491)

The advantages expressed by Merchie and Van Keer (see Figure 23) alongside with the support of the previous and recent research outweighs the disadvantages and the limitations. The fact that data was gathered straight away and did not need any particular shape allow participants to keep the thought flow on. Besides, even though the EFL writing involves an expense of cognitive resources, the environment and the scaffolded output involves a realistic result.

All those methods which entail the verbalisation of the participant's behaviour during the course of an activity have been told to hold a certain bias. However, so far

they have also been recognised as the best way to show the relation of thoughts and their verbalization. We have come across two different ways of gathering relevant information to describe the process of writing and the sub-processes involved. The most popular among the studies is known as "think aloud protocol" (Beare & Bourdages, 2007; Koditawakku, 2009; Machón et al., 2009; Moghaddam, 2018; Roca de Larios et al., 2008; Van Weijen et al., 2009). In other cases, other authors went for a concurrent immediate interview right after the activity had taken place (Knospe 2018; Salvador-Mata & García-Guzmán, 2009; Sommers, 1980).

TAP brings about concurrent verbalisations to portray the thinking process and Van Weijen (2008) states that it seems "the best way, at present, to observe the concurrence of cognitive activities during the writing process" (p, 16).

4.2. Method

4.2.1. Participants

The amount of participants in this study were twelve (N=12). They were divided into three groups of four people. A group of experts, and two groups of students, pre-service teachers, one of them with an intermediate EFL proficiency and another group with those who had an elementary. They were six (N=6) men and six women (N=6) participants altogether.

Expert writers

The first group included four (N=4) expert writers: three men and one woman. They kindly accepted to participate, had proved to have a level of English around B2 or C1 according to the CEFRL Council of Europe, 2001). Their ages ranged from 35 to 50. We acknowledged them as experts in a similar way as Sommers' (1980) did. In her study, expert writers were journalists, scholars and writers.

In our study, two of these expert writers held a PhD in sociology. They had published articles in English. Moreover, both of them had been visiting scholars in English-speaking countries and got involved in international projects. They had also passed the official exams of B2 and C1 levels respectively.

Another participant was a Natural Science PhD who held a C1 certificate and had published papers in English. The last of the experts was a Catalan and Spanish teacher who lectures text analysis at an A-level stage and his EFL proficiency was B2.

Intermediate EFL proficiency pre-service teachers

They were four male and female pre-service teachers (aged 20-24) who were enrolled in TEFL modules at that moment and held a B2 certificate or passed a B2 exam.

Elementary EFL proficiency pre-service teachers

They were four male and female (aged 19-23) pre-service teachers, in year 1 who held an A2 certificate or had passed a similar test.

4.2.2. Design and variables

The present study delved into participants' self-perception of their metacognitive regulation behaviour during the deferred revision, with respect to the accomplishment of a task (essay) and in two languages (L1: Spanish/Catalan; FL: English). Thus, a 3-phased design was applied: pre-test (self-administered questionnaire), task performance (writing and revising two essays in L1 and EFL), post-test (self-administered questionnaire). The questionnaires consisted of 19 questions for L1 writing and 20 questions for EFL related to the representation of the task, the self-regulation actions undertaken during revision and aspects related to text quality. The design of this exploratory study was based on the comparison of expert writers' attitudes and performance, and pre-service teachers' during the deferred revision of their texts.

Study 2

An ANOVA multivariate analysis was carried out in which a mixed 2 X 2 X 3 design was carried out for each item in the questionnaire: 2 (MOMENTS: pre & post task questionnaire) X 2 (LANGUAGES: L1 & EFL) X 3 (GROUPS: Experts, PSTs Intermediates & PSTs Elementaries). The independent intra-subject variable was the Language since all participants wrote texts in both languages. The inter-subject variable was the group that each participant was assigned to and the dependent variable were the results of the questionnaires before and after the completion of the writing tasks. For statistical purposes, the data obtained from the questionnaires have been adapted into proportions according to the question: (1= 0; 2= 0.3; 3= 0.67; 4= 1). Then, a transformation of the arc-sin of the square root of the proportional measure was carried out. This is a usual practice for those data that may stand aside normality conditions such as proportions. These results lead the analysis of this study however, they have a limited statistical power and they have been dealt with as signposts for an upcoming discussion.

Study 3

The length of texts and the text quality were compared before and after revision as in the first section of this dissertation. The length of revision was also compared as to establish a temporal means for each group. In the second part of this study, the results of the operations of metacognitive regulation as stated by Allal (2000) were analysed and compared per groups as well.

Study 4

This part focuses on the resulting transcriptions of the revision processes implemented by participants under think-aloud conditions and are analysed per segments. Each segment is related to actions and strategies of metacognitive regulation with respect to the textual properties and the strategies actually implemented.

4.2.3. Materials, instruments and measurements

4.2.3.1. Materials

Data gathered in this study came from the next elements:

Writing tasks

Participants carried out an opinion essay. They dealt with identical topics to our first study and the conditions to write the text were very similar (see procedure section).

This time rather they had to type it (in section 1 texts were handwritten). The essay or argumentative texts are the most popular genre among writing studies with higher education participants (Crossley & McNamara, 2016; Eckstein et al., 2018; Tillema, 2012, Van Weijen, 2008). Participants were informed of the topic, the order of languages they should write the essays in and the maximum and minimum length before they started. It was written on the paper and they were told orally as they were to begin. No time limit was set. The researcher stayed at all times with them, in the

same room, while they were proceeding with both the first version of the text and the revision. The experimental conditions turned out to be 4 as contained in Table 18.

Table 18. Experimental conditions. Topics (Films) and languages counterbalance.

Condition	Topic 1	Topic 2
1	Harry Potter - EFL	Boy in the striped pyjamas - L1
2	Boy in the striped pyjamas - EFL	Harry Potter - L1
3	Harry Potter - L1	Boy in the striped pyjamas - EFL
4	Boy in the striped pyjamas - L1	Harry Potter - EFL

In order to replicate the exploratory research we have presented in the previous chapters, we based it on the knowledge and the contexts of those two films: The Boy in the Striped Pyjamas and Harry Potter's saga, one of the films was discarded randomly. We made sure that participants had seen the film at least within a month before they actually participated.

Keylogg software

We used Inputlog as a keylogg software that could provide data for analysis of the insights of some processes involved in writing. All participants' first version of their texts and revisions were recorded using Inputlog (Leijten & Van Waes, 2013). Besides, this software allows researchers to review the process of typing too. Thus, all the word docs generated for this research are Inputlog-generated. The length of texts was collected from these documents. Nevertheless, for this study the several levels of analysis of the software have not all been exploited since they are out of the scope of this research.

Screen-recording software

The length of texts was collected from the documents generated once participants finished each one of them in both languages. The time each participant spent for the first and second version was gathered from the screen-recorded sessions. Two software programmes, Camtasia (Bañales, 2010) and Snagit, were used to record the screen and the voice of the participants as they were going through revision and speaking their thoughts aloud. A microphone was used to record their voice as the screen actions were recorded. So, for every revision of every text we have an audio-visual file. A total of about 300 minutes.

4.2.3.2. Instruments

Questionnaires

Self-perception questionnaires on the frequency of use of different actions of metacognitive regulation were administered to participants before and after the completion of the writing tasks. These questionnaires were designed from previous and their items were adapted for the particular purpose and scope of this study. The results of the participants' own perception of use of actions was used to triangulate the results obtained from the transcriptions of the sequences of texts revision and the actual texts productions.

Transcriptions

The participants' revisions were screen recorded and transcribed for qualitative data collection in a similar way as some other researchers did. We took into account the segments as Bañales (2010) and Tillema (2012) did in their dissertations. The former identified sequences in which education students modified expository texts and the analysis of data obtained was in accordance to previous studies (Knöspe, 2018; Salvador-Mata & García-Guzmán, 2009; Tillema, 2012; Van Weijen, 2008).

Segments were coded according to the group assigned to the participant, the participants' assigned number, the language and the order of occurrence. Each segment included the time when it began and ended according to the recording and the kind of transformation (including the type of transformation and the text affected as well as the paragraph). It also included a transcription of the words uttered by participants and the researcher words, if that happened. There was a box for possible comments or remarks during the transcription process as well and, in this dissertation a box underneath for its translation in English.

Transcriptions are all together a compendium of the use of all three languages at stake. The participants switched from language to language when revising since texts were written in Spanish, Catalan, or English and participants' think-aloud protocol was carried out in their mother tongue. So, for the present study, some participants whose L1 is Catalan, wrote their texts in Spanish and their transcriptions were in English. Transcriptions can be found in the appendix.

4.2.3.3. Measures

Study 2

Self-administered questionnaires

As mentioned before, a questionnaire (in both L1 and EFL) was administered to analyse both students and experts' self-perception of their metacognitive strategies during revision. It was administered before the first version of the text and before the deferred revision so that the results of the students' self-perception of the deployment of those strategies is linked to the completion of the writing tasks.

This questionnaire was designed and adapted from other validated ones in previous studies (Farahian, 2015; Petric & Czarl, 2003, Sasaki & Hirose, 1996). These questionnaires included items regarding the whole process of writing (planning, translating/ textualising, revising) so the adaptation consisted of selecting those items that had to do with different aspects of revision. Each item was arranged in a 'likert' scale. The central tendency bias was avoided by reducing the number of possible options with those degrees of frequency from 1 to 4 as follows:

1. Never or hardly ever
2. Sometimes
3. Often, frequently
4. Usually or always

The questionnaire was composed in English and was translated into Catalan and Spanish to help students understand the items and avoid misinterpretations. Table 19 pictures the resulting questionnaire, which entailed 19 items for the revision process in L1 and 20 items for EFL. The spare element was referred to translation into L1, which is not a strategical resource in L1 writing.

Table 19. Self-perception questionnaire administered pre and post task.

	QUESTIONNAIRE	Aspects to be surveyed
1	When I revise my text, I have in mind who the reader/s is/are.	Type of task / adequacy
2	When I finish writing, I check if the content of my text matches with the initial draft or the previous ideas I had in mind.	Representation of the task Evaluating text
3	When I revise my text, I tend to focus on grammar and vocabulary.	Metalinguistic awareness / Correction
4	When I revise the text, I pay attention to the appropriate paragraph arrangement and the ideas they contain.	Organisation of the text / Coherence
5	When I revise the text, I make sure I observe punctuation and spelling	Metalinguistic awareness / Correction
6	When I revise the text, I make sure the content of the text is what I intended.	Type of task / Content
7	When I modify the text during revision, I tend to delete words or ideas from the initial text and shorten it.	Type of transformation
8	When I modify the text during revision, I tend to substitute words or ideas from the original text.	Type of transformation
9	When I modify the text during revision, I tend to add words or ideas to lengthen the text.	Type of transformation
10	When I modify the text during revision, I tend to rearrange the sentences and/or the paragraphs to make it more comprehensible.	Type of transformation
11	I simplify or change the way I write an idea when I have problems with the vocabulary or grammar, maintaining the same sense.	Strategic knowledge / paraphrasing
12	When I revise I relate and put together simpler ideas into more complex and important ones.	macro-meaning
13	When I revise the text, I make sure that the important ideas in the text are expressed properly and placed accurately.	Macro-meaning / Coherence
14	When I revise the text, I tend to focus on meaning of each of the ideas in every paragraph.	Microstructural-meaning
15	When I revise the text, I tend to focus on the main ideas of my writing.	Macro-structural transformations
16	When I write an essay, I make sure during revision that it meets the requirements of this genre.	Rhetoric / Adequacy
17	When I revise the text, I make sure I used the right connectors, pronouns and demonstratives to link the ideas in my writing.	Rhetoric / Cohesion
18	When I revise the text, I make sure I attend the appropriate and evident progression of contents.	Rhetoric / Content / Coherence
19	When I revise the text, I read it aloud to help me identify possible mistakes.	Strategy / Reading
20	When I revise the text, I translate the text into my mother tongue. (ONLY EFL QUESTIONNAIRE)	Strategic knowledge

The questionnaire tried to obtain the following information from participants:

- The representation of the task and what it entails in terms of rhetorical knowledge (Items 1 & 17).
- Participants' self-perception on their use of metacognitive actions they during revision (Items 7 to 10). These items are related to Allal's (2000) taxonomy.
- Textual properties and the quality of the text. The extent to which participants were conscious of the aspects they focused on during the revision of their texts: adequacy, cohesion, coherence and correction (Cassany, 2009). In line with these elements, the items also included some of the descriptors of the holistic rubric (Liu, 2005 similar to Eckstein et al., 2018): content, text organisation, grammar, vocabulary and mechanics (Items 3 to 5, 13 and 16 to 18).
- The mental level of representation involved in the transformation: micro and macro structural textual levels affected by the transformations in the revision process (Items 13 to 15). These items were related to the way text transformations performed by subjects affected single and local ideas, or more complex ideas (paragraphs).
- Other monitoring strategies used in revision: reading, translating (using writer's L1) (Manchón et al., 2009) or paraphrasing/rewording (Knospe, 2017; Stevenson et al., 2006) items 19 & 20.

Study 3

Time

The length of the revisions of this study was calculated according to the length of recording session in each language and the timing in fractions of 5 seconds as it was difficult to adjust the end and beginning of the sessions and the segments.

Length of texts

The amount of words was extracted directly from the word documents generated by the keylogg software. Their measuring took place after the version and after revision.

Operations of metacognitive regulation

The transformations carried out by participants in their revisions of essays in both their L1 and EFL constitute the instruments through which we have assessed the operations of self-regulation in the writing task. According to the aforementioned analysis and its correspondence to those operations: anticipation monitoring and adjustment (Allal, 2000). The analysis show the actual categorisation of each action and their percentage of deployment in each group of participants.

Text Quality

As in the previous chapter, Liu's (2005) rubric was adapted to rate the quality of texts, in this case the essays in both L1 and EFL. A holistic score was used including those five features that were part of the analytic scoring which ranged from 1 to 3 in each category (see previous chapter rubric for essays). Content, text organisation, grammar, vocabulary and mechanics. Same criteria as in the rating in the previous chapter were observed.

Text quality scoring was validated by marking pilot texts again. Two researchers followed the criteria set for the study in section 1. The agreement in all aspects was <0.8 after Cohen's kappa was applied.

Study 4

Metacognitive Regulation segments

In our analysis we analysed different segments of metacognitive regulation. Our model is adapted from adapted Bañales (2010) who, in turn, adapted his model from Iñesta's (2009) and Tillema's (2012). Their studies resembles to ours as they examined and organised their data in those segments.

We have not considered the temporal dimension in the deployment of the actions of metacognitive regulation. Our analysis deals with the awareness in the use the participants show related to the deployment of the strategies. Sessions are not

analysed chronologically but rather focusing on topics. The total amount of time transcribed in segments bears about 4h and 45minutes.

The segments were transcribed and coded as depicted in Figure 24 below. The first section included the group, the participant, the language of the essay and the order of appearance. Right below, the time when the segment began and when it ended, they were all set in fragments of five seconds. The text transformed box gave account of the paragraph, the type of transformation and the actual words added, deleted, substituted or rearranged. The transcription box shows the words uttered by the participant in any language either it was a thought or they were reading or rereading the texts written so far. The bottom box offers the translation into English of the actual transcription.

G1.P1.L1_2			
<i>Code for segment recognition:</i> Group: experts, intermediate, elementary; G1, G2 or G3 Participant: 1,2,3,4. P1, P2, P3 or P4 Language: L1/EFL; Order of appearance: 1,2,3,4...			
Begin	End	Text transformed	Transcription
00:00:50	00:00:55	1 st paragraph Deletion Su necesidad de jugar	Voy a suprimir esto porque esta frase está mal construida
<i>Length of segments: The second when it starts is stated. It is related to the screen recording session, the second when it finishes The segments have been cut in pieces of 5 seconds.</i>		<i>The text transformed. The paragraph where it was placed in the first version of the text. The type of transformation: addition, deletion, substitution or rearrangement. The actual piece of text added, deleted or rearranged. In case of substitutions the first-version text and the new text have been quoted.</i>	<i>Transcription of the actual words uttered by the participants. No suprasegmental traits were transcribed. Inverted commas have been used when terms appeared in a different language or participants were reading their texts. If a word or some words were uttered in Catalan or Spanish and was relevant, its or their translation will be found between brackets. We used this criterion for the actual transcription and the box corresponding its translation in English.</i>
'I am going to delete this sentence since it is not properly constructed.'			
<i>This bottom box corresponds to the translation into English. We used single inverted commas to quote the participants utterance.</i>			

Figure 24. Instance of segment.

Textual properties

In our analysis, we have included the textual properties as they interweave different levels of text organisation, i.e. content, form and pragmatics (Cassany, 2009; Rienda, 2015). Cassany's account of the properties are founded on some other

influential works that he quoted (Adam, 1992; Bernárdez, 1992, 1995; Hallyday and Hasan, 1976; Van Dijk, 1978). Rienda (2015) also conferred relevance upon the textual properties to guide the process of revision.

These are the properties:

- Adequacy: it refers to the variety of the language used, depending on the place it is written and/or spoken as well as the function (formality, specificity, subjectivity...), in each communicative situation. It has to do with the sociolinguistic variation and it also includes pragmatic aspects such as the objectives or the functions carried out by a text.
- Coherence: it involves the choice and organisation of the semantic content of the text (relevant information, explicit and implicit data and implicatures). It portrays the development of the topic in a sensible, global and hierarchical way.
- Cohesion: it applies to the mechanisms that allow writers to connect different parts of a text (phrases, clauses, paragraphs and so on). They are brought into play to actually implement it. There are several features, such as punctuation, connectors, discourse markers, deictic markers, tense agreement...
- Correction or grammaticality: it gives account with the rules of any level (spelling, morphosyntax, and semantics) that enable writers to build up comprehensible sentences.

4.2.4. Procedure

Participants were informed of the topic, the order of languages they should write the essays in and the maximum and minimum length right before they started. Instructions were written on the paper and they were told orally as they were to begin. No time limit was set. The researcher stayed at all times with them, in the same room, while they were proceeding with both the first version of the text and the revision.

In the first session, participants filled out two questionnaires on their perception of frequency of actions of metacognitive regulation on revision. One survey focused on writing in English as a foreign language and the other focused on writing in participants' mother tongue, either Spanish or Catalan. These questionnaires were

completed before the writing tasks and the mean time of completion was around ten minutes. At the same time, participants were requested to watch two films: Harry Potter, any of the saga, and The Boy in the Striped Pyjamas. Those films were the same as in the writing tasks for the first study. They had to make sure they had seen both films before carrying out the activity.

In the second session, the essay word document assigned for the activity was prepared for participants. The writing task was replicated from the previous section, this time one of the films was discarded randomly as participants were fewer. Participants were appointed to carry out the writing tasks one by one, in an office with a peaceful atmosphere in both first versions. In two occasions, pre-service with elementary levels carried out the first version (no think aloud involved) at the same time.

During the writing sessions, participants were told the instructions carefully and were given these notes in written. They were assigned one essay in the L1 of their choice (Spanish or Catalan) and another in English. The topics and the languages were counterbalanced resulting in 4 experimental conditions.

Participants read the instructions carefully. No time limit was set to complete the tasks. They had word limit though, two pages maximum. They were told they would come back after a few days to revise and improve their texts. They were informed they could review the films and look up words in dictionaries or collect more information from resources of their choice to carry out a final and revised version of it. Once participants were aware of all the process to complete the writing tasks, they typed their first version of both essays on a computer. Inputlog was used to keep a record of all the information generated from the process and the first version of the text. At the same time, Camtasia and Snag it, screen recorder software, were used to record the whole process too.

The third session, the revision session, took place with an average of four days delay. The revision session followed this protocol: before starting the session, the participants were instructed how to behave in a think-aloud protocol (TAP). They were told they would carry out the revision of their texts and that they would be screen recorded and so would their voices. The TAP practise involved a short narrative text on what they had done the previous weekend. The participants were told to speak as much as possible and keep talking even if they got stuck. The total average length of

revision was 9 minutes and 35 seconds for L1 texts and 14 minutes and 10 seconds for EFL.

All revisions of the texts were screen-recorded following similar research procedures (Sommers, 1980; Knöspe, 2017; Van Weijen, 2008; Shariat, 2018). All those recordings were transcribed for analysis.

In the fourth session, participants filled out online the same two questionnaires again after having revised the text.

4.3. Results and analysis

4.3.1. Study 2. Influence of the writing task in the self-perception of metacognitive strategies.

Criteria for analysis and discussion

For the discussion of the data collected from the pre-task and post-task questionnaires, which ranked from 1 to 4 to assess their perception of use of that strategy or action during revision. First of all, we focused primarily on the statistical effects of the variables: the languages (L1 & EFL), the moment (pre and post writing task) and the three groups (experts, intermediate PSTs and elementary PSTs) involved. The items in which significant or quasi-significant effects were found lead the analysis. These results must be treated cautiously since the amount of participants is reduced and the effects have been calculated according to the proportions of the answers in the questionnaires and must be handled with care as explained in the part devoted to the methods above. The items in which significant or quasi-significant statistical effects were found are indicated in Table 20 below.

Table 20. Items with significant or quasi-significant effects.

Item	Question	Aspects surveyed
1	When I revise my text, I have in mind who the reader/s is/are.	Type of task / adequacy
4	When I revise the text, I pay attention to the appropriate paragraph arrangement and the ideas they contain.	Organisation of the text / Coherence
8	When I modify the text during revision, I tend to substitute words or ideas from the original text.	Type of transformation
11	I simplify or change the way I write an idea when I have problems with the vocabulary or grammar, maintaining the same sense.	Strategic knowledge / paraphrasing
12	When I revise I relate and put together simpler ideas into more complex and important ones.	Macro-meaning / Coherence
13	When I revise the text, I make sure that the important ideas in the text are expressed properly and placed accurately.	Macro-meaning / Coherence
15	When I revise the text, I tend to focus on the main ideas of my writing.	Macro-structural meaning / Coherence

It must be considered that the items in which some kind of effect was noticed have to do with what have been identified as higher-level cognitive activities (Chenoweth & Hayes, 2001; Schoonen et al., 2011). In this respect. These results show that writers' perceptions changed significantly on the issues such as item 1 which is related to goal-setting, when writers figure out a particular reader, the audience. Besides, effects were found in items 4, 12, 13 and 15 which are related to the content and the text organisation, the way meaning is conveyed in the different parts of the text and how more macro-structural meaning is attended to as well as the coherence with which the text is built upon.

The other two items have to do with the action and strategies carried out to transform the text so that the distance from the text written so far and the text. Item 8 has to do with the type of transformation undertaken, in this case substitution which is meant to be a more complex action (Allal, 2000) since it entails the deletion and insertion of new content or the correction of grammar or language conventions. Finally item 11 refers to a compensating strategy (Manchón et al., 2009) as it is paraphrasing, since it involves the use of much handier language in case the context, the task or the language proficiency may impede the fulfilment of the intended sense. On the other hand, the results presented worth-mentioning differences in each group or even in each individual.

4.3.1.1. Analysis per item - statistical effects

A mixed ANOVA analysis was implemented: 2 (Lang L1/EFF) X 2 (phases pre/post) X 3 (Group) for all the items in the L1 and EFL questionnaire (see appendix). There is only one item, number 20, which was specific for the self-perception on the frequency of use of the L1 in the EFL writing tasks. The items in which significant or quasi-significant effects were found as follows:

Item 1. "When I revise my text, I have in mind who the reader/s is/are."

This item is meant to bring about a reflection on the goals of the task in terms of the audience that will read the text. A quasi-significant effect Group X Phase (pre/post) ($F(2,0)=4.821$ $p<.038$; $\eta^2=.51$; $P=.64$) with a large-size effect of was found. This effect suggests that participants modified their self-perceptions after the

completion of the writing tasks in a different way in each of the groups. It may be interpreted as, no matter the language they wrote in, participants realised that the tasks made them bear in mind the audience of their texts.

From the results in the questionnaire, it can be noticed that experts perceived that they kept the audience of their texts in mind in L1 and EFL whereas the answers in the PSTs groups revealed different perceptions (See Table 21 in Appendix). On the one hand, a couple of intermediate PSTs whose self-perception of the frequency, which was really high, went down after the completion of the writing tasks in L1 and EFL.

On the other hand, in the elementary PSTs, two of the participants changed their self-perceptions of the frequency whereas the last two ones remained the same. For those two ones that changed for the first one, the frequency with which she declared she had in mind their audience in L1 increased and decreased in EFL. The second one's self-perception decreased in L1 and kept on being low (2 out of 4) in EFL before and after the task. These latter results may be interpreted due to the fact that these activities for PSTs, who are after all undergraduate students, are mostly related to academic practice (Rinnert & Kobayashi, 2009) in EFL courses that they were following at that time.

Item 4. "When I revise the text, I pay attention to the appropriate paragraph arrangement and the ideas they contain."

This particular item has to do with the coherence of the content in the text and the way writers break down the text into paragraphs so that content is conveyed appropriately and makes sense. A triple interaction effect with a large size effect was encountered, Language X Phase X Group, ($F(2,0)=7.571$; $p<.01$; $\eta^2=.62$; $P=.83$). Such result suggests that after the completion of the task, the perception of the frequency with which the participants paid attention to this particular item varied in each of the three groups and in each language. This finding may be understood as the participants' self-perception of the frequency of revision of the content covered in each paragraph was different and so it remained according to those three factors. It shows a divergence in the conception of the frequency of practice of this strategy in the revision in each language and in each group.

In addition, important differences in the self-perception of the use of this strategy were noticed if a closer look at the answers is taken. In fact, the experts, as in the first item, showed the highest self-perception of frequency of employment, however, there was a participant in this group whose perception was not the highest (4 out of 4) and the other participants' perceptions went down after revision in L1 and another one's answers remained in a perception of high-frequency of use.

With respect to the other two groups, their perception of the way they faced this particular strategy was very diverse as pointed out by the effect. On the one hand, intermediates showed a more accurate perception of their use of it since their numbers were lower than those of the experts' and decreased in L1 after revision. Particularly in two cases in which the maximum frequency score: 4, became 2 in the post-task questionnaire. Nonetheless, it augmented, slightly, after the completion of the task in EFL. Contrariwise, two of the elementaries thought that they used this strategy more often in L1, (the other two ones remained with the same degree of self-perception: 3) and three of these PSTs lowered their self-perception of use in EFL from a usual skill to an often usage.

Item 8. "When I modify the text during revision, I tend to substitute words or ideas from the original text"

The third item in which an effect was encountered was number 8. In this case, the Group brought about significant differences ($F(2,0)=4.270$; $p<.04$; $\eta^2=.51$; $P=.63$) with a large size effect. It suggests that the self-perception of the use of the substitution in each group was dissimilar and it may mean that they employed it more often than they actually thought they did.

According to the previous effect, this item's perception of frequency of use differed from group to group. Indeed, the observation of the answers on the use of this particular strategy, used to reduce the distance between the text written and the intended text, was varied. It must be noted that substitution was the type of transformation most frequently used during revision in both languages (See Study 3 in this section).

Elementaries showed a degree of awareness mostly in line with their actual actions, since their substitutions were 44% of their transformations in L1 and 71% in

EFL. The self-perception of use increased in L1 in all participants in the post-task questionnaire except for one participant which went from a usual employment to an occasional one. Curiously enough, this participant's L1 text only contained a transformation and it was a substitution. On the other hand, her revision of the EFL text consisted mostly of substitutions of words she had used as cues to know where to implement those superficial changes.

The rest of the groups offered a heterogeneous behaviour with respect to the awareness of the deployment of this strategy. Whereas experts maintained or augmented their self-perception of the frequency of use, one of the participant's reduced her declared awareness of the frequency in L1 and increased it in EFL. Experts' transformations entailed in L1 a 48% and a 43% in EFL which meant they were the most numerous of that sort.

With respect to the intermediates, like in the elementaries, the additions outnumbered the substitutions the in L1: 40% of the transformations were substitutions and 46% were additions. Contrarily, in EFL the majority of the changes carried out by this group were substitutions: 47%. This perspective was rather consistent with their answers in the questionnaires in both languages, since the most of them stated that it was a regular to frequent action. It must be noted that their perception tended to converge in a 2 out of 4, whether they had stated they perceived they used with more or less frequency. Nevertheless, one of the participants, whose perception improved from 1 to 2, used often and she ended up implementing mostly substitutions.

Item 11 "I simplify or change the way I write an idea when I have problems with the vocabulary or grammar, maintaining the same sense"

In item 11 referred to a strategy that entails paraphrasing or rewording of an element or some elements of the sentence or paragraph with elements similar in meaning. There was a triple interaction effect Language X Phase X Group, though marginal ($F(2,0)=3.316$; $p<.08$; $\eta^2=.42$; $P=.48$). It may be interpreted as the participants' self-perception of their use changed after the completion the task and its perception of frequency of use was different depending on the language and the group of writers. It all together suggests that the self-perception after the completion of the

task varied and it makes sense to be different particularly if the difference between the L1 and EFL is made.

In this item, all participants perceived that they used paraphrasing frequently. In the case of the experts, this perception was maintained. However, it decreased after the task in one of the participant's L1 questionnaire and increased in another participant's EFL. In the Intermediate PSTs, in L1 the perception of frequency went up in three participants, and in EFL however, it remained the same in two of them and went down in one case and down in another.

This trend changed in the elementaries since their perceptions went down from usual to frequent or remained as usual in both languages. Only in one case in L1 it increased. In any case, this item had a perception of a being employed very frequently in all three groups although there are some fluctuations.

Item 12 "When I revise, I relate and put together simpler ideas into more complex and important ones."

Another marginal effect worth stating was obtained in item 12 regarding the Phase (pre-post, languages and groups collapsed) ($F(1,0)=4.532$; $p<.06$; $\eta^2=.33$; $P=.47$). It seems to point out that participants' self-perception of the use of the strategy changed after the writing tasks were completed. It may suggest that writers gained awareness, once the deferred revision was carried out, on the fact that their texts had improved in terms of text coherence and content intricacy.

The answers in the questionnaires before and after the writing tasks showed a very heterogeneous perception of the frequency of use of this particular strategy in the groups and languages. It must be remarked that the higher increase was found in L1 and very few of them in EFL, just one participant in the intermediates and another one in the elementaries. The integration of ideas into more complex structures in the text involves a focus on the content and text organisation and a comprehensive mental representation of the text. These aspects are related to higher linguistic competence in EFL (Tillema, 2012) and linked to higher-level activities (Tiryakoglu et al., 2019).

Item 13 "When I revise the text, I make sure that the important ideas in the text are expressed properly and placed accurately."

A triple interaction effect Language X Phase X Group ($F(2,0)= 4.966$; $p<.03$; $\eta^2=.52$; $P=.65$) was unveiled. Even though it was quasi-significant, this interaction seems to indicate that the attention on macro-meaning at sentence level was different in all three groups depending on the language the tasks were carried out in and it changed after the completion of the tasks. In other words, these participants' self-perception of the use of this strategy changed since it requires higher attentional efforts, particularly in EFL (Sasaki, 2000; 2009). In fact, its employment stood out from the participants revisions.

As far as the groups and individuals are concerned, in the group of experts the perception of frequency of use augmented to very frequent or usual or remained as a usual action, in two cases in L1 and in just one in EFL. On the other hand, PSTs presented a different perception of the frequency of use. Intermediates' awareness showed a decrease of one person in L1 and felt their use as usual except for one case. On the hand, in EFL the frequency with which they considered they made use of it augmented in two cases. As for the elementaries, one of the participants perceived a more frequent use and another one a less frequent use in L1. In the same language, the other two participants perceived it as usual and in EFL. The perception of use fell in a pair of cases and remained the same – usual and very frequent – in the other two ones.

Item 15. "When I revise the text, I tend to focus on the main ideas of my writing"

The last item, in which a significant effect was found, was item 15. There was a marginal significant interaction effect Phase X Group ($F(2,0)=3.138$; $p<.09$; $\eta^2=.41$; $P=.45$) with a large size effect. It seems to indicate that after completing the writing tasks, the self-perception in each group on this item changed or was distributed in a different way.

With respects to the groups, experts kept their perceptions except for participant 4, whose perception decreased in both languages. It may suggest that the task enabled him to think that attention to general textual meaning was rather difficult to realise on a regular basis. It also happened to another participant but only in EFL.

In contrast, PSTs showed a similar behaviour among themselves since in both groups two of their members in the elementaries and three in the Intermediates perceived the frequency of use of this strategy as usual or very frequent and their perceptions stayed the same before and after the tasks. There were, however, variations in the rest of the participants. In the intermediates, the perception of the one who experienced changes in the perception augmented in EFL and decreased in L1 which suggests that she conceived the revision of EFL texts as more challenging in terms of focusing in global meaning. If that was to be so, it would be in line with difficulties reported by the WM of encoding and decoding in a language with limited proficiency (Kellogg, 1996; Hayes, 2006). However, it must be pointed out that this particular participant's transformations concentrated on superficial aspects and during her process of deferred revision only spotted a particular instance of global, textual focus during the deferred revision.

In the elementaries, two participants declared that their perception of frequency had risen after revision, one of them did in both languages and the other one only in EFL. None instance was found for the former participant in L1 and EFL. As for the latter, her revision in EFL entailed a constant translation and reformulation of her text that also included converting all she had written with the limitation of the linguistic competence.

Complementary analysis

In this part, the results of the analysis of some other items related to the self-perception in the use will be dealt with. These items happened not to hold statistical effects in the answers by the participants, however, their use is widespread during the revision. For instance, the frequency with which participants declared they thought they used the rearrangement of words, sentences or paragraphs in their revision. It turned out to be very high whereas the quantitative results in the next study reveal it was by far the least employed type of transformation. Besides, the answers with regard to the use of translation into L1, a recurrent strategy, (Manchón et al., 2009; Sasaki, 2000; Tillema, 2012) during revision also unfolded a divergent perspective on the awareness of the frequency of its use in all three groups.

Item 9 "When I modify the text during revision, I tend to add words or ideas to lengthen the text."

The perception of use of this action of metacognitive regulation experienced diverse views in the three groups. On the one hand, experts were the group that used them the least in L1: 22% of their transformations were additions compared to a 46% and 48% of intermediate and elementary PSTs respectively. On the other hand, in EFL experts used them more frequently than in L1 (33%) and, moreover, they used them more than intermediates (32%) and elementaries (15%).

According to the answers in the questionnaires in L1, the experts' self-perception decreased in three of four participants and remain as occasional in one case. It suggests that these appreciations are quite realistic. On the other hand, in EFL, two participants augmented their perception of use and in one case it decreased and other it increased as to show a diverse scenario. In this case one of the participants who completed their text in EFL with more information, made this item count. In the other cases, the frequency seemed to be around occasional which matches with the data presented above.

Intermediates showed a different behaviour since their perception of use in L1 augmented in two cases and decreased in one. It stayed the same in one more case. In EFL, it remained in an occasional use in two cases and augmented and decreased in one case. It, all together, brings to light a consistent self-perception of use and actual employment of the strategy in both languages.

As for the elementaries, the perception of use in L1 augmented in two cases and remained the same in the other two, to be around a very frequent use which matches with the percentages explained above. As far as their perception of use in EFL is concerned, two participants increased it and the other two remained the same to assure a very frequent use which stands very inconsistent with respect to their actual percentages.

All in all, expert writers and intermediate PSTs showed a perception in accordance to their actual behaviour in this particular item in both languages. On the other hand, elementaries offered a similar in L1 but a distorted one in EFL when compared to the actual proportions of actions carried out.

Item 10 "When I modify the text during revision, I tend to rearrange the sentences and/or the paragraphs to make it more comprehensible."

This particular item offers a peculiar insight of the perception of which the actions they undertake during revision and what they actually do. The results of the percentage of transformations entailing a rearrangement is not higher than 10%. In fact, only the experts in EFL reached the 9% in EFL and 8% in L1 although they perceived that they used it frequently before and after revision in three cases in L1. In another case, his perception declined and showed to be in agreement with what he had actually done.

In EFL, this group kept the perception of frequency in two occasions and decreased in one and went up in another case. It also revealed that the participant whose perception was the most accurate in accordance to their behaviour in L1 was the same in EFL and the high frequency of the rest did not meet the previous results.

The intermediates also showed misrepresented perception since no rearrangement was found in the revision of those four participants in L1 and just a 2% of the total of the actions were of that sort in EFL. In two cases their perception rose and in two other cases continued the same in L1. The frequency was higher than actual behaviour. As for the EFL, it persisted in two participants and augmented in the other two ones. In any case, they were far from the amount of rearrangements carried out.

In the case of the elementaries, even though the figures and trends are similar to the other two groups (4% of rearrangements in L1 and 2% in EFL, it must be stated that in two cases it went down in both languages, they were the same participants. It suggests that the completion of the text made them realise they did not use this strategy as often as they had stated. In spite of the mismatch in the frequency, their answers seem more accurate and realistic than their groupmates. In those cases, these two participants stated that they used it very frequently.

In short, only a few scattered participants from the three groups may be appointed as coherent with their behaviours when confronted with the self-perception of the frequency of use. In general terms the divergence is high and in some cases enormous in both languages.

Item 19 "When I revise the text, I read it aloud to help me identify possible mistakes."

This particular item refers to the perception of the way they revised in terms of reading aloud which is a feature that seems to be present in a random way quite often. As described in the study 3 in this section, it has unveiled different implications for revision.

On the one hand, the three of the four experts reported an increase in the self-perception of frequency of use after the completion of the tasks in L1, just 1 went down. On the other hand, in EFL the values stayed the same and, by and large, were higher than the perceptions in L1.

Intermediates demonstrated similar perceptions after the completion of the task in L1 but it meant a higher rise since the frequency they had estimated before the task was the lowest. In EFL, the results were in line and the values for the frequency were slightly higher for this group. One of the participants realised that she used reading more often than she had previously believed as her perceptions grew two points up to a rather frequent extent.

Elementaries exhibited a diverse range of answers. Peculiarly, three participants' perceptions of frequency of use raised whereas one of them dropped remarkably from usual to very unusual in L1. In EFL, reading became evident to be more frequent to two of them and decreased in other two ones.

Briefly, very distinct behaviour was noticed in relation to the reading aloud strategy since it was used in all groups by different participants. It was also observed that reading enabled the semantic mental representation of the text no matter the language. However, this way, it did stand as a hindrance for those participants with lower EFL proficiency as they would translate into their L1. It did also become apparent that reading aloud in EFL was challenging as the pronunciation of words in a foreign language could slow down, if not impede, the comprehension of a so-far written text. It sets the interaction between the different aspects concerning the WM in writing (Kellogg, 1996): central executive, visual sketchpad and, in particular, the phonological loop.

Item 20 "When I revise the text, I translate the text into my mother tongue."

The last item, number 20, was strictly related with the use of the translation in the first language of the writer. The perceptions of use were quite different from group to group even from person to person.

The expert writers decreased in their self-perception of use. It may be related to the fact that during the deferred revision, in some occasions, translation meant a way for meaning making and evaluation of the content and organisation of the text in a similar way as described in previous research (Manchón et al., 2009; Murphy & Roca de Larios, 2010) in a group of pre-service teachers in which the L1 was almost the same. They probably made use of it more often than around the 50%, which is the average. In this group, their perception of use ended up being occasional and it had decreased in two participants.

The intermediates augmented the self-perception of the translation, in three out of the four participants. Their values, though, remained lower than the experts. In the case of the elementaries, three out four maintained their perception of a usual employment of this strategy, however, one of the participant's perception declined to a rather unusual frequency. Noticeably, this participant used words in Spanish in her text in EFL as a cue to be translated. Those words were the focus of her whole process of revision.

In a few words, elementaries were more conscious of their use of the translation before the completion of tasks and they actually did so. Otherwise, experts and intermediates ended up perceiving the same frequency of use, however, the former ones' perception had decreased and the latter ones' had increased after the completion of the texts.

4.3.1.2. Discussion

The analysis of the pre and post task questionnaires has provided some results that should be managed prudently keeping in mind the circumstances of the whole exploratory study. First of all, the content of the questionnaires was addressed to participants with a background like our participants' as in previous research (Karlen

et al., 2017; Sasaki & Hirose, 1996; Cerrato-Lara et al., 2018; Ruan, 2014). However, the fact that the results are tied to the completion of a writing task makes it special (Murphy & Roca de Larios, 2010) and it would pay to be replicated with higher education students from different grades or with participants from lower educational levels although an adaptation would be required in that case. It would also make sense to bind it to a different writing tasks.

Secondly, in some cases, the perception of frequency of use of strategies that participants declared may differ from the way they use writing in their everyday activities since it may not be a recurrent task, particularly for pre-service teachers. For experts, writing occupies a part of their academic activities (Karlen, 2017). None of the participants had engaged in a similar activity and the results seem to suggest that, even though, they were asked about the process of revision in broad terms, their answers were influenced by the writing tasks they had just carried out. The conditions and procedures of the research process may exert an influence in the completion of the activities (Van Weijen et al., 2009) and deferred revision is no exception.

This analysis can provide greater insight on how the process of deferred revision is perceived and the ways the writing tasks can have an impact on writers' strategies. These results also help understand which aspects these participants recognised as guiding their revision. After the completion of the writing tasks, participants showed a patent variation of self-perception from the pre to the post task questionnaires. Such changes will complement the description of writing behaviours and the texts productions in the study 3 of this section as questionnaires were used by Cerrato-Lara et al. (2017) and Karlen (2017).

Comparing Experts vs Pre-Service Teachers

Experts showed in the items analysed above a higher self-perception in the frequency of use of the actions and strategies during deferred revision. Very slight variations were spotted before and after revision. In particular, writers in L1 perceived themselves as they observed items 1, type of task, and 4, organisation of the text, utterly after the completion of the writing tasks, in other words, they declared they had in mind the reader of the texts usually. They also declared they had paid a careful attention to formal aspects of the language in terms of punctuation and spelling.

Furthermore, according to their answers, they perceived that they usually paid attention to the aspects related to content. Attention to content, the accurate expression of ideas and their place in the text and their progression were identified as a main concern. Moreover, they regarded substitution as the most frequent strategy and it was quite so compared with addition, deletion or rearrangement.

In contrast, intermediates and elementaries displayed a more heterogeneous self-perception in the frequency of use. There were more variations among the members of this group of participants compared to the experts, and their number were more accurate according with their actual performances. The fact that their writing tasks are mostly connected to their academic activities may suggest that their attention to that particular issues was not the maximum. Furthermore, significant differences were found in the awareness of the frequency of use of substitution was inconsistent with their actual performance, particularly in L1, where addition was predominant and substitution was more numerous than the rest in EFL in both groups of PSTs.

Finally, it must be noted that major effects were found on the items related to content (Van Steendam et al., 2010) and the way it is arranged all through the text, the effects were marginal or less significant in those items. It suggests that the completion of the task revealed a different perception on the attention to the content which may be related to the awareness showed by experts and the gains of PSTs after the writing tasks that, in a way, clash with the transformations implemented in the second versions of the texts.

4.3.1.3. Appendix

A MODEL OF QUESTIONNAIRE

Q2. Regulació metacognitiva en l'escriptura en anglès com a llengua estrangera

Gràcies per prendre el temps de participar i emplenar el següent qüestionari.

Vos preguem penseu en les accions que duen a terme quan reviseu un text que heu escrit.

Aquest qüestionari no és cap avaluació, per això us preguem que respongueu amb sinceritat.

En aquelles qüestions que tinguen una escala entre 1 i 4 recorda que aquesta és la freqüència:

1. Mai o quasi bé mai
2. Amb certa freqüència
3. Amb prou freqüència
4. Sempre o quasi bé sempre

1	Quan revise el que he escrit, tinc en ment a qui va dirigit el text.	1 2 3 4
2	Quan acabe d'escriure, comprove si el contingut concorda amb l'esborrany inicial o les idees inicials que tenia pensades.	1 2 3 4
3	Quan revise el text, tinc tendència a centrar-me al vocabulari i la gramàtica de l'anglès.	1 2 3 4
4	Quan revise el text, em fixe en si la divisió en paràgrafs és l'adequada i les idees que contenen també ho són.	1 2 3 4
5	Quan revise el text, em fixe en la utilització normativa dels signes de puntuació (comes, punts, etc.) i de l'ortografia.	1 2 3 4
6	Quan revise el text, em fixe en que el contingut conjunt de les idees siga el que pretenc.	1 2 3 4
7	Quan modifique text en la revisió, tinc tendència a suprimir paraules o idees del text inicial i fer-lo més curt.	1 2 3 4
8	Quan modifique el text en la revisió, tinc tendència a substituir paraules o idees del text original.	1 2 3 4
9	Quan modifique el text en la revisió, tinc tendència a afegir paraules i idees per a fer el text més llarg.	1 2 3 4
10	Quan modifique el text en la revisió, tinc tendència a reorganitzar les oracions i/o els paràgrafs per fer-lo més comprensible.	1 2 3 4
11	Simplifique o canvie la forma d'escriure una idea quan tinc problemes de vocabulari o gramàtica, però sense canviar el contingut de la idea.	1 2 3 4
12	Quan revise, relacione i integre idees simples en idees més complexes i importants.	1 2 3 4
13	Quan revise el text que he escrit, em fixe en si les idees importants del text estan ben expressades i ubicades en la part del text que correspon.	1 2 3 4
14	Quan revise el text, tinc tendència a centrar-me en la manera d'expressar cadascuna de les idees individuals en cada paràgraf.	1 2 3 4
15	Quan revise el text, tinc tendència a centrar-me en les idees més importants de l'escrit.	1 2 3 4
16	Quan escric un assaig, en revisar-lo comprove que el text aconsegueix els requeriments propis d'aquest tipus de text i que els diferencien d'altres tipus de textos.	1 2 3 4
17	Quan revise el text, em fixe en si al text he relacionat les idees amb els connectors, els pronoms i els demostratius adequats.	1 2 3 4
18	Quan revise el text, em fixe en si la progressió dels continguts al text per a que siga l'adequada i siga evident.	1 2 3 4
19	Quan revise el text, el llig en veu alta per ajudar-me a detectar possibles errades.	1 2 3 4
20	Quan revise el text, tradueix de l'anglès a la meua llengua.	1 2 3 4

Figure 25. Model of questionnaire. Section 2. Study 2.

Table 21. Item 1. "When I revise my text, I have in mind who the reader/s is/are."

Participant	L1 Pre	L1 Post	EFL Pre	EFL Post
G1. P1.	4	4	4	4
G1. P2.	4	4	3	4
G1. P3.	4	4	4	4
G1. P4.	4	4	4	4
G2. P1.	4	4	4	3
G2. P2.	3	3	3	3
G2. P3.	4	3	4	4
G2. P4.	4	2	3	2
G3. P1.	3	4	4	3
G3. P2.	3	2	2	2
G3. P3.	4	4	4	4
G4. P4.	4	4	4	4

Table 22. Item 4. "When I revise my text, I pay attention to the appropriate paragraph arrangement and the ideas they contain."

Participant	L1 Pre	L1 Post	EFL Pre	EFL Post
G1. P1.	4	4	4	4
G1. P2.	3	2	3	3
G1. P3.	4	4	4	4
G1. P4.	4	4	3	3
G2. P1.	3	3	3	3
G2. P2.	3	3	2	3
G2. P3.	4	2	3	4
G2. P4.	4	2	2	2
G3. P1.	3	3	4	3
G3. P2.	2	4	4	3
G3. P3.	3	4	4	3
G4. P4.	3	3	3	3

Table 23. Item 8. When I modify the text during revision, I tend to substitute words or ideas from the original text.

Participant	L1 Pre	L1 Post	EFL Pre	EFL Post
G1. P1.	4	3	2	4
G1. P2.	2	4	2	3
G1. P3.	3	3	3	3
G1. P4.	3	3	3	4
G2. P1.	3	2	3	3
G2. P2.	3	2	2	3
G2. P3.	3	3	3	2
G2. P4.	1	2	3	2
G3. P1.	4	2	3	3
G3. P2.	2	3	3	3
G3. P3.	3	4	4	3
G4. P4.	3	4	4	4

Table 24. Item 9. "When I modify the text during revision, I tend to add words or ideas to lengthen the text."

Participant	L1 Pre	L1 Post	EFL Pre	EFL Post
G1. P1.	2	2	1	2
G1. P2.	3	2	3	2
G1. P3.	4	3	3	3
G1. P4.	3	2	3	4
G2. P1.	2	3	2	2
G2. P2.	3	2	2	2
G2. P3.	2	2	3	2
G2. P4.	1	3	2	3
G3. P1.	1	2	3	3
G3. P2.	3	3	2	3
G3. P3.	2	2	1	3
G4. P4.	3	4	4	4

Table 25. Item 10. "When I modify the text during revision, I tend to rearrange the sentences and/or the paragraphs to make it more comprehensible."

Participant	L1 Pre	L1 Post	EFL Pre	EFL Post
G1. P1.	4	4	4	4
G1. P2.	2	1	2	2
G1. P3.	4	4	4	3
G1. P4.	4	4	2	3
G2. P1.	2	3	2	2
G2. P2.	3	3	3	3
G2. P3.	4	4	3	2
G2. P4.	2	3	2	4
G3. P1.	4	2	4	3
G3. P2.	3	2	3	2
G3. P3.	4	4	4	4
G4. P4.	3	4	4	4

Table 26. Item 11. "I simplify or change the way I write an idea when I have problems with the vocabulary or grammar, maintaining the same sense."

Participant	L1 Pre	L1 Post	EFL Pre	EFL Post
G1. P1.	3	3	3	3
G1. P2.	3	3	3	3
G1. P3.	4	4	3	4
G1. P4.	4	3	4	4
G2. P1.	3	4	4	3
G2. P2.	3	3	3	3
G2. P3.	3	4	3	3
G2. P4.	3	4	3	4
G3. P1.	4	4	4	3
G3. P2.	4	3	4	3
G3. P3.	4	4	3	3
G4. P4.	3	4	4	4

Table 27. Item 12. "When I revise I relate and put together simpler ideas into more complex and important ones."

Participant	L1 Pre	L1 Post	EFL Pre	EFL Post
G1. P1.	3	3	4	4
G1. P2.	2	2	2	3
G1. P3.	4	4	4	4
G1. P4.	2	4	3	2
G2. P1.	2	2	3	3
G2. P2.	3	3	3	2
G2. P3.	4	4	3	3
G2. P4.	3	3	3	4
G3. P1.	2	2	3	3
G3. P2.	3	2	2	3
G3. P3.	1	4	3	2
G4. P4.	3	4	3	4

Table 28. Item 13. "When I revise, I make sure that the important ideas in the text are expressed properly and placed accurately."

Participant	L1 Pre	L1 Post	EFL Pre	EFL Post
G1. P1.	4	4	4	4
G1. P2.	2	3	2	3
G1. P3.	4	4	4	4
G1. P4.	4	4	3	4
G2. P1.	3	3	3	3
G2. P2.	2	2	2	3
G2. P3.	4	4	3	4
G2. P4.	4	3	3	3
G3. P1.	4	4	4	3
G3. P2.	3	2	3	2
G3. P3.	4	4	3	3
G4. P4.	3	4	4	4

Table 29. Item 15. ""When I revise the text, I tend to focus on the main ideas of my writing".

Participant	L1 Pre	L1 Post	EFL Pre	EFL Post
G1. P1.	3	3	4	3
G1. P2.	3	3	3	3
G1. P3.	4	4	4	4
G1. P4.	4	3	3	2
G2. P1.	3	3	3	3
G2. P2.	3	3	3	3
G2. P3.	3	2	3	4
G2. P4.	3	3	3	3
G3. P1.	2	4	2	3
G3. P2.	3	3	2	3
G3. P3.	4	4	3	3
G4. P4.	4	4	4	4

Table 30. Item 19 "When I revise the text, I read it aloud to help me identify possible mistakes."

Participant	L1 Pre	L1 Post	EFL Pre	EFL Post
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G1. P1.	2	3	4	3
G1. P2.	2	3	3	4
G1. P3.	3	4	4	4
G1. P4.	3	2	2	2
G2. P1.	2	2	2	2
G2. P2.	3	4	2	3
G2. P3.	1	3	4	4
G2. P4.	1	3	2	4
G3. P1.	3	4	3	1
G3. P2.	2	3	2	3
G3. P3.	4	1	3	2
G4. P4.	2	4	2	4

Table 31. Item 20. "When I revise the text, I translate the text into my mother tongue."

Participant	EFL Pre	EFL Post
G1. P1.	1	2
G1. P2.	4	2
G1. P3.	2	2
G1. P4.	4	3
G2. P1.	2	1
G2. P2.	1	2
G2. P3.	1	2
G2. P4.	2	3
G3. P1.	2	1
G3. P2.	4	4
G3. P3.	4	4
G4. P4.	3	3

4.3.2. Study 3. Length of revisions and operations of metacognitive regulation

4.3.2.1. Length of revisions (time)

This exploratory study had no time limit for the first version and no time limit for the revision. However, time has been considered as a factor in the study of writing processes (Galbraith & Rijlaarsdam, 1999; Gánem-Gutiérrez & Gilmore, 2018; Manchón et al., 2009; Roca de Larios et al., 2008).

Revision, on average, for all groups and almost for all participants took longer in EFL as portrayed in Table 32 below. These results are very much in line with Silva's (1993) results of the analysis of several previous studies comparing L1 and L2 - EFL in our case -. Only in the intermediates group the length was similar in L1 and EFL. This timing was uplifted by two of the participants whose revisions are the longest, in both languages, in the whole study. In both languages, the elementaries were the group with the shortest revisions. Far below the mean in those two cases. Nevertheless, one of the participants was in line with the mean revision time in L1 and EFL. He composed the texts highest quality in the group and some of the features of his revision process were similar to the experienced writers.

Table 32. Average time of revisions per groups and languages.

Group	Revision L1 length	Revision EFL length
Experts	00:09:16	00:16:56
Intermediate	00:14:06	00:16:52
Elementary	00:05:25	00:08:38
Mean	00:09:36	00:14:09

It must be stated that the amount of time spent by the experts and intermediates was very similar. The participant with the lowest level of EFL increased the mean time. Three of the participants, two intermediates and one elementary, spent more time in revision L1 texts. The difference between those revisions is less than half a minute in two cases. The other case, was significantly longer as it took almost five minutes longer and the revision contained many changes in terms of content. The attention to mechanics decreased and the changes lead to small amount of formal mistakes.

4.3.2.2. Length of texts (number of words)

The length of texts may be a signpost for the representation of the task that participants have and their writing fluency. In this study, a minimum and maximum length of text was set. It was not always accomplished neither in the first exploratory study we described in the previous chapter nor in this one.

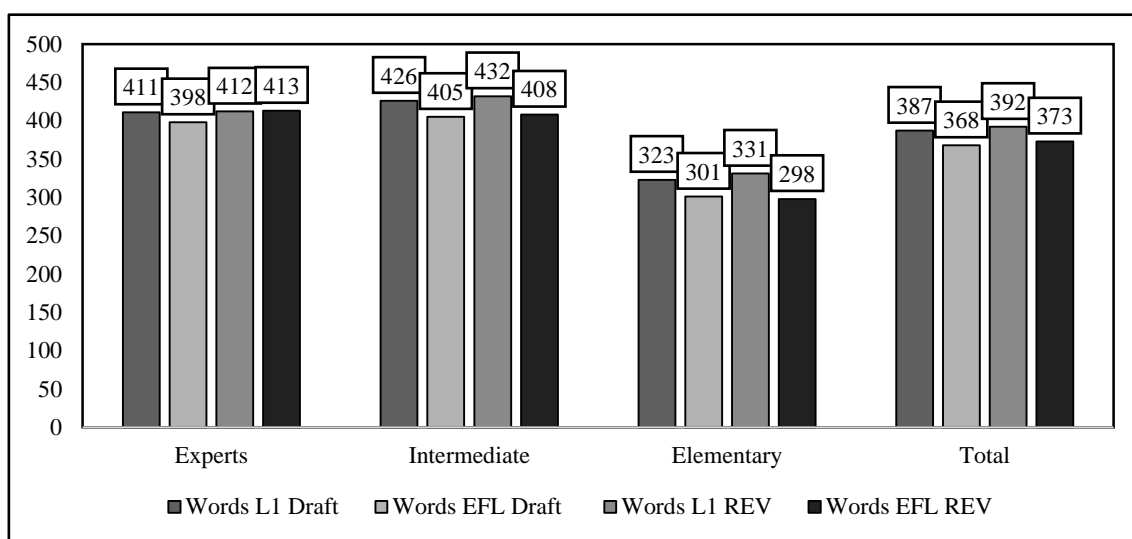


Figure 26. Mean length of texts per groups and per languages.

In the present study, in the first version of the text, the elementaries wrote the shortest texts on average, the intermediates wrote the longest and the experts were in the middle. Figure 26 shows the groups' means of length of both languages before and after revision. Texts were longer in L1, besides, in all three groups the difference between the L1 text and EFL on average 20 words.

The length of the texts after revision was, on the whole, longer in both languages. There is one exception: the mean length of the texts in EFL the elementaries group was lesser. In revision, the experts' mean length was very similar in both languages. They levelled up L1 and EFL. The average difference of intermediates' texts in L1 and EFL remained in a similar fashion and almost identical to the first version, a steady distance as Figure 26 indicates.

The revised version of intermediates were marginally longer in both languages and they were the longest in the three groups except for the EFL's revisions in which expert writers increased as we pointed out above. Finally, elementaries composed the

shortest texts in all three groups and their revised texts in L1 were longer on average, their EFL revised texts were shorter than the first versions as stated above.

Experts vs. Pre-service teachers

No significant differences were observed between the length of texts before and after revision in the experts and intermediate PSTs. Nonetheless, it must be highlighted that there were relevant differences in terms of the amount of words with the elementaries. The distance remained similar in the texts before and after revision and in both languages. The variation of words is around a hundred which seems to indicate that, on the one hand, elementaries had a different model of task in mind and how long texts should take and, on the other hand, lower EFL proficiency turned out in shortest texts. It seems that the relationship between the length of texts in L1 and L2/EFL proficiency of participants is similar to other multilingual contexts (De Angelis & Jessner, 2012; Stevenson et al., 2006; Tiryakoglu et al., 2019)

4.3.2.3. Holistic text quality

We are aware of the fact that the amount of participants is not significant, however, some tendencies can be observed and pay a comment.

On the one hand, as it could be expected, experts wrote the highest quality texts, followed by intermediates and, finally, elementaries as Figure 27 shows. In all groups the texts in L1 got higher grades. Moreover in both languages and all groups revision raised the quality of texts except for the experts in EFL in which, surprisingly, revision worsened the texts slightly.

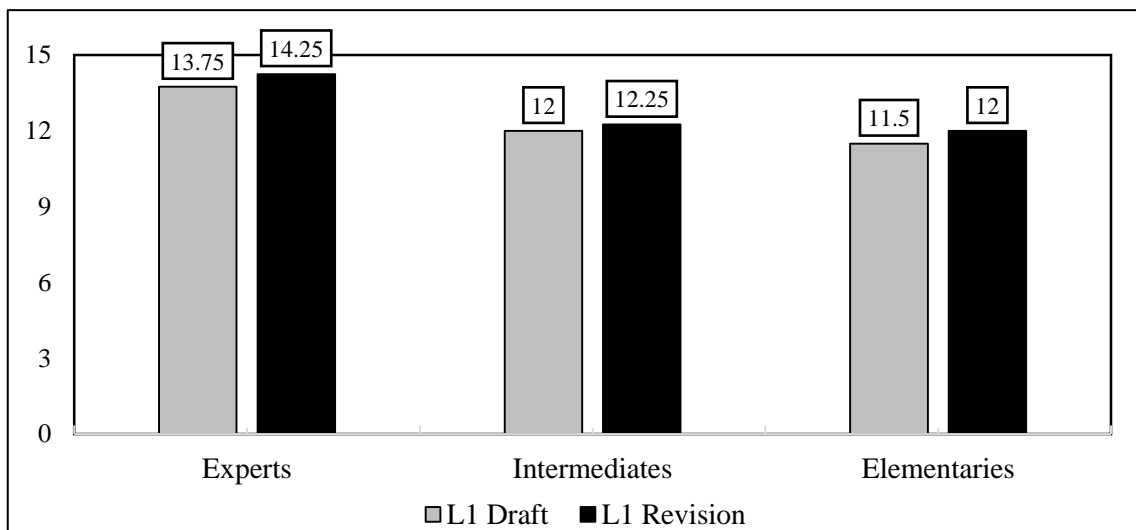


Figure 27. Holistic text quality means per groups and phases in L1. Draft stands for version1.

Nonetheless, if the individual results are observed in Tables 42, 43 and 44 in this study's appendix, they seem to suggest heterogeneity in the different groups and languages. On the one hand, in L1, the group with variation is the experts' in both the first version and the revision as Figure 28 portrays. At the same time, intermediates' means results differed up to a higher extent and did not vary much from first draft to revision.

It must be noted that the highest difference in all the groups and all texts and both languages is the intermediates L1 revision. Likewise, the highest increase in variations belongs to the elementaries in their L1 draft to L1 revision.

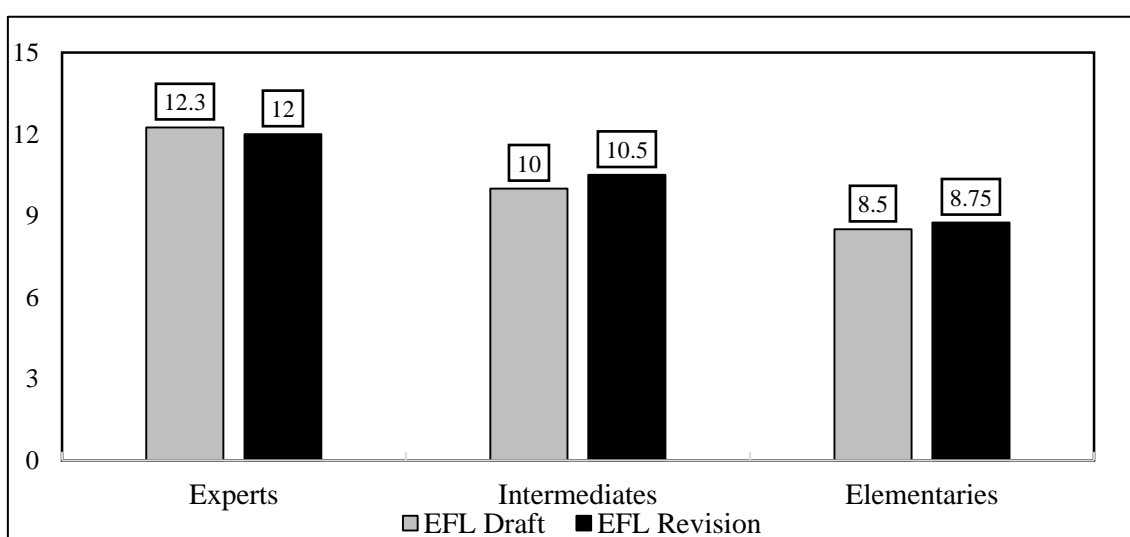


Figure 28. Text quality means per groups and phases in EFL. Draft stands for version 1.

By contrast, intermediates and elementaries improved the quality of their texts after revision in EFL. Intermediates took advantage and improve 0.5, the biggest increase, and elementaries half the improvement of intermediates (0.25). On the contrary, experts' holistic text quality decreased after revision.

The individual analysis of the participants' text quality in both languages, exposed in Table 33 brought about some details.

Table 33. Holistic text quality per groups and languages before and after revision.

Group	Participant	L1 Version1	L1 Revision	EFL Version 1	EFL Revision
Experts	P1	14	14	11	11
	P2	13	13	13	12
	P3	14	15	14	14
	P4	14	15	11	11
Intermediate	P1	13	13	10	10
	P2	14	13	12	12
	P3	12	14	10	11
	P4	9	9	8	9
Elementary	P1	13	13	10	11
	P2	12	9	9	9
	P3	10	13	6	6
	P4	11	13	9	9

On the one hand, the experts' was the group with fewer differences in text quality of all groups in both languages. Just one of the participants (P2) improved the text quality after revision in EFL but it affected the whole group's mean as in Figure 28.

In contrast, participants 3 and 4 improved their texts after revision. These variations in the text quality were more frequent in the other two groups: intermediates and elementaries. In the intermediates group, participants 3 and 4 improved the texts after revision. Participant 3 did it in both languages: from 12/15 to 14/15 in L1 and just a point after revision in EFL just as participant 4.

Conversely, participant 2 got a lower score in his revision in L1 than in the first version of the text. Elementaries improved the quality of their texts in a similar way to intermediates but in a wider extent. However, there were fluctuations: great improvements and one deterioration of L1 texts. Participants 3 and 4 improved their texts: from 10/15 to 13/15 and 11/15 to 13/15 respectively. Contrariwise, participant 2

worsened the quality of her text from 12/15 to 9/15. With respect to EFL, just participant 1 improved the quality after revision.

To conclude, the highest quality texts were those composed by the experts, as it could be expected, followed by the intermediates and the elementaries. The difference between the text quality, if all three groups are compared, was much higher in EFL than it was in L1 before and after revision. There are some particular points to be remarked.

First of all, in EFL the three groups improved the quality of their texts except for the experts who got a decrease of their mean after revision, even though their texts had the highest quality. Experts and elementaries improved their texts more than intermediates did in L1, nonetheless, intermediates improved text quality more than the rest in EFL.

With respect to results of text quality after revision, only one expert improved a text in L1 and another one made it worse in EFL whereas PSTs had four instances of variations in the quality of the texts in each group. Peculiarly, three texts improved and one worsened (in L1 in both groups). The group in which there were more fluctuations were the elementaries.

4.3.2.4. Operations of metacognitive regulation

Amount of transformations L1 vs. EFL

Globally, participants implemented more transformations in EFL than in L1. Table 34 shows the total amount of transformations performed by each group of participants in L1 and in EFL in the revision phase.

Table 34. Total amount of transformations per group and per language.

Group	Amount of Transformations	Amount of Transformations
	L1	EFL
Experts	27 (27%)	33 (21%)
Intermediate	48 (48%)	68 (44%)
Elementary	25 (25%)	55 (35%)
Total	100 (100%)	156 (100%)

EFL's transformations outnumbered L1's in line with the results of Stevenson et al. (2006) and Tyriakoglu et al. (2019). The amount is almost 50% higher as can be

withdrawn from table 31. With regards to the groups, experts carried out almost the same amount of transformations in both languages whereas intermediates participants made a bit more than 48% of transformations and elementaries doubled them. Such difference suggests that the amount of transformations of each group was consistent in L1 while it

was steady in EFL in the experts group but polarized in the elementary and intermediate groups as there was a participant in each group.

As depicted in Figure 29, expert writers' transformations were 6.8 on average in EFL. In this language, intermediates carried out more than twice the amount of transformations than experts did, 17, and outnumbered elementaries. In the intermediate group, two participants boosted the results as they implemented a large amount of modifications in their texts.

In L1, experts and elementaries undertook almost the same amount, on average, and intermediates were on top of the groups again. However, they carried out fewer transformations than they did in EFL.

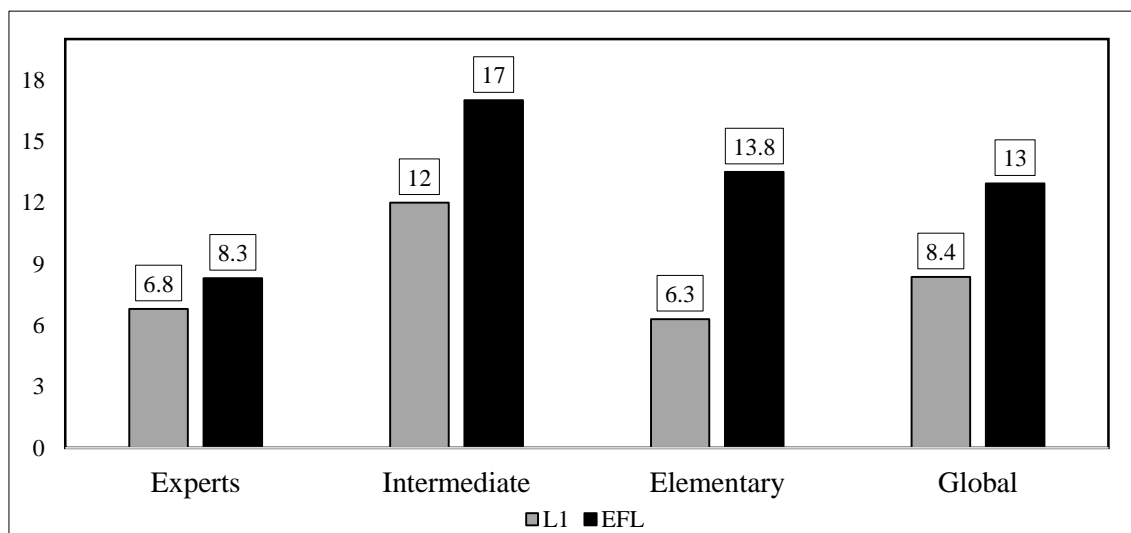


Figure 29. Mean transformations per groups and Languages.

With respect to the means within each group, experts' transformations amount are rather similar in L1 and EFL whereas in the elementary group the EFL transformations doubled the ones in L1. These means suggest that experts consider revision in a similar way in both languages and the writing skills and EFL proficiency made PSTs of both EFL proficiency levels more unconfident about their first versions, Sommers (1980) described experts' behaviour during online revision in a comparable

way. Elementaries needed more transformations in EFL and showed a similar amount of reliance on their first versions as experts did.

4.3.2.4.1. Anticipation

In this type of operation, the results of the transformations in L1 and EFL can be interpreted as the participants in the three groups faced revision in a different way, how the mental representation of the in-so-far text evolved during the delay and was closer to the intended text as they focused their transformations on optional changes as Table 35 shows.

Table 35. Anticipation. Optional vs. Conventional transformations in L1 and EFL.

		Conventional		Optional		Total
		Correct	Incorrect	Incorrect	Correct	
L1	Experts	14 (52%)	0 (0%)	0 (0%)	13 (48%)	27 (100%)
	Intermediate	11 (23%)	4 (8%)	3 (6%)	30 (63%)	48 (100%)
	Elementary	15 (60%)	0 (0%)	0 (0%)	10 (40%)	25 (100%)
EFL	Experts	9 (27%)	1 (3%)	2 (6%)	21 (64%)	33 (100%)
	Intermediate	28 (41%)	5 (7%)	4 (6%)	31 (46%)	68 (100%)
	Elementary	22 (41%)	7(11%)	11 (20%)	15 (28%)	55 (100%)

By and large, the results in both languages altogether show that the majority of transformations were optional, 52% in L1 and 54% in EFL. It reflects a rather dynamic representation of the texts in the deferred revision of the essays. However, some details need special attention so that some light can be shed.

First of all, the results in L1 displayed a majority of conventional transformations in experts (48%) and elementaries (40%), particularly the latter. It seems to indicate that they had in mind a more static representation of what the text should be like since they focused in more formal, low-order skills such as spelling, vocabulary or grammar.

On the other hand, intermediates seemed to plan revision and tried to improve text quality by introducing optional changes (66%) that did not entail repairing formal aspects of the first version of the text. They outperformed the rest of the groups in optional transformations and incorrect transformations either conventional (8%) or optional (6%). It must be noted that just one participant made all those conventional incorrect transformations whereas the optional incorrect transformations were carried out by three different people. The elementaries seemed to have in mind the changes

and adjusted their transformations so as to pay enough attention to make them improve the texts but just superficially.

In general terms, from these results in L1 could be interpreted that deferred revision is conceived in a different way according to the experience in writing. The experts' representations of their texts seem to be more static; they performed fewer transformations which were conventional and form-focused. According to these results, it could be argued that experts and elementaries shared a similar way of facing revision, however, as it could be expected, elementaries' transformations were rather conventional-centred. On the other hand, intermediates' percentages may suggest that they found revision as an opportunity to improve their texts in a deeper semantic level.

As far as the transformations in EFL are concerned, more incorrect transformations according to the language conventions took place, whether merely conventional or optional cases. It stands out the fact that the participants with the lowest EFL proficiency, elementaries, had the highest number of these cases: a total of 31% (including incorrect conventional and optional transformations), which almost doubled the other two groups.

The experts and intermediates presented fewer percentages which makes sense with respect to EFL level of the participants of each group, 13% for the intermediates and 9% for the experts. It must be noted, though, that both groups of PSTs carried out a similar amount of optional transformations. Elementaries and intermediates' means transformations were around 50%. Nonetheless, the elementaries flawed the language rules in the 20% of them which stands for an evidence of the difference in their metalinguistic awareness if L1 and EFL are compared.

Expert writers focused on optional transformations, which suggests that language proficiency and mastery of the skills allowed them to plan for a quality-enhancing revision (Chenoweth & Hayes, 2001; Stevenson et al., 2006; Tyriakioglu et al., 2019). The results in terms of text quality do not agree much on those terms as the quality of texts only improved in L1.

4.3.2.4.2. Monitoring

The monitoring of the writing process was measured in terms of the level of language affected and the object of transformation as reported by Allal (Op.cit.). In this case the expert writers focused mainly in semantic changes at the sentence level.

Experts or skilful writers (Sasaki, 2000) have been found to pay attention to textual aspects and the focus on macro structural changes if necessary (Silva, 1993). This is one of the findings that table 36 shows, experts did not need to face major changes in terms of global meaning to keep a high-quality text standards. Additionally, intermediates tended to focus on semantic, micro-structural, changes in L1 in different levels of language, they even undertook macrostructural changes at sentence level although they were around the 10% of them. The elementaries monitoring of the writing revision took them to carry out twice as much transformations in EFL than L1. In L1 they focused mainly in formal changes at simple levels: word and group of words. This group's results were similar in L1 and EFL: formal changes at word level.

Table 36. Monitoring in L1 in each group.

L1		Formal	Semantic	Macro
Experts	Word			
	Group			
	Sentence			
	Text			
Intermediate	Word			
	Group			
	Sentence			
	Text			
Elementary	Word			
	Group			
	Sentence			
	Text			

Code

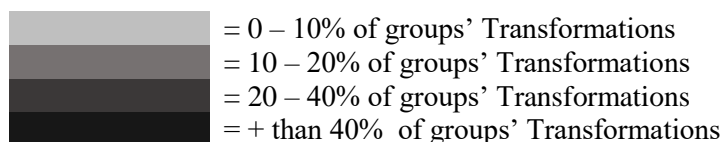
- = 0 – 10% of groups' Transformations
- = 10 – 20% of groups' Transformations
- = 20 – 40% of groups' Transformations
- = + than 40% of groups' Transformations

As for the monitoring of the writing process in EFL, the experts displayed a polarised behaviour, on the one hand, they focused mostly (55%) in formal aspects at word and group level, there were some meaning-preserving changes in the same levels and also around a 20% of macro structural transformations affecting at a sentence and text stage. Intermediates also focused on superficial changes (55%) at word level but they also went for semantic (around 20%) and macro-structural changes (around 10%) as observed on table 37.

Table 37. Monitoring in EFL in each group.

EFL		Formal	Semantic	Macro
Experts	Word			
	Group			
	Sentence			
	Text			
Intermediate	Word			
	Group			
	Sentence			
	Text			
Elementary	Word			
	Group			
	Sentence			
	Text			

Code



It shows that these writers may not possess the same expertise as the expert writers but they are on track. It altogether shows, though, a bigger concern on meaning-making objectives. Intermediates also scored a bit higher than the other groups in word or group-based changes, they did carry out some semantic and macrostructural changes, around 10% in both cases. It all can be interpreted as they are on their way in writing expertise and, as portrayed by researchers, writers with lower EFL proficiency undertook more superficial changes, even in situation of in writers are provided with more time to lace their attentional to pay attention to higher level revising as the cognitive load has been alleviated (Chanquoy, 2001; Chenoweth & Hayes, 2001; Kellogg et al., 2013; Silva, 1993).

Nonetheless, individual differences were found particularly in the intermediates and elementaries groups. These divergences among participants are

evident and revision styles differ from each other even in participants belonging to the same group as anticipated by Hayes et al. (1987).

Level of language affected

Almost 50% of transformations in L1 and, slightly more than that, in EFL were word-level. Such results suggest that transformations did not have an effect in the deeper structures of the text, so that meaning was not affected up to a deep extent in the revisions. In L1, transformations affected the sentence level which makes sense if we bear in mind that language proficiency resources are used in EFL and remain free in L1 and may well help to represent the task and set the contents more clearly. It stands out that almost 80% of the transformations are confined to words or a small group words in EFL and 65% in L1.

It seems worth mentioning that a constant 4% remains for text-level transformations. It seems lower to those reported from other studies (Allal, 2000; Chanquoy, 1997, 2001), however the conditions were different. This little influence in text transformation has also its impact in the almost inexistent improvement in the quality of text, particularly in aspects concerning the content and the organisation.

Level of language affected per groups

Elementary PSTs implemented 28 transformations a very similar amount compared to experts who made 27. Nonetheless, the distribution of them was significantly different in the level of language affected by the transformation, in other words, in the elementary and the intermediate students the transformations affect mostly to single words whereas in the experts the level is the sentence.

As it can be observed from Table 34, it stands out that expert writers pay more attention to sentences rather than single words as in elementaries. Indeed, 64% of transformations in this group belong to this category. For the intermediates, the vast majority of transformations is still focusing on words and 30% is on sentences. Sentence level reached the 53% in the experts group. Very little attention was paid to paragraphs. These results seem to indicate that expert writers are more conscious of a general affection in meaning further than the word, and stress the meaning into the sentence.

4.3.2.4.3. Adjustment

Substitution was, by far, the leading type of transformation in the revision of texts. Although Allal (2000) considered it a complex operation, it did not have an impact on the deep meaning of the text as we stated in the section right above.

The percentage of the different types offered a variation in how addition became more present in L1 and just half the presence that substitution had in EFL. It all seems to point out that deferred revision allowed participants to revise superficial aspects and add information which had an insignificant impact in the structure of the text. It could also be assumed that the language proficiency would allow participants to keep the working memory with a lower load.

Addition, in this case, would be an action that would enable writers to provide their texts with the information and they would consider necessary to bring the text so far closer to the intended text in a way of accomplishing their writing task fully.

Type of transformation per groups

With respect to the type of transformation, the distribution in all three groups in their L1 revision of their writing task appeared to be very steady: substitution and addition were the most popular as it can be withdrawn from table 38. In the elementaries and intermediates groups, substitution and addition were the most popular as visible in Table 35. The allocation was different, though. In the experts group the predominant type of transformation was the substitution that doubled the number of additions and deletions carried out. In the meantime, in the other two groups, the amount of additions was similar to substitutions in L1 and substitution was predominant in EFL in all three groups.

Table 38. Type of transformations per group in L1 and EFL.

		Simple		Complex		Total
		Addition	Deletion	Substitution	Rearrange	
L1	Experts	6 (22%)	6 (22%)	13 (48%)	2 (8%)	27(100%)
	Intermediate	22 (46%)	7 (14%)	19 (40%)	0 (0%)	48(100%)
	Elementary	12 (48%)	1 (4%)	11 (44%)	1 (4%)	25(100%)
EFL	Experts	11 (33%)	5 (15%)	14 (43%)	3 (9%)	33(100%)
	Intermediate	22 (32%)	13 (19%)	32 (47%)	1 (2%)	68(100%)
	Elementary	8 (15%)	7 (12%)	39 (71%)	1 (2%)	55(100%)

It must be pointed out the fact that the amount of rearrangements was rather low in all three groups. The predominance of substitution and addition reinforces the idea expressed by novice teenage writers of German as L3 (Knospe, 2017) in which revision these latter features abounded entailing low-order elements related to word choice, grammar and spelling (Faigley & Witte, 1981; Monahan, 1984; Tiryakioglu et al., 2019).

Substitution was predominant in both languages and outperformed addition in EFL. Allal (2000) assumed that substitution and rearrangement were more complex operations compared to addition and deletion. However, most of the substitutions could be connected with a meaning preserving change at the word level which would not entail such a cognitive burden for revision. Besides, addition instances in L1 outnumbered EFL's which appears to indicate that participants took advantage of the interim to bring in some contents. It also can be related to the fact that most optional changes were substitutions and additions, contrariwise to Allal's (2000) findings for draft revision of her primary students.

Moreover, the fact that addition was more frequent in L1 than in EFL could have to do with the fact that language proficiency enabled participants to elaborate on the first version of the text.

On the other hand, the comparison between the amount of simple and complex adjustments was different in L1 and EFL. The simple ones were predominant, particularly the addition of words or groups of words, as mentioned above. In contrast, in EFL, complex adjustments prevailed by far in all three groups and the elementaries employed much more than the other groups as portrayed in table 35.

To sum up, in Allal's words (2000, p. 151), our participants displayed "greater mobility in their deployment of these tools" in L1, unlike they did in EFL. However, experts showed a wider use of all those for actions and, by far, used rearrangement more frequently than the others. In fact, their percentage of actions is more constant in L1 and EFL than intermediates and elementaries who, in turn, carried out the most diverse use of types of transformations across languages.

4.3.2.4.4. Self-perception questionnaires and operations of metacognitive regulation

With regard to the adjustment, a few rearrangements were found in revisions, nevertheless, it was perceived as the most frequent type of transformation carried out by participants for all three groups in L1 and EFL. In line with the results previously portrayed, the participants' perceptions on what they had done during revision did not match with their actual transformations. Moreover, additions, deletions and substitutions were consistently perceived as frequent in very similar terms in both languages too.

Intermediates were the least enthusiastic to use any of them. In those terms, it can be asserted that participants had the perception they implemented complex transformations when they went mostly for substitutions and deletions, besides, additions were more present in L1 than they are in EFL.

With respect to the items related to the object of transformation (from formal to textual changes), included in the operation of monitoring, the following considerations should be taken into account: all three groups declared an interest in all the objects of transformation: superficial, micro-textual and macro-textual. Consistently, the participants' perceptions on the observation of those features remained quite stable both before and after the writing tasks. Their perception of the objects of transformation was quite high in all three groups and in both languages. However, just a few instances were found in deeper macro-textual or referential transformations. A few of them were carried out in the EFL texts even by elementaries however most of the instances were to be found in L1 and the group which undertook more transformations at a deeper level (microtextual-sentence) were the experts in L1.

Elementaries admitted a lower interest in the revision of the micro and macro structural aspects of the text before revision. As the effects showed in the previous study this conception was different in all three groups. In EFL their perception increased after the completion of the writing tasks. Likewise, they focused, as the rest of the participants, on formal transformations mainly. Some instances of a greater focus on macro-ideas was observed in experts. In other words, it can be asserted that participants alleged they focused on formal aspects such as grammar and spelling and micro and macro ideas very often, however, revision seemed to point out the opposite.

4.3.2.5. Discussion

With regards to the length of texts and the time spent in the completion of the revision tasks, it became patent that experts wrote longer texts and took less time to complete the writing task and their revision, as it could be expected. EFL revisions took longer particularly for intermediate PSTs. Elementaries, on the other hand, wrote the shortest texts and spent the shortest amount of time to revise the texts in both languages. As far as the operations of metacognitive regulation are concerned, anticipation, was considered in the first place. In this topic, results showed fewer transformations in L1 than in EFL and turned out to be mostly optional in L1 which seems to suggest a more dynamic representation of the task in the intermediates.

By contrast, the experts and elementaries showed a more static focused-on-form representation. Such distribution could also imply that both experts and elementaries relied on their abilities with different results in terms of text quality. It looks as if no matter the language, the task of revision entailed a constant representation of the text Intermediates undertook in both languages a similar amount of optional transformations among themselves..

The combination of the level of language affected and the object of the transformation, the operation of monitoring, resulted in slight differences between the groups and the languages. All groups shared the aim in the rather formal word-based transformations that led to a rather superficial revision in both languages only to be altered by experts and intermediates in L1, who displayed a deeper insight of the text in these terms and carried out more sentence-based transformations with impact in wider macro-structure textual ideas. Such impact was extremely reduced in EFL and just experts focused in more global transformations that involved a longer strings of words.

As for the adjustment, unpredictable results came up. On the one hand, more complex transformations, substitutions and rearrangements, were found in EFL and simpler ones, addition and deletion in L1. This was a constant in all three groups, nevertheless, it must be highlighted that substitution was the most common feature of all four one identified in our analysis and outnumbered the rest. It seems to suggest

that, on the one hand, participants were resourceful enough as to face the task and implement those transformations offering a new versions of the text.

The contrast of the self-perception questionnaires and the operations seems to suggest that participants had the impression they carried out transformations they had not. In fact in the adjustment and the object of transformations, the participants' perceptions and the actual actions flow in opposite directions.

All in all, this study revealed that experts wrote longer and higher quality texts in L1 and EFL and the time they spent in revision was shorter compared to PSTs. In addition, the experts in this study substituted sentences in L1 which made a minor impact on the level of the text affected: up to a macro-textual in L1. In EFL words with very superficial effects capitalised the revision. On the other hand, they showed to have a more static representation of the text in L1 and a more dynamic in EFL. They also seemed to be more self-satisfied with the first version of their texts.

Intermediates, on the other hand, faced revision in a similar way to the experts in the length of revision in EFL, much longer in L1, though. Intermediates' texts were even longer, however, the quality was lower. This group and the experts shared a focus on sentence and micro-structural changes in EFL and more sentence-level changes in L1, they did however, made use of addition much more than any other group. They implemented more optional changes in L1 and fewer in EFL which showed a more dynamic representations of the text compared to the other two groups. They also showed the most realistic self- perception on the actions of metacognitive regulation after the completion of the task as depicted in the previous study.

Elementaries, wrote the shortest texts and their revisions took less time than any of the other two groups. Their text quality was very similar to intermediates in L1 but, as expected, lower in EFL. They envisaged revision in a similar way in both languages. However, they carried out fewer transformations in L1 but stayed behind the intermediates in EFL. It must be noted that there were significant differences between participants, in any case, elementaries showed a more static representation of the texts, they implemented mostly additions in L1 and substitutions in EFL based usually on words that had a superficial impact on the texts.

4.3.2.6. Appendix

Table 39. Length of revisions (time) per participant and language.

Group	Participant	Revision L1 length	Revision EFL length
Experts	P1	00:05:10	00:09:50
	P2	00:09:40	00:14:00
	P3	00:13:30	00:18:45
	P4	00:08:45	00:25:10
	Mean	00:09:16	00:16:56
Intermediate	P1	00:06:55	00:05:20
	P2	00:24:50	00:20:20
	P3	00:05:00	00:04:40
	P4	00:19:40	00:37:10
	Mean	00:14:06	00:16:52
Elementary	P1	00:03:00	00:09:00
	P2	00:04:45	00:11:50
	P3	00:04:15	00:03:55
	P4	00:09:40	00:09:45
	Mean	00:05:25	00:08:38
Total		00:09:36	00:14:09

Table 40. Length of texts (words) per groups, phase and language.

Group	Words L1	Words LE	Words L1 REV	Words EFL REV
Mean Experts	411	398	412	413
Mean Intermediate	426	405	432	408
Mean Elementary	323	301	331	298
Total	387	368	392	373

Table 41. Length of texts (words) per participant, phase and language.

Group	Participant	Words L1 Version1	Words LE Version1	Words L1 REV	Words LE REV
Experts	P1	266	294	269	318
	P2	385	407	371	396
	P3	601	612	617	616
	P4	392	278	391	323
	Mean	411	398	412	413
Intermediate	P1	366	417	428	418
	P2	393	483	309	477
	P3	514	406	549	409
	P4	430	314	442	328
	Mean	426	405	432	408
Elementary	P1	300	372	300	370
	P2	305	398	320	372
	P3	332	220	327	217
	P4	356	212	376	232
	Mean	323	301	331	298
Total		387	368	392	373

Text quality

Table 42. Experts' holistic text quality per participant, phase and language.

Participant	L1 Version 1	L1 Revision	EFL Version 1	EFL Revision
P1	14	14	11	11
P2	13	13	13	12
P3	14	15	14	14
P4	14	15	11	11
Mean	13.8	14.3	12.3	12

Table 43. Intermediates' holistic text quality per participant, phase and language.

Participant	L1 Version 1	L1 Revision	EFL Version 1	EFL Revision
P1	13	13	10	10
P2	14	13	12	12
P3	12	14	10	11
P4	9	9	8	9
Mean	12	12.3	10	10.5

Table 44. Elementaries' holistic text quality per participant, phase and language.

Participant	L1 Version 1	L1 Revision	EFL Version 1	EFL Revision
P1	13	13	10	11
P2	12	9	9	9
P3	10	13	6	6
P4	11	13	9	9
Mean	11.5	12	8.5	8.8

Table 45. L1 - Version 1.

Group	Subject	Content	Organisat	Grammar	Vocab	Mechan	Total
Experts	P1	3	2	3	3	3	14
	P2	3	2	3	3	2	13
	P3	3	3	3	3	2	14
	P4	3	3	3	3	2	14
Intermed	P1	3	3	3	3	1	13
	P2	3	2	3	3	3	14
	P3	2	3	3	2	2	12
	P4	1	1	3	3	1	9
Element	P1	3	2	3	3	2	13
	P2	2	3	3	3	1	12
	P3	1	2	3	3	1	10
	P4	2	2	3	2	2	11

Table 46. L1 - Revision.

Group	Subject	Content	Organisat	Grammar	Vocab	Mechan	Total
Experts	P1	3	2	3	3	3	14
	P2	3	2	3	3	2	13
	P3	3	3	3	3	3	15
	P4	3	3	3	3	3	15
Intermed	P1	3	3	3	3	1	13
	P2	3	2	3	3	2	13
	P3	2	3	3	3	3	14
	P4	1	1	3	3	1	9
Element	P1	3	2	3	3	2	13
	P2	2	3	3	3	2	9
	P3	2	2	3	1	1	13
	P4	2	2	3	3	3	13

Table 47. EFL - Version 1.

Group	Subject	Content	Organis	Gramm	Vocab	Mechan	Total
Experts	P1	2	2	3	3	1	11
	P2	3	2	3	3	2	13
	P3	3	3	3	3	2	14
	P4	2	3	2	2	2	11
Intermediate	P1	2	2	2	3	1	10
	P2	3	2	3	3	1	12
	P3	1	2	3	2	2	10
	P4	1	3	1	2	1	8
Elementary	P1	3	3	2	1	1	10
	P2	1	3	2	1	2	9
	P3	1	2	1	1	1	6
	P4	2	3	1	2	1	9

Table 48. EFL - Revision.

Group	Subject	Content	Organisat	Grammar	Vocab	Mechan	Total
Experts	P1	2	2	3	3	1	11
	P2	2	2	3	3	2	12
	P3	3	3	3	3	2	14
	P4	2	3	2	2	2	11
Intermediate	P1	2	2	2	3	1	10
	P2	3	2	3	3	1	12
	P3	1	2	3	3	2	11
	P4	1	3	2	2	1	9
Elementary	P1	3	3	2	2	1	11
	P2	3	3	1	1	1	9
	P3	1	2	1	1	1	6
	P4	2	3	1	2	1	9

Table 49. Holistic Total.

Group	Participant	L1 Draft	L1 Revision	EFL Draft	EFL Revision
Experts	P1	14	14	11	11
	P2	13	13	13	12
	P3	14	15	14	14
	P4	14	15	11	11
Intermediate	P1	13	13	10	10
	P2	14	13	12	12
	P3	12	14	10	11
	P4	9	9	8	9
Elementary	P1	13	13	10	11
	P2	12	9	9	9
	P3	10	13	6	6
	P4	11	13	9	9

Table 50. Amount of transformations per participant and language.

Group	Participant	Transf. L1	Transf. EFL
Experts	P1	7	11
	P2	10	6
	P3	1	2
	P4	9	14
	Total L1	27	33
	Mean	6.8	8.3
Intermediate	P1	4	7
	P2	13	12
	P3	14	8
	P4	17	41
	Total Intermediate	48	68
	Mean	12	17
Elementary	P1	6	6
	P2	6	36
	P3	12	5
	P4	7	8
	Total Elementary	25	55
	Mean	7.8	13.8
Global Mean		8.8	13
Global Total		100	156

Table 51. Amount of transformations per group and language.

Group	Transformations L1	Transformations EFL
Experts	27	33
Intermediate	48	67
Elementary	25	54
Global	100	156

Table 52. Distribution of transformations per participant L1. Conventional vs. optional.

Groups	Particip	Conventional		Optional		Total
		Inco to Co	Inco to Inco	Co to Inco	Co to Co	
Experts	P1	1	0	0	6	7
	P2	10	0	0	0	10
	P3	0	0	0	1	1
	P4	3	0	0	6	9
	Total	14	0	0	13	27
Intermediate	P1	1	0	1	2	4
	P2	0	0	0	13	13
	P3	8	0	1	5	14
	P4	2	4	1	10	17
	Total	11	4	3	30	48
Elementary	P1	0	0	0	1	1
	P2	2	0	0	4	6
	P3	3	0	0	3	6
	P4	10	0	0	2	12
	Total	15	0	0	10	25

Table 53. Distribution of transformations per participant EFL. Conventional vs. optional.

Groups	Particip	Conventional		Optional		Total
		Inco to Co	Inco to Inco	Co to Inco	Co to Co	
Experts	P1	2	1	1	7	11
	P2	0	0	0	6	6
	P3	2	0	0	0	2
	P4	5	0	1	8	14
	Total	9	1	2	21	33
Intermediate	P1	6	0	0	1	7
	P2	5	0	0	7	12
	P3	5	1	1	1	8
	P4	12	4	3	22	41
	Total	28	5	4	31	68
Elementary	P1	5	0	1	0	6
	P2	12	6	9	9	36
	P3	3	0	0	2	5
	P4	3	0	1	4	8
	Total	22	6	11	15	55

Experts

Table 54. Transformations level of language and object L1. Experts.

		Formal	Semantic	Macro
Expert 1	Word	0	0	0
	Group	1	1	0
	Sentence	1	2	0
	Text	0	0	1
Expert 2	Word	2	1	0
	Group	0	0	0
	Sentence	0	7	0
	Text	0	0	0
Expert 3	Word	0	0	0
	Group	0	0	0
	Sentence	0	0	0
	Text	0	1	0
Expert 4	Word	3	1	0
	Group	1	0	0
	Sentence	1	3	0
	Text	0	0	0

Table 55. Transformations level of language and object EFL. Experts.

		Formal	Semantic	Macro
Expert 1	Word	5	0	0
	Group	3	0	0
	Sentence	1	0	1
	Text	0	0	1
Expert 2	Word	1	0	0
	Group	3	2	0
	Sentence	0	0	0
	Text	0	0	0
Expert 3	Word	2	0	0
	Group	0	0	0
	Sentence	0	0	0
	Text	0	0	0
Expert 4	Word	3	3	0
	Group	0	1	2
	Sentence	0	0	3
	Text	0	0	2

Intermediate

Table 56. Transformations level of language and object L1. Intermediate.

		Formal	Semantic	Macro
Intermediate 1	Word	0	0	0
	Group	0	1	1
	Sentence	1	0	0
	Text	0	0	1
Intermediate 2	Word	1	2	0
	Group	0	2	0
	Sentence	0	4	4
	Text	0	0	0
Intermediate 3	Word	10	2	0
	Group	0	1	0
	Sentence	0	0	1
	Text	0	0	0
Intermediate 4	Word	6	5	1
	Group	1	1	0
	Sentence	0	3	0
	Text	0	0	0

Table 57. Transformations level of language and object EFL. Intermediate.

		Formal	Semantic	Macro
Intermediate 1	Word	6	0	1
	Group	0	0	0
	Sentence	0	0	0
	Text	0	0	0
Intermediate 2	Word	7	1	0
	Group	0	1	0
	Sentence	0	3	0
	Text	0	0	0
Intermediate 3	Word	2	1	0
	Group	3	1	0
	Sentence	0	1	0
	Text	0	0	0
Intermediate 4	Word	17	2	0
	Group	6	3	0
	Sentence	0	6	5
	Text	0	0	2

Elementary

Table 58. Transformations level of language and object L1. Elementary.

		Formal	Semantic	Macro
Elementary 1	Word	0	0	0
	Group	0	0	0
	Sentence	0	1	0
	Text	0	0	0
Elementary 2	Word	2	1	0
	Group	1	1	0
	Sentence	0	0	1
	Text	0	0	0
Elementary 3	Word	1	0	2
	Group	1	1	0
	Sentence	0	0	0
	Text	0	0	1
Elementary 4	Word	10	0	0
	Group	1	0	0
	Sentence	0	1	0
	Text	0	0	0

Table 59. Transformations level of language and object EFL. Elementary.

		Formal	Semantic	Macro
Elementary 1	Word	1	2	0
	Group	0	0	0
	Sentence	0	0	0
	Text	1	2	0
Elementary 2	Word	14	1	0
	Group	11	2	1
	Sentence	0	1	6
	Text	0	0	0
Elementary 3	Word	3	0	0
	Group	1	0	0
	Sentence	0	0	0
	Text	0	0	1
Elementary 4	Word	7	0	0
	Group	0	0	0
	Sentence	0	0	1
	Text	0	0	0

Adjustment

Table 60. Type of transformations per participant in L1.

Groups	Particip	Addition	Deletion	Substitution	Rearrange	Total
Experts	P1	2	1	3	1	7
	P2	2	3	5	0	10
	P3	0	0	0	1	1
	P4	2	2	5	0	9
	Total	6	6	13	2	27
Intermediate	P1	3	0	1	0	4
	P2	1	5	7	0	13
	P3	12	0	2	0	14
	P4	6	2	9	0	17
	Total	22	7	19	0	48
Elementary	P1	1	0	0	0	1
	P2	2	0	4	0	6
	P3	2	1	2	1	6
	P4	7	0	5	0	12
	Total	12	1	11	1	25

Table 61. Type of transformations per participant in EFL.

Groups	Particip	Addition	Deletion	Substitution	Rearrange	Total
Experts	P1	7	1	3	0	11
	P2	0	3	2	1	6
	P3	1	1	0	0	2
	P4	3	0	9	2	14
	Total	11	5	14	3	33
Intermediate	P1	1	0	6	0	7
	P2	5	3	4	0	12
	P3	4	1	3	0	8
	P4	12	9	19	1	41
	Total	22	13	32	1	68
Elementary	P1	0	0	6	0	6
	P2	1	6	29	0	36
	P3	2	0	2	1	5
	P4	5	1	2	0	8
	Total	8	7	39	1	55

4.3.3. Study 4. Patterns of deferred revision in essays in EFL and L1. Case study Experts vs. Pre-service teachers

4.3.3.1. Group 1. Expert writers

As far as the expert writers is concerned, it must be stated that the participants in this group wrote longer texts and carried out fewer transformations than the rest of the participants. Moreover, their texts had more quality and, by and large, spent less time revising their texts. In other words, their first versions were better than their counterparts in this study.

In order to do so, they openly expressed that they had the type of task and reader of the task in mind and on that basis they completed their writing tasks and set the goals. In our instances, the styles were completely different and it was made evident by participants.

On the one hand, the time of revision was higher in EFL and so was the amount of transformations. Nonetheless, their routines were different. Participant 3 was the only one who read the text completely before he started the edition of the text: advanced planner (Cumming, 1989; Tiryakoglu et al., 2019). The rest of participants began reading and edited the text as they came across all those elements that were suitable of being changed (emergent planners). This strategy was depicted by Hayes (1996) as part of the process of revision, nonetheless, expert writers and elementaries engaged in the same task although they did in a different way. Experts connected the topics and the structure of their texts with their field of expertise and identified it as a phase of revision named backtracking by Manchón et al. (2009).

Deferred revision has been regarded as a means of improving the quality of texts in the expectation of producing a better quality text (Chanquoy, 2001; Maftoon et al., 2014; Van der Bergh & Rijlaarsdam, 2001). However, it may not necessarily help skilful writers improve the quality of their texts (Galbraith & Torrance, 2004).

It must be noted, though, that there were some aspects that could be improved according to our assessment and some others that were rated with the top mark. As a

matter of fact, experts struggled with spelling in their revision of EFL due to their limited language proficiency (Schoonen et al., 2003) despite the fact that they had stated in their questionnaires that this is an aspect they revised frequently.

In terms of the actions of metacognitive regulation analysed, it stands out the fact that, experts are the group that undertook more changes related to the semantic level in L1, mostly at word and sentence level. Notwithstanding, the transformations that they carried out in their revisions of EFL texts were more superficial and resided mostly at word level which was less expected. These actions were in line with intermediates' and elementaries' and suggest that similar processes take place in EFL no matter the level of expertise. More instances from different types of texts would be necessary but the explicit evidences in revisions and the participants' contribution make it evident.

It was also noticeable that experts placed a fair amount of attention on transformations related to cohesion, mostly substitutions, as participants expressed in the questionnaire. In terms of coherence, they added text to try to fulfil the task as participant one and two did. Moreover, they displayed an explicit concern on their revision about spelling and elements related to adequacy: the reader and the register; and the cohesive elements that articulate them: connectors, word choice, and length of sentences... In fact, participant 3 reported that everything that the EFL text had to sound good as reported by Silva (1993, p. 662) when in EFL revision there was less "revising by ear," that is, making changes on the basis of what "sounds good". Such aspect did take place in this study. Besides, participant 2 in this group made sure that he had improved the text and looked for accurate linguistic form when he used an expression he had heard in a song and judged it was transferable to his text.

Group 1. Participant 1.

Table 62. Group 1. Participant 1. Revision Data.

Experimental Condition 1	L1 - Spanish	EFL
Revision Time	00:05:10	00:09:50
Transformations	7	11
Version 1 Length	266w	294w
Revision Length	269w	318w

Table 63. Group 1. Participant 1. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	3	2	2	2
Text Organisation	2	2	3	2
Grammar	3	3	3	3
Vocabulary	3	3	3	3
Mechanics	3	1	1	1

The performance of this participant shows some mismatches from her self-perception in the questionnaire and her performance as it is showed below. On the one hand, her revision in L1 was shorter compared to the people in her group and the average of the participants in all three groups. Her transformations in both languages were mostly superficial although she added some meaningful text in terms of opinion, when she realised that the actual text deviated from the task she had been assigned (Cf. tables 62 and 63).

Her proficiency also allowed her to focus not only on formal or meaning-preserving changes but also in terms of text structure and register. The latter entails she had a well-defined type of reader for this task. It also stands out that despite the effort for accomplishing the task, she overlooked a conclusion for her essays in both languages.

Transformations L1

This participant read aloud from the beginning and did so as she read and edited the text. That was an action present during the whole revision in her L1 although she had selected the option of "seldom". In the case of reading to help for revision, this participant was unaware she did that.

Coherence

The question of meaning and its progression and organisation in the text is visible in this revision as the written text and the intended text collide at this point. It

pays a replacement of a sentence that affects the meaning of the paragraph as G1.P1.L1_7 depicts:

G1.P1.L1_7			
Begin	End	Text transformed	Transcription
00:02:40	00:03:10	2 nd paragraph Substitution el miedo simboliza New text Construimos vallas ante el miedo que nos suscita lo desconocido	He sustituido porque luego en la segunda frase he puesto “simboliza” otra vez y no era lo que quiero decir: la valla no simboliza el miedo, sino la barrera que ponemos ante el miedo.
'I have made this change because later on in the second sentence I have written “simboliza” (symbolizes) and that is not what I meant to say: the fence does not symbolize the fear, but the barrier we put up against fear.'			

In this case, the answers from the questionnaire and the actions she undertook while revising matched up. She asserted she paid attention to the form and the related content which was quite so according to the actions she carried out. Moreover, she stated she would go for substitutions or deletions of content rather than addition and she did as well. She actually rearranged a paragraph as she reckoned that the content needed that separation and that both parts of the text covered different topics as G1.P1.L1_9 shows:

G1.P1.L1_9			
Begin	End	Text transformed	Transcription
00:04:15	00:04:20	2 nd paragraph Rearrangement Separate into different paragraphs	Ahora voy a hacer un punto y aparte aquí que queda bien, se lee mejor y empezamos otro tema.
'Now I am going to separate these paragraphs. It suits the texts, it is easy to read and we start a new topic.'			

This is a fact that she was aware of as she confirmed it. Nonetheless, when she completed the questionnaire in connection with the type of text and the completion of the requirements of the type of text, she replied that she always or very often paid attention to it. In this case, in terms of the structure and organisation of contents, she missed a final part to summarise her opinion after all her reasoning.

Correction

All her choices in terms of formal transformations were optional according to Allal's taxonomy and did not alter the meaning or the organisation of the whole text.

She showed her awareness of metalinguistic and cohesion which seems to have guided the decisions in the changes:

G1.P1.L1_2			
Begin	End	Text transformed	Transcription
00:00:50	00:00:55	1 st paragraph Deletion Su necesidad de jugar	Voy a suprimir esto porque esta frase está mal construida.
'I am going to delete this sentence since it is not properly constructed.'			

Transformations EFL

A few discrepancies were noticed when the transformations she carried out in her text and the answers from the questionnaire she completed were matched.

Adequacy

In another transformation, she wondered about the register required for the type of writing task and text she was writing. She did that in terms of the appropriate vocabulary that would suit the sentence. As she had stated when she completed the questionnaire, she had in mind who she writes the text for and so the style and register are subject to revision as she said she did:

G1.P1.EFL_11			
Begin	End	Text transformed	Transcription
00:05:10	00:05:15	2 nd paragraph Deletion Not nice for the kid at all	Voy a suprimir esta frase porque es como muy coloquial ("not nice at all").
'I am going to delete that sentence because it is very colloquial ("not nice at all").'			

Coherence

Once she found the place where she knew she wanted to add some relevant content, she slowed it down and took her time to read and edit the text. She made profit of this first move so that, that name she was not able to remember when she wrote the text for the first time, could fit in that particular sentence and paragraph:

G1.P1.EFL_2			
Begin	End	Text transformed	Transcription
00:00:50	00:01:25	1 st paragraph Addition J.K. Rowling	Voy a añadir el nombre de la autora de las novelas de Harry Potter. Voy a ver dónde pongo el nombre para que la frase tenga sentido.
'I am going to add the name of the author of the Harry Potter's novels, I am going to find out where I should put the name so that the sentence makes sense.'			

This participant replied in the questionnaires that she did not added information frequently. Nonetheless, she added some words in different parts of the text, up to 5 additions. These additions made the text more comprehensible in her own words. Those were slight, optional transformations which means that, the mental representation of that intended text of this participant, varied just to try to make an impact on the quality of the text. In fact, at the end of the revision, she realised that her text had focused too much on details of the story and much less on stating her opinion of the topic she had been asked to produce. As a consequence, at the end of a 10-minute revision, in the last two minutes she added a paragraph that contained some grammar mistakes she overlooked. She had answered in the questionnaire she did take notice of grammar frequently, though.

More texts from this participant would be needed to double check if it was a question of this particular activity or a case of significant impairment of metalinguistic awareness. As she was proficient in English.

G1.P1.EFL_17			
Begin	End	Text transformed	Transcription
00:07:50	00:09:45	4th paragraph Addition Apparently when the lord of darkness tried to kill Harry, the baby was like a mirror and that was the cause of Voldemorts dead.	Voy a añadir algo porque esto me ha quedado así. El problema es que el texto no está centrado en el tema que se me ha dado. Yo estaba contando muchas cosas y me he dejado el meollo de la cuestión para el final.
'I am going to add something because that is how I have done it. The problem is that the text is not focused on the topic I have been given. I have been telling many things and I left the core of the topic to the end'			

Cohesion

Making sense in micro-structural propositions is once again a recurrent strategy for writers to justify their choices. In the same line, deleting a word can improve the text as it avoids unnecessary repetitions and provides clearer syntactic structures. This strategy is combined with the process of reading the passage aloud so that it enables to raise awareness about the structure and the meaning of the passage for the writer (Manchón et al., 2009; Murphy & Roca de Larios, 2010). Unlike PSTs, this participant did not translate the text so that she made sense of the text directly in the foreign

language. This segment revealed the ability of skilled writers in EFL to keep in mind the intended meaning of the text and the observation of the grammar and vocabulary available to meet the objectives. The “rhythm” or “flow” of a text had already been described as a concern for this type property by skilful writers (Silva, 1993). Another instance of such strategy is to be found in segment G1.P1.LE_2.

G1.P1.EFL_4			
Begin	End	Text transformed	Transcription
00:01:50	00:02:25	1 st paragraph Deletion Harry	Voy a suprimir el nombre de Harry porque realmente no hace falta (reads the text aloud in English). Sí, así tiene ritmo.
'I am going to delete “Harry” as it is not necessary there. Yes, the text flows now.'			

Reading

The first one of them takes place when this participant started reading silently and faced revision as she read the text: emergent planner. She had answered she did read aloud.

Group 1. Participant 2.

Table 64. Group 1. Participant 2. Revision Data.

Experimental Condition 2	L1 - Catalan	EFL
Revision Time	00:09:40	00:13:50
Transformations	10	6
Version 1 Length	385w	407w
Revision Length	371w	396w

Table 65. Group 1. Participant 2. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	3	2	3	2
Text Organisation	2	2	2	2
Grammar	3	3	3	3
Vocabulary	3	3	3	3
Mechanics	2	2	2	2

This participant's revision time in L1 was around the average of his group and almost exactly the same amount of time as the total average and the EFL was shorter than the average of his group and fairly in line with the total average as depicted in table 64.

The texts written by this participant and participant 4 have different features in common as they belong the same research field. That was not the only coincidence, in both L1 and EFL their texts were above average in length and their structure was similar as the paragraphs were scarce, long and there was no line between them. Besides, sentences were rather long, in fact, this is characteristic of the texts that they are conscious of as they mention it during revision. Ultimately, the points of view expressed in their essays are in connection with their field of expertise.

Participant 4 took more time in their first version and the online revision of that first version of the text as he confirmed during his revision. He searched "for more information may occur when the reviewer's diagnosis is not specific enough to suggest a clear action" (Hayes et al., 1987, p. 187).

Transformations L1

Adequacy

In this particular transformation, the writer substitution for organisation or small amount of transformations were carried and most of them have to do with local meaning in the sentence. He pointed out it was "a question of style". The majority of his changes were in relation with this aspect, those meaning-preserving changes that did not affect text structure and the organisation of the contents all along the text.

G1.P2.L1_9			
Begin	End	Text transformed	Transcription
00:05:55	00:06:10	1 st paragraph Substitution sí que es pot identificar en en els i les lectures de la nissaga una certa adulació New text Sí que es pot identificar una certa adulació en el públic lector	Canvie les frases en llenguatge genèric. P. Una qüestió estilística? R. Exactament
I am changing the sentences in a generic language Q. A question of style? A. Exactly			

Coherence

Such property was actually covered as the first version developed the topics in a sensible and logical way and he did not undertake any particular changes that mattered much on the general meaning of the text, he rather focused on how those reasons were linked as it is portrayed in the cohesion section below.

Cohesion

In this text on Harry Potter, the whole text is a paragraph, the writer did not identify it as an inconvenience and did not mention it at all during revision. He was aware of the way the transition between the parts of text should be like. Most of his revision focused on cutting down the length of sentences and what it brings about: the reiteration of some expressions or words. However, he did not seem to success in his effort to tackle this inconsistency. He substituted sentences reducing the amount of words or varying the word choice, in other case he simply deletes redundant terms as segment G1.P1.L1_9 shows.

G1.P2.L1_2			
Begin	End	Text transformed	Transcription
00:01:45	00:01:50	1 st paragraph Substitution La nissaga situa Harry New text Harry se situa	Més fàcil d'entendre, tal i com està escrit la nissaga, sona molt fort. Trobe que sobrava, de vegades repetir-se... trobe que més avall també ho dic
'It will be easier to understand as it is written (this way), "the saga" sounds too strong. I think it was not necessary, sometimes repeating (words) I believe I mention it later in the text.'			

Correction

It must be highlighted that he paid attention to formal aspects and no mistake was found in spelling or punctuation. He followed to the letter the grammar and spelling conventions which matches with the frequency of revision of that issue he had mentioned before in the questionnaire.

Reading

He did all his reading silently and started in both cases to transform the texts as he found parts likely to be modified (emergent planner). He did not read the text completely before he started as some other participants from all the groups. He did reread the text before he completed the whole revision at least the last paragraphs, though.

Transformations EFL

This text took longer than the revision of the L1 text which is in agreement with the rest of the participants in this group. The amount of transformations were fewer. As he answered when he filled out the questionnaire, he assured that he did not check his actual writing with a draft or a plan and his answers matched with what he really did. He did not pay attention to any plan although he knew what he meant to say with his essay.

Adequacy

Most of the efforts in his text in EFL are made towards a sense of alleviating the difficulty of the text for the reader. It is a feature of the skilful writers who are aware of the reader and the task (Tiryakoglou et al., 2019) and, according to their metacognitive knowledge they organise the organisation of the text and the sentences.

In this case, minor changes were introduced and, as he put it, he was trying to shorten sentences and make them more comprehensible. Nonetheless, he had marked the deletion and substitution as actions that he did not carry out frequently when revising the texts he had written in EFL and they were the predominant ones in his revision.

G1.P2.EFL_3			
Begin	End	Text transformed	Transcription
00:03:35	00:04:30	1 st paragraph Deletion Just as his colleague	Suprimisc això per a no afegir complicacions, quan escric de vegades, després et rellegies i dic què complicat. Tendisc a fer les coses més curtes en la segona escriptura o buscar maneres de dir les coses més senzilles.
'I delete these words to reduce the complexity, sometimes when I write, I read my text afterwards and I say how complicated. I tend to do things shorter in the second writing or I try to find ways to say things easier'			

Cohesion

This participant was aware that he had written a word not far from where he had repeated the same word and he changed it for a word that could preserve the meaning or modify it in a way that he believed more appropriate. He replaced it by a rather uncommon word that he had also written down in the first version in a previous part of the text. This writer overlooked the fact that it was repeated which could be due to the overload of the working memory (Kellogg, 1996) as he was not able to remember that he had already used and he alleged he borne that in mind during revision as portrayed in segment G1.P2.LE_5. A factor that may have an effect on verbal retrieval and the reiteration of another already-used word would have a diminished the cohesion of the text.

G1.P2.EFL_5			
Begin	End	Text transformed	Transcription
00:05:55	00:06:15	1 st paragraph Substitution Nice New text Joyful	He repetit "nice" abans. Aquesta l'he pensada varies vegades però he posat un sinònim el primer que se'm va ocórrer va ser eixe que no sé si està bé, espere que sí.
'I have repeated "nice" before. I thought about this one several times but I tried to introduce a synonym, the first one that came to my mind was that one. I am not sure if it is correct, I hope so'			

In the same line, the following transformation was an instance of the effect of the long-term memory and the recall of lexical retrieval that applies to this context as we can remember that are correct when uttered by an EFL native speaker and make sense with the reasoning.

G1.P2.EFL_2			
Begin	End	Text transformed	Transcription
00:02:30	00:02:55	2 nd paragraph Substitution Reality New text The real life	Aquesta es una substitució... per llocs comuns del llenguatge, estic pensant en la cançó de Queen. "Is this the real life?" A voltes eixos llocs comuns si en la cançó es diu això, a lo millor queda millor així eixa expressió
This is a substitution... for there are common places in the language, I am thinking about Queen's song. Is this the real life? Sometimes those common places... If that is what the song says, it may be better expressed like this.			

Coherence

In this section the only transformation that can be related with the meaning of the text and its construction is the first one. He realised that the order could imply an ambiguity and the meaning of the whole sentence could be affected.

G1.P2.EFL_1			
Begin	End	Text transformed	Transcription
00:01:30	00:02:10	1 st paragraph Deletion The direction of	Estem en el primer paràgraf, supose que serà per a reduir la complicació[...] Ho he llevat perquè no quedava massa clar. En el nou text he posat el subjecte més clar. Quan escric en anglès, mire a vore on està el subjecte.
'We are in the first paragraph, I guess (I am doing this) to reduce the complexity [...] I got rid of it as it was not very clear. In the new text I introduced a clearer subject. When I write in English, I check where subject is.'			

Group 1. Participant 3.

Table 66. Group 1. Participant 3. Revision Data.

Condition 3	L1 - Spanish	EFL
Revision Time	00:13:30	00:18:45
Transformations	1	2
Version 1 Length	601w	612w
Revision Length	617w	616w

Table 67. Group 1. Participant 3. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	3	3	3	3
Text Organisation	3	3	3	3
Grammar	3	3	3	3
Vocabulary	3	3	3	3
Mechanics	2	2	2	2

This participant made sure his texts had the highest quality from the very beginning. His texts were the longest which, in turn, means that the length of his first revisions was the longest in the expert writers group (See Table 66). His revisions were above the average in terms of time and in both languages introduced very little variation compared with the rest of participants in his group and the rest of the groups.

He read aloud the text and justified the choices he had made in both cases, besides he declared that he had checked when he wrote the first version that there would not be many transformation in the revision session. In terms of content, he admitted he faced the texts in relation with his field of expertise:

G1.P3.L1_2			
Begin	End	Text transformed	Transcription
00:01:35	00:02:00	Reads aloud 2 nd paragraph, justifies the content of that paragraph	Ací m'ha eixit la vena sociòloga
'My passion for sociology is here'			

G1.P3.EFL_6			
Begin	End	Text transformed	Transcription
00:03:44	00:04:00	Reads aloud 1 st paragraph, justifies the content of that paragraph	El que he fet ací és endur-me aquest tema de la tanca de metall al terreny de la sociologia[...]
'What I did here is to take the topic of the metal fence to sociology'			

Transformations L1

This participant, as some others, explained in Catalan while he preferred to write their L1 text is Spanish. As it was mentioned before, it is a common feature in contexts of languages in contact in which the majority language is not the language of the school or, in this cases, for academic reasons the majority language is the widely used in the context. In other words, what Ferguson (1959) called diglossia, that is to say, the discriminate use of languages depending on the communicative situation.

Adequacy

Furthermore, there is no trace of mention during the 10-minute revision although he was focusing on the structure of the sentence and the paragraph. He pointed that out in the questionnaire and referred to during his revision. He is as well conscious of the possible readers of the text and the declarative knowledge about writing, the effect of the length of sentence in the general comprehension of the text. There is only one change: he rearranged one sentence. He had referred to that idea before but had not mentioned it and rearranged it to clarify the example.

Similarly, he put forward his discernment of the style according to the task and the text type. He was also aware of the resources that would bring cohesion in rhetorical terms when they may cause the exact opposite effect in other writers, for example, repetition:

G1.P3.L1_5			
Begin	End	Text transformed	Transcription
00:04:10	00:04:15	Justifies style	Ací també era important repetir el “no todos..., no todos..., no todos...” està fet a propòsit i també el tema de la sonoritat
Here it was also important to repeat “no todos..., no todos..., no todos...” (not everyone..., not everyone..., not everyone...) it is there on purpose and is related to sonority.			

Perhaps, when he alluded to sonority, he means that this kind of structure, the repetition of three element of a kind is a very ancient rhetorical resource.

Cohesion

On the other hand, he revised both sentence and paragraph structure and he was conscious of the possible readers of the text and the declarative knowledge about writing, the effect of the length of sentence in the general comprehension of the text.

G1.P3.L1_6			
Begin	End	Text transformed	Transcription
00:04:30	00:04:50	Reads the 3 rd paragraph	Un problema que tinc és que a voltes les frases les faig massa llargues i es pot perdre el fil.
'The issue I have to face is the fact that, sometimes, I write too long sentences and readers may not keep track of the plot'			

After ten minutes of revision, this participant spent all his time reading and rereading aloud and he knew that during his first version he carried out a thorough revision online so he did not find formal mistakes. In this process, he reread and justified his style and the content so that his text met the requirements of the task.

G1.P3.L1_11			
Begin	End	Text transformed	Transcription
00:09:10	00:09:20	Justifies style and content	Jo el que he intentat ací és anar més enllà de la pel·lícula perquè crec que és el que es demanava en l'exercici. Crec que havia de fer una reflexió que anara més enllà de la pel·lícula.
'I tried to go beyond the film because I think that is what the activity required. I think I had to reflect on aspects that would go beyond the film.'			

Eventually, a final read unveiled the search for inconsistencies in the structure of the organisation of the text and the content. He pointed out a recurrent thought of what a good text should entail:

G1.P3.L1_12			
Begin	End	Text transformed	Transcription
00:09:20	00:09:30	Reads aloud quickly	[..] Ara estic revisant el text a nivell d'estructura més que detall, vaig entrant a temes en el contingut, cuidant la forma. La forma és part del contingut. El text ha de fluir!
'I am now revising the text with regards to the structure, I pay more attention to detail in terms of content, and I try to take care of the form. The form is part of the meaning. The text must flow!'			

Correction

During revision, this participant, as mentioned, justified all the selections in his text in terms of grammar, word choice and spelling and provided a key why his revision is so different from the others. On the one hand, he declared that he paid attention to all the previous formal aspects mentioned above. That is way in line with all the aspects regarding formal aspects in the questionnaire.

Moreover, he also stressed, as some other participants will do that “it must sound good”. As we mentioned the declarative writing knowledge as stated by Knospe (2018). He tried to keep the relationship between what he actually said and the meaning intended under control. The following statement described his awareness of the subject.

G1.P3.L1_3			
Begin	End	Text transformed	Transcription
00:02:05	00:03:30	Reads aloud 2nd paragraph, justifies the content of that paragraph. Explains his revision process.	Jo mentre estic llegint em fixe absolutament en tot, comes, puntuació, accents, expressions i ha de sonar bé
'While I am reading I pay absolute attention to everything, commas, punctuation, spelling, vocabulary and it must sound good.'			

Reading

This participant read aloud as in EFL and justified most of the choices he made, which is coherent with his answer in the questionnaire as he did that frequently during his revisions. Probably more often than he thought he would.

He commented on formal aspects and contents. The paragraphs were rather long, more than 10 lines each except for the last one that summarised some of the ideas he elucidated. With respect to this particular question, he responded in the questionnaire (item 4) that he had in mind the accurate length and allocation of paragraphs in the text. Paragraphs were rather long and no separation was visible.

This feature depicts the texts written by participants 2 and 3 who share the same area of expertise and training. These outlines in all texts, in their first and second versions and in both languages, might suggest that such displays could be a widespread arrangement of the text in this particular discipline.

Transformations EFL

He read the whole text aloud from the first paragraph. At the same time, he commented on the decisions he had done in terms of content, coherence of the text, its structure and, specially, word choice. In this sense, his revision strategy does not differ from other experts and the pre-service teachers.

In fact, he left a question mark next to the expression “concentration camp” so that he remembered he could look it up in a dictionary and check if that was accurate. A king of cue to signpost particular aspects to be revised in the deferred revision. A similar strategy was used by PSTs in both groups. They used either portions of text in their L1 or gaps to remember to fill them in during revision.

He did reflect on other questions that were connected to macrotextual content and its organisation openly as it is a feature that is present in his revision. Once he finished revising the first paragraph, he summed it up in a few words:

G1.P3.EFL_3			
Begin	End	Text transformed	Transcription
00:01:05	00:01:30	Justifies his decision to use a summary of the film as an introduction	El que faig és un xicotet resum, ací el tema és el simbolisme de la tanca a la pel·lícula.
‘What I am doing is a short summary. The topic here is the symbolism of the fence in the film’			

Correction

In this case the only spelling mistakes he detected was corrected by deleting an 'n' to a word which was a typo. However, this kind of action was not mentioned but is related to what he stated about formal aspects in the L1 text. Peculiarly, he overlooked some spelling mistakes we had made.

G1.P3.EFL_15			
Begin	End	Text transformed	Transcription
00:14:00	00:14:05	2 nd paragraph Addition n	NONE
NONE			

Reading

He read paragraph by paragraph and he seldom backtracked to the previous sentence. He did hesitate in some formal aspects and how some words matched the register they should use, e.g. “to fit with something”.

G1.P3.EFL_8			
Begin	End	Text transformed	Transcription
00:05:30	00:07:30	He wonders whether “to fit with something” is correct grammatically speaking	Pense que és correcta eixa expressió. Com no és la meua llengua no sé si algunes expressions resulten informals o no massa formals.
‘I think this expression is correct. As this is not my language I am not sure if some expressions are informal or not too formal.’			

He also showed his declarative writing knowledge when he reflected on the task requirements and the reader of the text. That is how he explained the structure of his text and the content.

He referred to his professional expertise as he had done with the text in L1. As far as the transformations are concerned, there was only one word since it was spelt wrongly. At the same time, he overlooked two mistakes at the end of the text (the spelling mistake was the same he had corrected in the previous paragraph). This could be a salient feature of expert writers, they may well miss a mistake because their WM is overloaded by paying attention to deeper text content and structure as it was the case here.

All in all, this participant spent a long time in writing and revising the texts. Very similar figures in both languages for their length and their quality. He used similar strategies to other participants in the other two groups during the revision: read aloud and signposted words to be replaced. On the other hand, he devoted most of the time during revision checking the meaning of the text, its structure and progression and the way it met the task requirements.

Group 1. Participant 4.

Table 68. Group 1. Participant 4. Revision Data.

Condition 4	L1 - Catalan	EFL
Revision Time	00:08:45	00:25:10
Transformations	9	14
Version 1 Length	392w	278w
Revision Length	391w	323w

Table 69. Group 1. Participant 4. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	3	3	2	2
Text Organisation	3	3	3	3
Grammar	3	3	2	2
Vocabulary	3	3	2	2
Mechanics	2	3	2	2

This participant's revisions were very different in length and in structure. EFL proficiency turned out to be an issue as he was writing the text in English. He also made it explicit during his revision as it is presented later on. It seems quite so, if attention is paid to the rating in the descriptors concerning grammar and vocabulary (see table 69). The difference of length between the two revisions suggests that this participant struggled in the revision of the EFL text.

Transformations L1

His revision was less than 10 minutes long and was mostly silent, which differed from what he answered in the questionnaire where he stated that he did not engage in silent reading that often.

Cohesion and coherence

As he declared when he filled out the questionnaire, he took notice of the way the ideas were put into words and the way they were arranged in the text. Actually, the rest of his transformation focused on that kind of aspects although they only have influence on the style as there are only two corrections. The following intervention took place in different parts of the text and all along the revision.

G1.P4.L1_4			
Begin	End	Text transformed	Transcription
00:03:55	00:04:15	3 rd paragraph Substitution punctuation Full stop New text coma	Ací fa falta puntuació... és una oració molt llarga: de tres línies, i, a més, hi ha subordinades per ahí. S'ha de segmentar de manera que siga més intel·ligible.
'Some punctuation is needed here... this is a very long sentence: three lines, besides, there are subordinate clauses around. It needs to be split so that it is easier to understand.'			

In a second reading of the text, he got back to the second paragraph and deleted a discourse marker in the form of a subordinate clause. Such change did not modify the meaning of the paragraph. As he continued reading, he perceived that a similar subordinate clause could be removed and it had no impact in the meaning.

He did make evident, anyway, he needed to reduce the length of some sentences as this kind of action would improve the comprehension of the text. Even the fact that he could identify the type of clause and its influence on the text it is a question that belongs to this expert's ability:

G1.P4.L1_10			
Begin	End	Text transformed	Transcription
00:06:00	00:06:10	2 nd paragraph Deletion com avançàvem	El problema és que havia inclòs moltes subordinades i això dificulta molt la llegibilitat i l'enteniment.
'The problem is that I had used many subordinate clauses and that makes the reading and understanding (of the text) difficult.'			

In the group of participants mentioned beforehand, they referred to such issue as: "the text must flow" or "it needs to sound good". Now, he named it as he has the knowledge to identify the effect of these syntactic structures on the comprehension of the text and the way it can affect the reader of the text.

G1.P4.L1_11			
Begin	End	Text transformed	Transcription
00:07:10	00:07:20	2 nd paragraph Deletion (A whole sentence is deleted)	Ací novament he eliminat una altra subordinada
'I have deleted a subordinate clause here again'			

Correction

Even though he is an expert in the language, he had overlooked subtle formal aspects in the language in his first version. A typo mistake he had ignored and he noticed then, or on formal mistakes easily unnoticed since the spelling of this words differs from their colloquial uses.

G1.P4.L1_8			
Begin	End	Text transformed	Transcription
00:05:20	00:05:45	4 th paragraph Substitution renegueu New text reconegueu	Ací n'hi ha un error de paraula no sé si és per "picatge" o per què
"There is a mistake here, I do not know whether it is a typo."			

Reading

For some reason, silent reading provided this participant with the concentration he required to complete the revision. He read the whole text completely, and then, he started his revision of this text. This is the most evident instance of advance planner in the experts' group.

It took him almost three minutes and he declared that he was going to read to activate the working memory (Roussey & Piolat, 2005) and check what he could remember from what he had written:

G1.P4.L1_1			
Begin	End	Text transformed	Transcription
00:00:20	00:02:55	NONE	Vaig a llegir-lo tot per a refrescar o recordar, perquè clar encara ho tinc, en funció d'això, abordaré, si més no, per parts, val, per a determinar si estic segur que allò que havia d'anar a la introducció ha d'anar o no.
'I am going to read it all (the text) to refresh or recall, because it is still in my mind. According to that (what I am to read), I will tackle (the text) at least section by section. So that I will decide whether what should be part of the introduction is actually there.'			

Transformations EFL

The revision process carried out by this participant was curious and it may suggest up to which extent the level of English exerts an influence over part of the final quality of the text and the word choice.

Adequacy

However, the revision meant a complex course. The adequacy of the text in terms of word choice according to the situation of communication was his focus as well as the development of the content along the text. This participant took his time to read and reread and, above all, made decisions about the accuracy in the word choice and the progression of the main ideas which is an evidence of skilled writing (Schoonen et al., 2009).

That is the most likely explanation to the fact that this revision took him double the time of his L1's. He showed how aware he was of his knowledge of himself as a writer and how his in-so-far text met the appropriate register and fulfilled the goal he set for the task.

G1.P4.EFL_18			
Begin	End	Text transformed	Transcription
00:23:00	00:24:30	NONE	He arribat al límit d'on jo puc corregir perquè no sabia com [...] sé que hi ha coses que grinyolen.
'I reached my top, up to the point I can correct because I would not know how to [...] I know there are things that do not sound good'			

Coherence

The progression of the ideas is one of the foci of this revision as we mentioned above. In line with the answers in the questionnaire, he declared that he paid attention to such feature frequently and he did. He was able to evaluate the connection between ideas and keep track of the needs of the text to accomplish the objectives of the task, the same way, he rewrote a paragraph and rearranged some ideas to make complete sense when they were all put together.

G1.P4.EFL_15			
Begin	End	Text transformed	Transcription
00:18:10	00:19:20	4 th paragraph Substitution They must be (Hesitates to find the accurate expression) New text	Ostras! Com ho dic això? Claro, they are looking for [...] (silence for about 1 minute) En llegir el discurs, he replantejat el contingut. He començat per aquelles coses o carències, la part més argumental que té a vore amb els valors i l'argument

		Films must be like our real worlds	i, aquesta segon part que té a vore amb la part més operativa, més logística. He afegit tres línies parlant de per què no podria funcionar eixa pel·lícula.
‘Geez! How can I say that? Sure, "they are looking for" [...] (silence for about 1 minute) As I read the text, I have reconsidered the content. I have started off with all those things the section referred to the reasoning and the values, all what it lacked of. In this second section it has got to do with’			

Cohesion

Another aspect we wanted to get to know how writers keep under control is the cohesion of the text. This participant displayed his awareness of this feature of discourse. However, the markers replaced did not fit the language conventions as far as the spelling or the accuracy are concerned:

G1.P4.EFL_10			
Begin	End	Text transformed	Transcription
00:11:40	00:13:25	2 nd paragraph Substitution From the other side New text Although (Misspelt in the text!)	Ja tinc clar les parts del text, cada paràgraf a què esta dedicat i em faria canviar, per un altre cantó, a un altre connector. Ahí he posat "Per una altra banda" i crec... que seria més apropiat posar "although", que siga concessiu. Estic parlant que no és res nou, no ha inventat res, està basat en contes i mites tradicionals: la figura de l'heroi. Com que ací estic afegint connotacions negatives, convindria ficar un connector: encara que, sí que hi ha coses que hem de destacar...
I am sure about the parts of the text, what each paragraph is devoted to and it would make me change, on the other hand, another linking word. I have written (says is Catalan what he meant to say in English "Per una altra banda" and I think it would be more appropriate to write "although", a concessive discourse marker. The text means to say tthat this story is now new at all and it is based on traditional tales and myths: the hero. The thing here is that it is bringing in negative connotations, it would be better to start with a connector "encara que sí que hi ha coses que hem de destacar" (Translating from Catalan that is in turn a translation from the participant's version in English. The connector is 'encara que' which means although in English).			

Correction

In this respect the linguistic competence, a limited knowledge of grammar compared to his L1, caused that most of the substitutions had to do with formal aspects in the first as he read the text, at least, a couple of times. His first transformations had to do with grammar aspects that in turn had to do with cohesion. The use of references in English as he guessed which ones they should be:

G1.P4.EFL_2			
Begin	End	Text transformed	Transcription
00:03:20	00:03:30	1 st paragraph Substitution its New text the	La construcció anava forçada, eixe atribut no necessitava eixe possessiu, pense que anglès... ben bé ahí no hauria d'anar perquè focalitze en el subjecte i no en l'argument.
'The sentence did not fit very well. That attribute did not need the possessive (pronoun), I think that in English it should not be there because I am focusing on the subject rather than the actual reason.'			

Reading

As he did with his revision in L1, he went through the whole text first, he read it silently as he had stated when he completed the questionnaire. After almost three and a half minutes, he began the edition of the text.

The sequence of this revision is different from others: he read the whole text first, started revision and edited the text as he read it again. In this first revision the formal aspects: grammar and word in particular situations seemed to be prioritised. He substituted pronouns, articles and demonstratives. In the second part, he reread again and transformations took place as the text was intended to make sense, that is why aspects modified move from the forth to the third paragraph and, then, to the second and back down to the fifth.

Significantly enough, in this revision, there was a segment in which instances of metacognitive control take place. This expert tries to shape the content to the text structure: adjustment features in Allal & Saada-Robert (1992) cited in Allal's (2000) happened to be in constant change in the mind of the writer as he deletes, adds, deletes part of the addition, replaces and, finally, adds a sentence and rearranges a another one that was in a different paragraph previously, the process and the result is described in segment G1.P4.LE_15.

G1.P4.EFL_15			
Begin	End	Text transformed	Transcription
00:18:10	00:19:20	4 th paragraph Substitution They must be (Hesitates to find the accurate expression)	Ostras! Com ho dic això? Claro, they are looking for [...] (silence for about 1 minute) En llegir el discurs, he replantejat el contingut. He començat per aquelles

		New text Films must be like our real worlds	coses o carències, la part més argumental que té a vore amb els valors i l'argument i, aquesta segon part que té a vore amb la part més operativa, més logística. He afegit tres línies parlant de per què no podria funcionar eixa pel·lícula.
Oh my God! How can I say that? Of course 'they are looking for' As I have read the text I have rethought the content. I have stated by those things or deficiencies, the most argumentative part that is related to the values and the plot and this second part that is more related to the operative and logistics. I have added three lines that deal with the reasons why that film would not be successful.			

Use of translation into L1

As he had stated in the questionnaire, he translated into his L1 when he revised and edited the text. It is a common and popular strategy, when writing in a foreign language or L2. The use of L1 in writing, it has been described to be used for different targets and this participant provides instances of some of them (Sasaki & Hirose, 2000; Manchón et al., 2008). Translation, the use of L1, is also a cognitive demanding process that monitors the process that writing entails and proficiency-related differences in its employment. Translation also brings about the accuracy in terms of grammar and word choice which are an essential part of revision in EFL. He uses translation as he reflects upon the refined meaning of a particular word:

G1.P4.EFL_4			
Begin	End	Text transformed	Transcription
00:06:20	00:06:55	2 nd paragraph Substitution seemed New text checked	Ací canviaré un verb, perquè en primera instància: "la nostra conducta necessita ser aprovada i comprovada pel col·lectiu, la gent que ens envolta". Jo el que volia dir, ací el que havia posat es una paraula que volia dir comprovada i aprovada... Es per una qüestió de semàntica.
I will change a verb here, because in the first place, "our behaviour need to be approved and verified by the group, the people around us". What I meant to say is, what I had written there is a word that means "verified and approved"... It is question of semantics			

To conclude, this participant exhibited the way to identify actions that control revision and they were not only connected to the word choice or grammar but also the connection of ideas and the text structure. As it became apparent, the participant was aware of the room for improvement that his texts needed and recognised he was not able to make it better since it EFL proficiency would not allow him to either find the inconsistencies or refine the expression to a more formal register.

4.3.3.2. Group 2. Intermediate EFL proficiency pre-service teachers

The length of the revisions and the amount of transformations are higher compared to the other two groups. It seems reasonable to assume that the more time spent in revision the more likely the possibility of transforming any of the parts of the text. Despite that, the distribution of those aspects is irregular: two people carried out revisions no longer than six minutes and the other two people's revisions were more than twenty minutes long. This pattern is the most inconsistent within a group in our study.

Different previous studies had shown diverse patterns of behaviour and deployment of strategies across writers (De Angelis & Jessner, 2012; Rinnert & Kobayashi, 2009; Schoonen et al., 2009; Tillema, 2012, Tiryakoglu et al., 2019; Van Weijen et al., 2009). This group of PSTs showed the more internal inconsistency as a group of the three involved in this study.

On the one hand, they showed a mixtures of advanced and emergent planners when facing the delayed revision. In fact, the longer revisions portrayed a constant re-plan. Very few instances of advanced planning. These segments showed how the representation of the task was changing, how they effectively and explicitly had their potential readers in mind and how they tackled the micro and macro meaning issues. In consonance with these traits, their perceptions on the deployment of the strategies and their focus on them during the deferred revision was more accurate than their counterparts from the other two groups as the triangulation with the questionnaires showed.

It must be noted that some of them displayed a high sense of awareness of the need of attention to aspects regarded as high-level activities such as coherence and cohesion (Manchón & Roca de Larios, 2011; Tiryakoglu et al., 2019). In other instances, particularly in EFL the efforts were placed in the amendment of lower-level features for which all of them showed their interest. However, such awareness did not mean a full application and an improvement in the text quality. Even though, participants mastered the L1 they used for their texts and held intermediate certificates in EFL, deficiencies in text organisation and inappropriate content as well as spelling mistakes were overlooked in both languages. In other words, in this group there can be found instances of metacognitive regulation on high-order activities, particularly in

L1, although the issues on which attention focused may seem not to be tackled properly, particularly in EFL.

In this group, some participants in EFL used a particular cue which allowed them to identify those aspects to be revised and edited as a strategy. In this line, the cues are in shape of gaps to be filled in or words in L1 to be looked up (Stevenson et al., 2006). Such contrivance was not observed in the experts group but was present in all EFL texts in the elementary level. In this sense, the L1 was used as a resource during revision, the first instances of parts of the texts and words can be traced in this group. This is a strategy widely implemented by participants in higher levels (Murphy & Roca de Larios, 2010; Rinnert & Kobayashi, 2009) and it can be extended to lower levels in our study. Moreover, during the revision of the EFL texts, translation of the elements in the text was present and its influence in the writing process and the impact on text quality pays to be mentioned as it increased the attention to elements to be focused on.

Group 2. Participant 1

Table 70. Group 2. Participant 1. Experimental Condition 1. Revision Data.

	L1 - Spanish	EFL
Revision Time	00:06:50	00:05:20
Transformations	4	7
Version 1 Length	366 w	417 w
Revision Length	428 w	418 w

Table 71. Group 2. Participant 1. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version 1 L1	Revision L1	Version 1 EFL	Revision EFL
Content	3	3	2	2
Text Organisation	3	3	2	2
Grammar	3	3	2	2
Vocabulary	3	3	3	3
Mechanics	1	1	1	1

This participant undertook a rather little amount of many transformations in her texts as portrayed in Table 70. Very few compared to other participants in her group and, besides, most of them were superficial changes. She overlooked some other mistakes in terms of grammar and spelling in EFL and the text needed more reasons to justify her opinion and not basically the summary of the films. Both, first version and revision, lacked of a final paragraph in which a summary of the standpoint was stated. In her L1 text she was more focused on the topic of the essay.

Transformations L1

This participant did not alter the text much in revision. She actually added some text with information she had checked during the interim time.

G2.P1.L1_2			
Begin	End	Text transformed	Transcription
00:01:05	00:01:10	1 st paragraph Addition es decir el Gobierno o los altos mandos	No estava clara, crec que no queda clar que les persones del poder siguen les del govern o l'administració
'It was not very clear, I do not think it is very clear that those people in power are those people in the government or authorities.'			

Coherence

Deferred revision offered writers the possibility of transforming the text in a way that they can complete their texts with information that they either did not remember or did not know when they wrote their first versions. The awareness of the

possibility of enlarging the text and the precise meaning of it was present and the possibility of taking advantage of such chance was stated. In fact, this pre-service teacher did so and added some extra information as she judged it as necessary.

G2.P1.L1_5			
Begin	End	Text transformed	Transcription
00:02:30	00:04:30	5 th paragraph A new paragraph Addition New text “De hecho, algunos de los grupos que actualmente luchan por los derechos humanos y por la recuperación de la memoria histórica y que además, están ayudando a las familias de las personas que estuvieron en estos campos a recuperar sus cuerpos, están utilizando la simbología de esta película como lema o símbolo identificatorio”	Vaig a afegir una informació que he trobat sobre alguns grups de reivindicació contra els camps de concentració que han utilitzat la simbologia de la pel·lícula per al seu lema, el que passa és que no sé quins grups són
'I am going to add some information I found about some groups that are claiming against concentration camps and that have used what the film symbolises for their slogan. The thing is that I do not know the names of the groups.'			

Unfortunately, she did not take the time to revise some formal aspects of this new paragraph in which there were two blatant spelling mistakes.

Cohesion

At the same time, the paragraph she added and depicted above had some affected the cohesive elements of the text. The segment G2.P1.L1_7 is a clear sample:

G2.P1.L1_7			
Begin	End	Text transformed	Transcription
00:05:50	00:06:00	6th paragraph – at the beginning Addition Por otro lado	Vaig a introduir un connector, perquè com he afegit un paràgraf nou per a que el text tinga sentit
'I am going to add a connector because I have added a new paragraph and that way it makes more sense.'			

During her revision, this participant focused on this property of texts more than on any other. Even though, the quality of her text did not improve much after the revision process and she only read the text once. She made sure that the new content she add had the appropriate relationship with the already written text and joined the

paragraph she added with next paragraph. She was very aware of that as she had stated so in the questionnaire.

She was also aware of the fact that word variation improve text cohesion. In the next instance, she substituted the same expression as she had repeated "campos de concentración" (concentration camps) three times in the five previous lines. So, she paid attention to that but just locally as G2.P1.L1_3 portrays:

G2.P1.L1 3			
Begin	End	Text transformed	Transcription
00:01:35	00:01:50	1 st paragraph Substitution Uno de los que dirige el campo de concentración New text Uno de los dirigentes del campo	Ací vaig a canviar "campos de concentración" per a no repetir en la mateixa frase.
'I am going to change "campos de concentración" (concentration camps) not to repeat it in the same sentence.'			

She just referred to it as the "camp" (camp) but did not actually came up with a synonym or any paraphrasing or reformulating strategy (Stevenson et al., 2006). Maybe the key lies in what she admits when she was modifying this part of the text: "I am going to change it not to repeat it in the same sentence". The sentence seems to be the limit. Such unconscious assertion could be related with the cognitive demand of the whole activity and the subsequent overload of the working memory (Alamargot et al., 2005).

Reading

She read silently in agreement with what she had answered in the questionnaire and as soon as she found a part of the text that is was worth changing in her opinion, she did. She behaved as an emergent planner as she wrote what came to her mind (emergent planners (Cumming, 1989 as cited in Roca de Larios et al., 2008).

Transformations EFL

As far as the text in EFL is concerned, the transformations were very scarce and focused mainly on formal aspects: some grammar changes, spelling and word choice. She also confirmed what she had stated when completing the questionnaire:

she did not implement transformations often and she took notice of spelling and punctuation often.

Correction

With respect to grammar, the revision could have been more exhaustive as she overlooked some mistakes in terms of modal verbs forms, 3rd person plural present simple or simple past endings. She edited some verb and subject agreement errors though. She knows she made that mistake. Moreover, she showed her awareness of grammar inadequacies, segment G2.P1.LE_3 is an example:

G2.P1.EFL_3			
Begin	End	Text transformed	Transcription
00:01:40	00:01:45	1 st paragraph Substitution have New text Has	Vaig a canviar-ho perquè hi ha un error gramatical
'I am going to change that because there is a grammar mistake.'			

As far as the attention to spelling is concerned, she proved to be conscious of the need to correct some mistakes. She did amend very few, though, if we bear in mind that she asserted in the questionnaire that she thought she did so frequently. However, left more than ten spelling mistakes behind. In fact, she overlooked some evident mistakes in terms of spelling.

G2.P1.EFL_2			
Begin	End	Text transformed	Transcription
00:00:45	00:00:50	1 st paragraph Spelling mistake Addition Appeard New text appeared	Vaig a canviar esta paraula perquè n'hi ha un error
'I am going to change this word because there is a mistake.'			

Reading

It must be noted in the revision of both texts was the same: read the text, carried out surface changes, particularly in English, and made no reference about the content of the text. She carried out the revision all together and never backtracked in a very similar way to her L1 revision.

Group 2. Participant 2.

Table 72. Group 2. Participant 2. Experimental Condition 2. Revision Data.

	L1 - Spanish	EFL
Revision Time	00:24:50	00:20:20
Transformations	13	12
Version 1 Length	393w	483w
Revision Length	309 w	477w

Table 73. Group 2. Participant 2. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	3	3	3	3
Text Organisation	2	2	2	2
Grammar	3	3	3	3
Vocabulary	3	3	3	3
Mechanics	3	2	1	1

This is the only participant of this study whose L1 revision was significantly longer than his EFL's compared to the rest of the participants in this group and the rest of participants as it can be observed from table 72. The amount of transformations on average was not proportionally high according to the time she spent for revision in both languages.

Transformations L1

The strategies put forward by this participant are in line with those of experts and as he cared about the coherence mostly: the amount of content related to the facts and that stands out of the quality of his text. Moreover, he carried out the task and explicitly mentioned he bore in mind what potential readers could understand from the text. Such features are alleged to expert or skilful writers (Chenoweth & Hayes, 2001; Schoonen et al., 2009; Van Steendam et al., 2010). The structure is not completely accurate for the task, the paragraphs relate to just one topic which is consistent with what he answered in the questionnaire.

Coherence

In this L1 revision, the task was fulfilled in terms of content, and the transcription reveals an interest of doing so. As we pointed out before, the use of

deletions and substitutions kept up the progression of contents and the opinion on the suggested topic remained clear regardless of those changes. This writer was able to bear in mind the whole text and found inconsistencies or redundancies as segment G2.P2.L1_14 depicts:

G2.P2.L1_14			
Begin	End	Text transformed	Transcription
00:15:20	00:16:20	4 th paragraph Deletion cuando alguien tiene miedo de pronunciar el nombre de Voldemort o los dementores, piensa en Harry Potter y se le arregla el problema, una especie de religión.	Al revisar el párrafo desde arriba y comenzar a leerlo desde arriba cuando llegas al final, todo lo que se queda al final pierde el sentido si cambias lo de arriba" Creo que es una información que se podría obviar, no clarifica nada ni añade nada
'Since I have started my revision from the top and that is where I started to read it, when you reach the end, everything else down the bottom makes no sense if you changed the part on the top. I think it is a piece of information that can be omitted, it does not explain anything it does not bring in anything new'.			

In fact, the amount of instances of segments related to the coherence in terms of appropriate content and progression of ideas and the impact on the text was present in the whole revision and it can be stated that it is in line with the self-perception of the frequency with this participant's answer.

Cohesion

As he stated in the questionnaire, he frequently took into account the potential readers of the text, and the content they were going to read. In order to avoid ambiguity, he removed a word that could lead to misinterpretation of the point he was making in the text.

G2.P2.L1_10			
Begin	End	Text transformed	Transcription
00:10:50	00:11:10	3 rd paragraph Deletion supuestamente	Si alguien lo leyese no dejarle una remota posibilidad que no fuese así Dejar claro que es así [...] que no fuese ambiguo que fuese claro
'If somebody was to read it, it would give no chance that it was that way. (My objective is) making clear it is like that, no place for ambiguity or obscurity'.			

Another instance of such purpose by means of a substitution, this time he replaced the sentence and changes the term to prevent the text from having the same words in the same paragraph or very close. It is quite a recurrent strategy related to word choice that does not affect the text, it is rather local.

G2.P2.L1_13			
Begin	End	Text transformed	Transcription
00:13:30	00:15:10	4 th paragraph Substitution medicamento que sirve para curar el mundo New text que debe salvar al planeta	Como he puesto arriba "salvar el mundo" no me gustaría repetir el término, salvar a la humanidad por ejemplo, [...] Salvar el planeta un término que incluye a todo"
'As I have written "salvar el mundo" (save the world) in the previous paragraph, I would not like to repeat the word, save the human kind, for example, [...] "salvar el planeta" (save the planet) is a term that includes everything'			

Even when he is reading the text for a second time, he is aware of the text and, the means by which, the paragraphs and units of sense are linked. In the last minutes of his time, intended to make more logical the transition of ideas. That is why he separated a sentence and used replaced a coma by a full stop. He was aware of the effect and he mentioned it explicitly.

G2.P2.L1_20			
Begin	End	Text transformed	Transcription
00:20:30	00:20:40	2 nd paragraph Substitution coma New text Full stop	Le daría una mayor pausa, lo que viene a continuación no tiene una relación tan directa como lo anterior.
'It would give it a break. The next part has not such a direct relationship with the previous part'.			

Reading

This participant spent most of the time reading as everyone else in the study. He revised the whole text and carried out some transformations after he had done some others in the first paragraphs. This is a rather unusual strategy in L1. Backtracking is in EFL (Manchón et al., 2009; Roca de Larios et al., 2008)

The transcription of his revision texts reveals he spent most of the time reading the text and rereading once he had gone through the whole text. Once he finished his first reading of the text, he read it again and in the last six minutes, he carried out three more transformations. Eventually, the text length after revision was about 20% shorter, the transformations were substitutions or deletions. Such findings were not in accordance with his answers in the questionnaires, among this participant's perceptions

were that he rarely deleted part of the text, this strategy, though, was rather frequently used.

Transformations EFL

This participants' revision in EFL was one of the longest in her group and the whole study. He did not carry many transformations in his text and they were mostly, word-based, conventional and superficial changes, although the type of transformations varied and they were simple in five out of eight of them.

During his revision, the reading segments were silent and, he had done in the L1 revision, such feature of his revision was consistent with what he answered in the questionnaire. Although he did read the whole text before he started the revision which took him about three minutes. Contrarily to what he did in the L1 revision, he did not take the time to revise the text again once he had gone through the whole text first he finished once he reread only the third paragraph.

He also translated as he read to check the intended meaning and he did so while reading. He used translation to check if the actual text matches with his intended text, he probably was not aware he did that as a strategy monitoring of the revision process.

It must be noted that there is a predominance of addition and deletion, simple transformations in Allal's words and contrarily to what she had answered in the questionnaire.

G2.P2.EFL_13			
Begin	End	Text transformed	Transcription
00:13:40	00:13:50	NONE	No cambiaría nada, expresa bastante bien lo que quiero. Al leerlo estoy traduciendo.
'I would not change a word, it puts in words what I mean to say quite well. When I am reading it, I am translating it			

As for the text structure, he answered that he did not pay attention to it usually and that was in line with the assessment of both texts as he did not meet the accurate outline for an essay completely.

Cohesion

In this occasion, he realised there was a repeated word and that deleting that redundancy would make it easier for reader to understand.

G2.P2.EFL_6			
Begin	End	Text transformed	Transcription
00:07:30	00:07:40	2 nd paragraph Deletion Living	“Was living awful moment living in the territory” Si omitimos este “living” que había ahí incluso ese “living” de ahí (el segundo) facilita la lectura
‘If we omit this “living” that there was that “living” there, it will easy up reading’			
G2.P2.EFL_15			
Begin	End	Text transformed	Transcription
00:14:55	00:15:10	3 rd paragraph Addition even though	Y aquí cuando pongo la coma ", his dad was living like a king, his dad was one of those" Esa frase necesita algo entonces pondría "even though his dad" a pesar de que su padre era uno de esos..." se introduce la frase de una manera mejor
‘And here I type a coma "", his dad was living like a king, his dad was one of those". That sentence needs something then it would say "even though his dad" (even though his parents) the sentenced is introduced in a better way.’			

In the following case, the word choice means a way to make sure the intended meaning and it shows how the actual text is driven by it.

G2.P2.EFL_7			
Begin	End	Text transformed	Transcription
00:08:45	00:09:00	2 nd paragraph Substitution certain New text given	Igual podría poner "at any given time" [...] Cuando los chalaos que estaban allí dentro les diese la santa gana, pasaría aquello es algo que no está marcado en el calendario... at a certain time parece algo más concreto y any given time es algo más inconcreto, realmente no lo sabemos
‘Perhaps I could say "at any given time" [...] When those guys who were there were in the mood something unforeseen would happen... "at a certain time" seems to be something more specific and "any given time" something more unspecific, (the thing is that) we actually do not know.’			

Coherence

He openly showed he was concerned about what the text meant. He bore in mind the knowledge of the content of the film and how it could be understood by the reader in terms of relevance of content. This transformation aims at clarifying a particular clause that may involve.

G2.P2.EFL_4			
Begin	End	Text transformed	Transcription

00:06:40	00:06:50	2 nd paragraph Deletion your intuition can help you to know	La situación en el la película se ve muy claramente y en el libro se también lo específica muy claramente y, aun careciendo de cualquier sentido de la intuición, puedes saber lo que les está pasando al niño porque explícitamente te lo han dicho o lo has visto
'The situation in the film is very obvious and the book makes it evident too, even if it one has no intuition, one can guess what the boy is going through because they have seen it or they have been told so'			

Correction

As we mentioned at the very beginning, these are the most frequent instances of transformations as this participant spotted some mistakes in terms of grammar, spelling or word choice.

G2.P2.LE 14			
Begin	End	Text transformed	Transcription
00:14:35	00:14:45	3 rd paragraph Substitution likely New text like	"Likely" está bien puesto? Entonces diría "like" y pondría directamente "like" y quitaría "likely" por asegurarme
'Is "likely" correct? I would go for "like" then and I would write "like" and would delete "likely", to make it sure'			

This type of correction improves the text as the participant noticed there was something wrong.

G2.P2.LE 9			
Begin	End	Text transformed	Transcription
00:10:29	00:10:30	2 nd paragraph Addition -s New text ones	NONE
NONE			

To summarise, this participants' revisions were a very particular case. He made sure to keep the form of the text under control as he had stated in the questionnaire, both in L1 and EFL. He did not manage to improve of the text in those terms if we pay attention to the quality of the texts. He made a mistake when he wrote in Spanish which lowered the quality of the revision text in terms of spelling and punctuation when compared to the first version of the text.

He also reflected upon the content and he used revision to modify content and tried with some part of the meaning of the text, he used his L1 to translate the text from English into Spanish when he revised the EFL text. This has been described as a

strategy to understand the text and proceed with the representation of the intended text (Manchón et al., 2009).

Too much reflection and reading have lead this revision to last a long time, however, the quality of his text did not suffer any changes on the whole. It can be argued that he probably did not take advantage of this time of revision efficiently, despite his high command of grammar and spelling in both languages.

In this particular case, those twenty-five minutes of revision turned out to be inefficient due to a misrepresentation of the task. It can be argued that it was caused by the overload of the working memory which would also be responsible for overlooking some spelling mistakes, especially in EFL (Chanquoy, 2009; Hayes, 2006; Kellogg, 1996).

Group 2. Participant 3.

Table 74. Group 2. Participant 3. Experimental Condition 3. Revision Data.

	L1 - Spanish	EFL
Revision Time	00:05:00	00:04:40
Transformations	14	8
Version 1 Length	514 w	406 w
Revision Length	549 w	409w

Table 75. Group 2. Participant 3. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	2	2	1	1
Text Organisation	3	3	2	2
Grammar	3	3	3	3
Vocabulary	2	3	2	2
Mechanics	2	2	2	2

This participant's revisions lasted a very similar amount of time and were very similar between the L1 version and the EFL version as pictured in Table 74. She followed an accurate outline: she started reading and changing all the elements as she encountered them. It was clear that she knew there were some elements that needed editing.

In terms of what we assessed as correction, that is to say, the observation of accurate spelling and correct punctuation of texts, it did not get better after revision. Even though she declared she cared about it very often. On the other hand, she paid special attention to cohesion. The deictic references, the word choice and the extent of sentences as she declared were part of it.

In general, their texts lacked of part of the content required for this writing task although they had an acceptable degree of cohesion and correction, of which she was mostly aware as the score on Table 75 depicts.

Transformations L1

The transformations in this version of the text showed how she filled the gaps of information she had left to complete with the names of the kids as she could not remember them. She did so up to nine times out of those fourteen transformations. Here is the reason why there were more changes in L1 than in EFL.

That also shows how aware she was of the task and what this type of deferred revision involved. She also made sure she found out information to complete the content of part of the text.

Adequacy

The deferred revision was spent for this participant in superficial modifications. She adjusted very little the type of text and its structure and the type of writing task. No instance was found across her revision.

Coherence

On the other hand, there is a mismatch between what she answered in terms of the development of content in L1 and EFL, particularly in EFL. In this particular revision of the text she was not able to improve the development of the text and did not stick to the topic. She felt she needed to add some more information to the text to relate to the topic of the film which did not improve the content as the ideas concerned the symbolism of the fence were unfinished and did not fulfil the task of an opinion essay.

G2.P3.L1_11			
Begin	End	Text transformed	Transcription
00:01:40	00:02:20	3 rd paragraph Addition "A Bruno le llama la atención la gran cantidad de personas que se encuentran en dicho campo y la forma tan peculiar que tienen de vestirse, un pijama de rayas azules y blancas"	Participant types it as it reads it aloud.
NONE			

Cohesion

This L1 revision entailed a few transformations. In this case, she removed the reference as she felt it was not necessary and reduced the sentence by removing the verb and using a phrase between comas.

G2.P3.L1_4			
Begin	End	Text transformed	Transcription

00:00:35	00:00:40	2nd paragraph Substitution que son New text , dos niños,	Vaig a llevar açò que no m'agrada com queda (reads)
'I'm going to delete this, I do not like how it fits in there'			

Correction

As we mentioned before, the sentences and the sense of the whole text is driven by the correct spelling of names. She had checked the name of the concentration camp and she knew she had misspelt. She knew what to do: check it on the internet and replace it.

G2.P3.L1_2			
Begin	End	Text transformed	Transcription
00:00:10	00:00:25	1 st paragraph Substitution Auswich New text Auschwitz	Vaig a canviar este nom perquè estava mal. Auschwitz. Que ho he buscat per internet este matí.
'I am going to change this name as it was wrong. Auschwitz. I looked it up on the Internet this morning.'			

These type of one-word, lower-level substitutions are the predominant transformations in L1.

According to the answers given at the questionnaire, all the transformations she implemented are in line with what she perceived she did. Especially in those aspects related to types of transformations where she thought she unfrequently deleted some text. Substitutions were predominant. On the other, she did not attend aspects related to the structure and content of text which she did not realised she did not do according to the questionnaire.

Transformations EFL

The scrutiny of this EFL revision show identical features to her L1 but with different impact. She left gaps to be completed in both texts which was used by participants in the elementary group. In this case, she used them in L1 and EFL differently. Whereas she left gaps to be completed with the names of the kids as we mentioned before, in the EFL revision the gaps were to be filled with relevant words

that were related to the meaning of the text (see Figure 30 below). However, none of those words had an impact in the content as they were not strictly related to providing an opinion reasoning or an argument which was the writing task. An objective she did not manage to reach utterly.

In the following writing, I am going to try to explain why Harry Potter is the kid who is chosen to save the world.

In the first film, we can have an idea of why Harry Potter is a very special kid. He is the only person who have survived an attack of Lord Voldemort, a character that during the films shows his badness. It is a shocking thing that a baby had survived to that attack and two adult people had died, moreover the parents of Harry Potter, Lily and James Potter who were to recognized magicians. Due to that attack a ___ is marked on Harry Potter's face. This ___ is going to be the symbol that, during all the films, is going to make different that kid. Everybody is going to recognize Harry Potter, the child that survived an attack of Voldemort because of his___.

Harry Potter is not going to be alone during his adventure, he is going to make and amazing friendship with two partners at class. Their names are Ron Weasley and Hermione Granger and they are going to help their friend Harry Potter to "save the world". His adventure to learn the magical life started the day of his ___ birthday, when a letter of the School of witchcraft and ___ : Howgarts, is received at the house where he lives, his aunt and uncle's house. His life is going to be very different from what is normal to him, due to he doesn't know anything about his parents being magicians in their young life.

Once he has started the first course in Hogwarts, he is going to enter in one of

Figure 30. Screenshot of G2.P3.EFL’s version 1 text.

Coherence

The EFL revision left a very succinct approach to improving the content of this text. In that sense, she only realised that a few questions should be improved through minor changes. She showed to be conscious of the need of adding or replacing information and got as deep as the sentence level but at a micro-meaning extent so that the text explained some facts about the topic that in no case changed the arguments or added a new perspective on the topic. In her revision, she added the previous line and the following group and did not notice both expressions as to be redundant and consider them a question of cohesion.

G2.P3.EFL_5			
Begin	End	Text transformed	Transcription
00:01:30	00:01:35	2 nd paragraph Addition a scar with the shape of a thunder	He afegit informació perquè crec que és important saber quina és la marca que té.
'I have added some information because it is important to know what his scar is like'			

Cohesion

When she finished the first version of the text she knew she needed some information to complete the description of the school. She guessed it was something important because it is the name of the school and she had left a gap to be filled in in the delayed revision and so she did: 'when a letter of the School of witchcraft and ___'.

G2.P3.EFL_9			
Begin	End	Text transformed	Transcription
00:02:45	00:02:50	2 nd paragraph Addition wizardry	He afegit la informació de què va l'escola de Hogwarts
'I have added some information related to Hogwarts school'			

At the very beginning of the text, there was a typo. She was not able to remember why she mistyped the word and what the word she intended to write was. She avoided the correction and just deleted the word. She guessed she had repeated two reporting verbs when the intended sense might be a bit different.

She probably meant to say "I'm going to try to explain". It can be guessed so as the keys 'e' and 'r' are next to each other on the keyboard. Her lack of experience typing texts in English, lack of wide vocabulary and the overload of the working memory may have been part of the cause of this transformation.

G2.P3.EFL_2			
Begin	End	Text transformed	Transcription
00:00:10	00:00:12	1 st paragraph Deletion to tey	Açò no sé què és, no sé per què ho tinc ahí. Voldria posar "to tell"
'I do not know what this is, I do not know why it is there.'			

Correction

She became aware of some of the spelling mistakes she had done. In the next instance, she was aware as she read the text. There was a confusion between homophones. In terms of correction, she overlooked some other instances of misspelt words as showed in the previous sequence.

G2.P3.EFL_3			
Begin	End	Text transformed	Transcription
00:00:50	00:00:55	2 nd paragraph Substitution to New text two	He canviat "to" la preposició per "two", no sé per què. Em liaria i ho canviaria
'I have replaced the preposition "to" by "two", I do not know why (I made this mistake). I got mixed up and I changed it'			

In the following sequence, the participant activates one the strategies when finding a mistake or in doubt. She overlooked the possible problem and did not dare to correct or make a mistake. She just skipped the edition of the text and overlooked the possible conflict of revising it which is a common strategy in revision (Hayes, 1996).

G2.P3.EFL_7			
Begin	End	Text transformed	Transcription
00:02:00	00:02:15	NONE	(Hesitant) "His adventures to learn the magical life" (repeats magical). Buah, pues no sé si està bé. Ho deixé així.
"His adventures to learn the magical life" Geez, I do not know if it correct. I will leave it like that.			

This analysis of both revision processes has identified some common features in L1 and EFL revision in this participant. She used gaps to distinguish which terms she was not aware of and left them there as a signpost to be fulfilled in the revision session. She also concentrated on small bits of texts as depicted and her transformations had no influence in the result of the tasks in terms of content and cohesion and coherence. On the contrary, to what she had stated she thought she did when she completed the self-perception questionnaire.

On the other hand, she was aware that she tended to do substitutions as those operations of adjustment the text to her intended version of it. It must be noted the use of gaps deployed by this participant. She signposted each of the lexical items she did not know how to say in EFL to make sure she could remember it in the interim between the first version and the revision and fill those gaps in later.

Group 2. Participant 4

Table 76. Group 2. Participant 4. Condition 4. Revision Data.

	L1 - Catalan	EFL
Revision Time	00:19:40	00:37:10
Transformations	17	41
Version 1 Length	430 w	314 w
Revision Length	442w	328 w

Table 77. Group 2. Participant 1. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	1	1	1	1
Text Organisation	1	1	3	3
Grammar	3	3	1	2
Vocabulary	3	3	2	2
Mechanics	1	1	1	1

The revisions carried out by this participant were rather long compared to the average of her fellow intermediates and the rest of the participants. She was the second longest in L1 and the longest by far in EFL as table 76 shows.

She spent all that time and improved the grammar of the text in EFL. She overlooked part of what she should have included with regards to the content partially in that language. Her opinion was absent in the essay and her ideas were mostly scattered and called for a more sensible arrangement.

Most of her transformations focused on formal aspects rather superficial or meaning-preserving changes. There were, though, some changes affecting the structure of the paragraph or the text in the EFL revision. Most of her transformations were single-worded, more than 50% in both languages. This finding reveals that she mostly engaged in superficial improvements of the texts although she reflected on the content but missed the point: she thought about the best summary of the stories instead of stating her opinion about the topic with respect to the plots of the stories (Cf. table 77).

G2.P4.L1_12			
Begin	End	Text transformed	Transcription
00:08:10	00:09:55	NONE	Ahí estiguí molt de temps pegant-li voltes. No sé si deixar-ho aixina. Ací jo explique que el problema és que ara te pareix impensable que unes persones poden matar

			els altres simplement ideologies o per creences. No? però perquè ningú té el dret de llevar-li la vida a una altra persona. Però que ara, per exemple, no hi ha guerres o almenys no hi ha guerres a la majoria dels països. [...] Ací conte que avantpassats meus sí que han viscut aquestes injustícies quan passaven ací. i açò és lo que crec que no està ben explicat.
'I went on about it for quite a while. I do not know if I should leave it like that. Here I am explaining that the problem is that it seems incredible nowadays that some people could kill somebody else simply due to their ideology or their beliefs, does not it? Nobody has the right to kill anybody else. Now there are no wars or, at least, there are no wars in the majority of the countries. [...] What I am telling in this passage is that my ancestors lived such unfairness when they happened here, and that is what I think it is not well explained'			

In terms of content, she tried to relate the topic to her field of expertise but did not succeed in establishing a link between her thoughts and what she understood what the fence meant. Instead, she elaborated on what she believed a kid can understand from that sort of situation. That is why she did not get more than 1 out of 3 in this particular descriptor.

She also responded she did not keep her mind much on text structure and she was consistent with that. Dissonantly enough, she had made sure the essay outline was correct for her EFL but she did not for her L1 revision text.

She was reflective during her revision process, although there were segments in which she eventually did not modify the text, it showed that she had a representation of the text in mind and she could not remember at all times the purpose of the task. She missed the point of the purpose. It could be argued that it was the reason why she spent so much time summarising the film and had to re-direct her efforts to the writing task. That could prove to be an evidence of the cognitive complexity of the task and the efforts to keep it in the working memory.

G2.P4.L1_8			
Begin	End	Text transformed	Transcription
00:06:55	00:07:05	NONE	El primer paràgraf és el que millor explicat, o siga, el que millor dona a entendre la meua opinió del simbolisme de la tanca. Després no recorde molt bé el que ve a continuació però crec que és més explicació del que passa.
'The first paragraph is the best explained, I mean, it is the one that best explains my opinion about the symbolism of the task. I cannot recall very well what is next, after all. But I think that it is the explanation of what goes on (in the film)'			

Reading

In both revisions, this participant started reading. She took her time to begin with the transformations but she did as she encountered them. She did not do so like participant 2 in her group who spent a lot of his time reading during his revision. She mostly engaged in reading and implemented more transformations than him and anybody else as we pointed out before.

Transformations L1

Most of the transformations in L1 were optional, word per word substitutions that barely affected the meaning of the text and its content and structure.

Adequacy

In the segment G2.P4.L1_10 below, the participant just chose what she thought to be more appropriate for this situation.

G2.P4.L1_10			
Begin	End	Text transformed	Transcription
00:07:40	00:07:45	2 nd paragraph Substitution en anterioritat New text anteriorment	Bueno açò més que res és perquè siga diferent. En realitat és lo mateix però m'agrada més anteriorment. Per criteri propi, P: no hi ha canvi de significat, no? R: No
'Well this (change) is mainly to make it different. It is actually the same but I like "anteriorment" (before). It is my own judgement'			

In fact, both expressions are synonyms and mean the same. This kind of optional changes that mean a slight or no modification at all of the content and its sense are the dominant in this revision. She repeated a similar operation later on in the text as she chose a term belonging to a higher register. She found that it was needed: "dic" (I say) was replaced by "referisc" (I refer).

G2.P4.L1_20			
Begin	End	Text transformed	Transcription
00:13:30	00:13:50	3 rd paragraph Substitution dic New text	Crec que s'escriu aixina. He canviat "dic" perquè és com molt personal, he posat em "referisc" perquè ells no són conscients... Llig el text a continuació.

		referisc	
'I think it is spelt like that. I have changed "dic" (I say) as it (the situation) is very personal because they (the kids) are not very aware... I am reading the upcoming text.'			

Cohesion

Cohesion was properly taken care of in this revision. She showed she was aware of the need of this word choice as one of the features as well as connectors, demonstratives, pronouns... She also verbalised that it is necessary to improve the quality of a text.

G2.P4.L1_18			
Begin	End	Text transformed	Transcription
00:12:25	00:12:35	3 rd paragraph Substitution infants New text xiquets	Ho canvie perquè abans ja s'ha repetit. Pose "infants" per que no hi haja tanta repetició de la mateixa paraula.
'I am changing it since it was repeated before. I am writing "infants" (kids) to prevent this word from being repeated.'			

She went over it again, particularly at the end of the revision. Two segments that avoided the repetition of referents in the first case and a term with a similar contextual meaning.

In the following transformation, the reasoning is still the same: repetition reduces the expressivity of the text. In this instance, the lack of knowledge of formal written language provokes a mistake in the use of this connector as the terms she used are a calque of the Spanish forms. Transfers of L2 into L1 are a type of feature that takes place in contexts of languages in contact and may take place when producing in a foreign language as we described in previous chapters. However, in this case, it takes place in a context in which the environmental L2 has an impact on L1 proficiency, particularly in formal aspects as they are majority in secondary and higher education.

It all set out as a question of cohesion and turned out to be a question of correction related to the appropriateness of this term in a formal context.

G2.P4.L1_27			
Begin	End	Text transformed	Transcription
00:18:15	00:18:20	3 rd paragraph Substitution respecte New text En quant	També per a que no es repetisca.
'I changed this word not to be repeated.'			

Coherence

This section cannot be fulfilled with many samples. Nonetheless, the following two instances bring about a couple aspects to be considered. First, the fact that she added a sentence that provided the same information but expressed with more precision and made the text more comprehensible for the reader.

She judged it as an important piece to be known by her readers as she explicitly referred to it in the sequence below. She declared the same when she answered the questionnaire which stands for the second point and it can be understood as a means to show that she was aware that there was a reader, the type of reader and such knowledge monitored the development of her writing.

G2.P4.L1_4			
Begin	End	Text transformed	Transcription
00:04:00	00:06:00	1 st paragraph Addition sense tindre en compte qui és l'altre	He afegit una oració sencera per a que s'entenga millor també. És que a lo millor com tu tens unes idees en el cap i les vols escriure, les escrius i te penses que estan bé però a lo millor l'altra persona que no està en el teu cap no sap el que estàs posant - l'altra persona vols dir el lector - el que està llegint-ho, clar! -Amb el que acabes d'afegir-li - Una millor comprensió - Estàs afegint informació? -No, és el mateix però d'una altra manera
<p>'I have added a complete sentence to make it more comprehensible. The thing is you have some ideas in mind and you want to put them into words, you write them and you think they are right but the other people are not in your mind and they do not know what you mean to say. R: The other people, you mean the readers? P: People who are reading it, of course! R: With what you have just added? P: A better understanding R: Are you adding information? P: No, it is the same but expressed in different words.'</p>			

Second, in the following segment, she deleted a part of the text she believed that had no relationship anymore with the perspective on the content that she was creating. It was her attempt to make a relationship between the kids and their behaviour towards what happened in the story.

Correction

Although it was quite a recurrent element, it was not that present in this L1 revision. It usually concerns questions of spelling. Otherwise, their proficiency in the language they chose as their L1 for writing makes writers self-confident in their skills and their meta-linguistic knowledge.

This participant's revision focused mostly on mistakes on lower-order skills rather than semantic changes. In some cases, in L1 there were formal mistakes in spelling, grammar and punctuation that were overlooked. Either because she ignored the error or because she forgot to correct it or chose not to as she was not sure about it. The latter seems to be a recurrent strategy for EFL writers (Hayes et al., 1987), particularly least experienced writers, as we will observe in group 3. It is also a strategy that was used by experts in this study when they showed conscious of their constraints in EFL.

In this segment, though, this participant deleted a word which may be the remainder of an operation in the text that online revision did not detect, and went onto the second version.

G2.P4.L1 15			
Begin	End	Text transformed	Transcription
00:11:20	00:11:25	2 nd paragraph Deletion un	"Un suficiente", no, "suficiente". El lleve perquè està mal
"un suficiente" (untranslatable), no "suficiente", I delete it since it is wrong'			

Transformations EFL

The revision of this text was, by far, the longest in the present study. The participant took twenty minutes to sort out what she understood as the revision of the first paragraph.

She transformed the text several times and tried to make sure that the tense agreement was the appropriate for the type of text according to her judgement. She proved to bear a dynamic mental representation of the text as the first and the second version varied: many optional changes became conventional ones as she had to ensure that all verb tenses were past tenses. Such modification explains the amount of transformations and the fact that they mostly are one-worded.

It can be inferred that the aim of her revision was mostly those superficial changes, however, she implemented about a 15% of changes in the text level. All the

changes allowed her to improve the quality of the text in terms of grammar, which was, in turn, an aspect she normally paid attention to in revision as she had responded the questionnaire that way.

Adequacy

This participant alluded to the reader and how the text is going to be read and her answer in the questionnaire in this particular matter confirms it. Yet, just an instance in which she openly cared about the register and the specificity of the vocabulary and, even so, in this optional group of words she added, she mixed-up the terms "gender" and "genre" that are the same word in Spanish and Catalan.

G2.P4.EFL_42			
Begin	End	Text transformed	Transcription
00:31:10	00:31:20	2 nd paragraph Addition The gender Harry Potter's films	Ho canvie això per a que siga més formal.
'I am changing this to make it more formal'			

Cohesion

As a pre-service teacher, this participant confirmed she cared about referencing, tense agreement, word choice and most of the aspects related to cohesion according to Cassany (2009).

Word choice was a recurrent feature in L1. It was also noticeable that she cared about it in EFL which agreed with what she answered in the questionnaire in relation to vocabulary and grammar. As we mentioned before, most of the changes were superficial and those were examples that improved that particular aspect of the text as portrayed in segment G2.P4.LE_16 below:

G2.P4.LE_16			
Begin	End	Text transformed	Transcription
00:07:45	00:07:50	New 1 st paragraph Substitution During the film New text In the film	"In the film", canvie eixa paraula perquè ahí es repetia "during".
"'in the film", I am changing this word because "during" was repeated.'			

In a similar way, once she evaluated the text and decided to change the whole text from past to present which involved identifying the verbs, changing the tenses and

checking the correct tense and whether the past simple was regular or irregular. It was a time-consuming and cognitive-demanding action that required a lot of attention. It overwhelmed the working memory and must have made her overgeneralize some verb forms in a way that she overlooked some those mistakes.

Coherence

As we have emphasized before, she cared about the content in terms of factual information about the film. Such explanations added content to the text but had little influence on the topic of the essay as she did not use them to state or support her opinion. Besides, once she added the new content, she did not mean to revise her new text. In fact, it meant the use of a false friend in English as

G2.P4.LE_5			
Begin	End	Text transformed	Transcription
00:02:30	00:02:55	1 st paragraph Addition The bad character of the <i>history</i> wants to kill Harry Potter because he is	Ho havia explicat d'una manera però no estava bé.
'I had explained it the wrong way.'			

G2.P4.LE_7			
Begin	End	Text transformed	Transcription
00:03:25	00:03:55	1 st paragraph Addition The bad character of the history wants to kill Harry Potter because he is the <i>soon</i> of a magician, James Potter	Sí podem posar-ho així.
'yes, it makes sense like that.'			

In the following segment G2.P4.LE_20, she drew her attention to the word choice related to the content. She was not sure if the text she had written so far represented was the text she meant to say. She purposely carried out this kind of optional transformations that intended to add some appropriate and necessary content for the text. She seemed not to be aware of the fact that adding new text, especially a few lines or a paragraph, in EFL without a spell check and online help, may end up in making mistakes in spelling or grammar. This is a recurrent feature of revision with a similar ending as we explained before. On the other hand, other participants looked

up, read and even learned names by heart, factual information or even chunks of text as they overtly went on about it.

G2.P4.LE_20			
Begin	End	Text transformed	Transcription
00:13:05	00:15:30	New 1 st paragraph Addition All the people who want to protect Potter helped him when he has a problem, and also, some of them, don't say him the reason why his parents died	Harry Potter viu males situacions però que té gent que l'ajuda, el recolza com a que estava mal explicat. He posat "bad situations" però no volia posar "bad situations". Aleshores per intentar juntar els dos paràgrafs i per intentar unir-ho he posat que Voldemort és el personatge roïn de la història, que mata a J. Potter i després ell vol matar al seu fill, Harry Potter, que es el personatge principal.
'Harry Potter have terrible experiences but there are people who help him, they support him. That was not explained properly. I wrote "bad situations" but I meant not to write that. That is why when I tried to put two paragraphs together I wrote that Voldemort is the baddie, who kills James Potter and wants to kill his son, Harry Potter, who is the main character.'			

The rearrangement of contents is a strategy seldom carried out by writers so that the meaning of the text is affected in greater depth. It may change the sentences, paragraphs or even the text. In the case of the segment G2.P4.LE_12, it made sense that the paragraphs were together. This is one of the few instances to be found in the revision of the texts and it contrasts with the self-perception of this writer and the rest of participants who declared that they used it frequently when its use was rather unusual.

G2.P4.LE_12			
Begin	End	Text transformed	Transcription
00:06:45	00:06:50	2 nd paragraph Rearrangement	Voldemort vol matar-lo perquè és el fill d'un mag, com que tots volen amagar-li que Voldemort els ha matat. Mira, això t'ho explique ací (2 nd paragraph). Mira, t'ho vaig a juntar. Perfecte. T'ho he juntat perquè es quedava massa curt el resum. I l'altra part (2 nd paragraph) és com també part del resum.
'Voldemort wants to kill him because he is the son of a magician, exactly the same way everybody wants to hide that it was Voldemort who killed him. Look, this is something it is explained here (points at the second paragraph). Look! I am going to put it all together. Perfect. I have done it so because the summary was too short and the next part (the 2 nd paragraph) is part of that summary.'			

Correction

By and large, formal changes seem to be the most popular spotlights for transformations. In this revision, they were scarce but significant as they showed the

participant's interest in formal aspects and how it drove this part of the revision process, she made it explicit too when she replied the questionnaire. She engaged in reflection that took her to make a right decision as portrayed below.

G2.P4.LE 48			
Begin	End	Text transformed	Transcription
00:34:05	00:34:10	4 th paragraph Substitution This New text these	És que quan és plural és "these".
'If it is plural is "these".'			

In conclusion, this participant's revisions, in both L1 and EFL, focused mostly in revising content as an L2 proficient writer (Chenoweth & Hayes, 2001; Schoonen et al., 2009) however this content turned out to be optional and did not improve the quality of the text in terms of coherence according to the task. Besides, she included text and did not review its formal features as some mistakes were found.

She had mentioned in the questionnaires that she paid attention to such points frequently so it can be inferred that she had a representation of the tasks in both languages that did not meet, in some way, with what their requirements were. On the other hand, she also stated that she concentrated in formal aspects which she did. Although she overlooked some others, mainly in EFL, as she engaged in amending a cascade of verb tenses. It must also be stressed that from the answers in the questionnaire, she had in mind the type of task and the reader, which as higher-level activities are a trait of L2 proficient or competent writers (McCutchen, 2011; Tiryakoglu et al., 2019; Whalen & Menard, 1995) and she openly commented on it during revision and the majority of her transformations had such features as references.

4.3.3.3. Group 3. Elementary EFL proficiency pre-service teachers

In this group, two of the participants were male and two of them were female. They had been through the school system that awards an A2 certificate in English once students finish and pass English in the sixth-form or vocational training courses which include English as a foreign language.

They all chose to write their L1 text in Spanish. It was the L1 to three of them and the girl whose L1 was Catalan chose to write in Spanish as it had been the language she had used as a medium of instruction at school. For the latter, in her transcription, as in some of the previous above mentioned, we had to deal with this constant translanguaging in the sense that in an academic context, contents can be received and produced in different languages (Lewis et al., 2012). This is the phenomenon that took place between what it was written and the verbalised thoughts of the participant in different languages.

The participants from this group used a variety of strategies to monitor their process of revision. For example, all of them left gaps or highlighted words that they used as cues to look up this information or and which would be filled in or modified in the revision session (Stevenson et al., 2006).

They also wrote words in L1 (Spanish) to be memorised and looked them up in a dictionary later to be recalled at the revision session. This particular use of the participants' L1 also appeared in similar contexts (Manchón et al., 2009). This is an extent that participants confirmed during the revision session when uttering their thoughts aloud. In these cases not only vocabulary, but also the content of some events that were needed to complete the sense of the text or the contextualization. Such features were different from what some other participants in groups 1 and 2 used and resembled the results of some other studies (Knospe, 2017; Stenvenson et al., 2006). Some participants were not able to recall the names of some characters or places due to the cognitive load on the WM in the first version and even the second.

These four participants made a great effort to stick to the think-aloud protocol (TAP). As we put it before, the TAP is a cognitive-demanding procedure that requires concentration and the capability of reading, editing and speaking (Merchie & Van Keer, 2014). Sometimes, all these actions were carried out at the same time and, in one of the cases, a text supposed to be written in English was encountered filled up with

many words, even a paragraph, in Spanish to be translated and recalled in revision.
Moreover, the TAP was undertaken in Catalan which was the participant's L1.

Group 3. Participant 1.

Table 78. Group 3. Participant 1. Experimental Condition 1. Revision Data.

Condition 1	L1 - Spanish	EFL
Revision Time	00:03:00	00:09:00
Transformations	1	6
Version 1 Length	300w	372w
Revision Length	300w	370w

Table 79. Group 3. Participant 1. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	3	3	3	3
Text Organisation	2	2	3	3
Grammar	3	3	2	2
Vocabulary	3	3	1	2
Mechanics	2	2	1	1

This participant's texts were similarly long in both languages and before and after revision a quick look at Table 78 will reveal it. The time she spent in the revision was three times higher in EFL and undertook six transformations, most of them at word level and with little, if any, impact on the meaning. It is displayed on Table 79.

Transformations L1

Her answers in the questionnaire revealed that her self-perception was that she did not make the texts longer by adding information during the deferred revision and that was in line with her performance in these writing tasks. Her answers were also quite consistent with the fact that she cared about the relationship of the ideas in the text. She only carried out a single transformations and spent most of the time rereading the text.

Adequacy

This is the aspect that she could have improved from her text as the word choice could have been more precise and slightly more formal, nonetheless, she accomplished the task successfully.

Coherence

She did not implement any changes and she completed the questionnaire by stating that she frequently cared about it. There is not much more to get to know about

this aspect as the development of the content in the text was correct according to the writing task.

Cohesion

She only carried out a change in L1 and just to guarantee the sentence she amended made sense. The succeeding transformation had no influence over the general sense of the text.

G3.P1.L1 2			
Begin	End	Text transformed	Transcription
00:02:00	00:02:45	5th and last paragraph Substitution Quería transmitir es que se trataba New text Quiere transmitir que se trata	Si lo pongo así, tiene más sentido.
'If I put it this way it makes more sense'			

Correction

Little she mentioned about correction. Just a mistake was spotted and it seems to be a typo, besides it was overlooked during revision. Even in these situations, in which PSTs take part, they miss the point of paying attention what research has found to be their main aim in revision (Knospe, 2017; Manchón et al., 2009; Ruan, 2006; Sasaki, 2000).

Reading

In both revisions, she made sure she read silently. It was the opposite of what she thought she did according to what she replied in the questionnaire.

Transformations EFL

EFL revision took three times longer than it did in L1. She focused mostly on the vocabulary section as she replaced the words she had left in Spanish and highlighted in yellow as a strategy to guide her revision. This was a

Cohesion

When she revised the text in English, she made sure she changed all the words she had highlighted in yellow in order to be replaced by the words she had searched for.

In fact, she did not even follow the order of the paragraphs. She changed a word in the first paragraph and went to the third to ensure that the word she had written in Spanish -“reto”- was replaced by the correct one “challenge”. She got back to the second one and forward again in the text as to finish with all the pre-stated changes. She did that up to four occasions, the following segment, G3.P1.LE_2, is an example:

G3.P1.EFL_2			
Begin	End	Text transformed	Transcription
00:00:25	00:00:35	4 th paragraph Substitution retos New text challenges	Ací "challenge" ho canvie perquè ho havia buscat.
' I am writing "challenge" here as I had looked it up'			

This instance is also a couple of words that she highlighted but could not recall the meaning and made use of her knowledge of English. She put into practice a recurrent resource: paraphrasing or rewording (Stevenson et al., 2006, p. 202) which fosters "flexible linguistic processing".

Correction

Her revision also led her to correct grammar mistakes as in segment G3.P1.LE_6. However, she overlooked some previous faulty phrases or misspelt words and corrected this one properly.

G3.P1.EFL_6			
Begin	End	Text transformed	Transcription
00:02:25	00:02:30	3 rd paragraph Substitution Have New text Has	Ahí fique "has" perquè havia de ser "has"
'I write "has" because it should have been "has"'			

She had stated in the questionnaire that grammar was an issue she checked frequently and apart from these instances depicted. At the same time, she missed some of the words mistakes she had made in terms of punctuation.

Group 3. Participant 2.

Table 80. Group 3. Participant 2. Experimental Condition 2. Revision Data.

Condition 2	L1 - Spanish	EFL
Revision Time	00:04:45	00:11:50
Transformations	6	36
Version 1 Length	305w	398w
Revision Length	320w	372w

Table 81. Group 3. Participant 2. Analytic text quality before and after revision in L1 & EFL

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	2	2	1	3
Text Organisation	3	3	3	3
Grammar	3	3	1	1
Vocabulary	2	3	1	1
Mechanics	1	2	1	1

This participant carried out the revision of both texts in a different style. The transformations in L1 were scarce, they concerned repeated words mostly, a spelling mistake and some information that was added and did not affect the general meaning of the sentence or the paragraph (Cf. Table 80).

On the other hand, the EFL's transformations outnumbered the L1's. She carried out a distinctive revision of the text, very divergent from the rest of the participants in the group and this study as the use of the L1 was peculiar and helped her build the EFL text in several ways as it will be examined below.

As far as the answers from the questionnaires are concerned, she answered that unfrequently she kept in mind the structure of the text, which she did quite well and explained the way she organised her writing accordingly.

Transformations L1

A few transformations, that affected mostly in a superficial way and added very little information, they ameliorated the standards of the text's correction, though.

Adequacy

She modified her text and no instances of transformation that entailed the register and the task were found. She kept an appropriate register in terms of word choice and style in line with her answers in the questionnaire.

Coherence

Both texts, version 1 and revision, shared the structure. It seemed to be interiorised by the participant as she divided both texts following the structure of an essay, so she had clearly in mind the representation of the task and the structure of the text. Despite the fact that she engaged in revision of a missing word. It was probably a typo.

On the other hand, she perceived that she made use of substitution unfrequently and most of her transformations were of this kind. She matched her self-perceptions questionnaire and actual strategies as she added information, not much but she did. She was also consistent with her self-perception with respect to the use of deletion as she did not perform any. The information that she brought to the text in the revision had no impact on the quality of the text.

G3.P2.L1_5			
Begin	End	Text transformed	Transcription
00:03:00	00:03:10	3 rd Paragraph Addition De los peligros que pueden darse en el mundo	Estic afegint informació necessària.
'I am adding necessary information'			

Cohesion

With respect to this particular textual property, when she revised the text in L1 she asserted that she tried to make sure that some words or expressions were not repeated. She explicitly claimed for a special care to cohesion. Such remark was in line with her answers in the questionnaire. In the following segments she replaced words or phrases so that they did not coincide in the same paragraph with the same word or concept as depicted in segment G3.P2.L1_2:

G3.P2.L1_2			
Begin	End	Text transformed	Transcription
00:01:00	00:01:10	2 nd Paragraph Substitution Para New text a	En el primer paràgraf després de la introducció... canvie el “a” en lloc del "para" perquè abans hi havia un altre para et costa menys llegir-lo si no es repeteixen tant les paraules
'I am replacing “a” for “para” as before (in the text) there was another “para” and that way it is easier to read if some words are not repeated'			

Correction

The only instance and improvement in the form involves also a change in the meaning as the connector had a different sense. She was aware that the text might turn out to be ambiguous as "si" without the diacritical mark means "if" in English and "sí" means "yes" or "definitely/certainly"

G3.P2.L1_4			
Begin	End	Text transformed	Transcription
00:02:40	00:02:45	3 rd Paragraph Substitution Si New text Sí que	Vaig canviar una falta que tenia el “si” sense accent. I vaig afegir el "que".
'I am going to change a (spelling) mistake on the "si" (if) without the diacritical mark. I am going to add the "que".' (Altogether it means certainly, definitely)			

Transformations EFL

In her EFL revision this participant increased notably the amount of time devoted to this second session compared to the first, almost three times, similar to our previous writers and carried out six times the amount of transformations.

Adequacy & Cohesion

There is not much to say about these properties. The fact that text was organised beforehand and the content set only allowed to introduce little changes in the register or references. Besides, she used the L1 to represent the text in terms of readership and content so that she would not forget the intended text once she faced revision.

Coherence

It must be noticed that she was not fully aware of what the fact of using the L1 in such way would entail to add or delete information. In fact, she declared that she unfrequently added or deleted information which she did, particularly deletion, in an almost organised manner. She stated her strategy in a way that she could remember the vocabulary she could not remember at that time. Once she had ended the paragraph, she deleted it.

G3.P2.EFL_10			
Begin	End	Text transformed	Transcription
00:02:30	00:02:40	2 nd paragraph Deletion Entire paragraph she had written in Spanish	Havia escrit el paràgraf en castellà, el vaig traduir i vaig posar les paraules que no sabia entre parèntesi. Ara ja el tinc traduït i la el puc esborrar.
'I had written the paragraph in Spanish, I translated it and typed the words I did not know between brackets. Now I have translated it (into the target language: English) and I can delete it'			

This participant as showed she shared the same ideas explained by Knospe in one of the cases she analysed, for the participant in that study revision “meant re-reading several times with a strong focus on grammar and word choice” (2017, p. 177). It seems to be a common strategy in not so experienced writers whose language proficiency impels them to find out ways to sort out the questions displayed here.

In the third paragraph of the text, some other strategies came to play. On the on hand, she could not remember some of the words she was not able to recall in the first text maybe because the working memory reached the first paragraph as she admitted:

G3.P2.EFL_13			
Begin	End	Text transformed	Transcription
00:03:25	00:04:25	2 nd Paragraph Substitution En un principio la vaya le parece algo inofensivo New text Firstly time they think it was inoffensive when they play with the ball	En este paràgraf no havia buscat totes les paraules i és quan comence a canviar unes per altres. Esta és la primera paraula que canvie. Com no me la sé estic dubtant i no la pose. Me la vaig deixar per al final però no. Estava fent-ho d'alguna manera que jo sabera dir-ho.
'In this paragraph I had not searched for all the words and that is when I start to replace them for others. This is the first word I change. As I do not know it, I am hesitant and I do not write it. I was going to leave it until the end but I did not. I was doing it in a way I was able to mean it (find a similar word)'			

Therefore, she changed the words and she tried to use a word that she knew and, besides, could be used in that context even though it did not have the same meaning. A few moments later in the revision of the text, she deleted part of the text as she was not able to find or remember the words to translate them:

Correction

The use of translation is the main characteristic of the whole process of revision and guides its accomplishment. In this regard, it must be noted that this participant stated that she never or very rarely she paid attention to formal aspects and that she used translation as much as possible. The use of the latter is undeniable whereas the attention on the former takes place as revision goes on and mistakes overlooked in terms of spelling and grammar were prominent due, most likely, to her lack of linguistic proficiency (Chenoweth & Hayes, 2001; Whalen & Menard, 1995)

The first instance is an example of what happened right at the beginning of revision. The text has a few words in Spanish to be replaced in English. The word in Spanish were misspelt and so was the equivalent in English. She also disclosed that she made sure she looked up the words in the dictionary.

G3.P2.EFL_1			
Begin	End	Text transformed	Transcription
00:00:17	00:00:23	1st Paragraph Substitution Nacismo New text Nacism	Canvie les paraules en castellà perquè les he buscat.
'I am changing the words in Spanish as I have looked them up'			

She carried out the same operation in the whole text, the substitutions in the initial part of the text were mostly successful, unlike the preceding one.

Use of L1

She deliberately used Spanish as L1 for writing and Catalan for during the TAP. She was aware of the deployment of this strategy and clearly stated it in the questionnaires and admitted during the revision as it was recorded.

The use of L1 seems to be a strategy followed by writers who have to consider form-related aspects as portrayed in different studies with secondary school writers

and also by undergraduate students (Knospe, 2017; Manchón et al., 2008; Sasaki, 2009; Tiryakoglu et al., 2019).

She made sure she had written the text with the intended structure, content and meaning as writers with higher EFL proficiency do (Tiryakoglu et al., 2019). She wrote a first paragraph that she considered an "introductory" paragraph and two more content-filled paragraphs plus a final conclusion one.

In her revision, she stated that the first and last paragraphs were fine if there were only words or phrases in language one. However, those central paragraphs had a version in Spanish and right after it a translation with the gaps of words, phrases or sentences that needed an accurate translation. It seems like this is a solution for the cognitive load involving the task (Sasaki, 2009; Kobayashi & Rinert, 2009). Our participant discussed this problem concerning the cognitive load later when she says that she has looked up some words and expressions in the dictionary and she goes for them as soon as the revision starts.

She wrote four paragraphs and the second and the third were in Spanish with a translation of the text in English and some words or sentences in capital letters, which she used across the text in English so that it stood out clearly, between brackets in the text in Figure 31:

The film about "The Boy in the Striped Pyjamas" is the story of the (NACISMO) in the society. Show the situation of the two parts. On the one hand, show the actions of the (SOLDADOS NAZIS) and the actions of the child that he is the (HIJO) of the (SOLDADO NAZI AL MANDO). And the other hand, show the life of the (JUDIOS), they have a horrible future because they are (CONDENADOS) to live and suffer in (SUFRIR EN UN CAMPO DE CONCENTRACIÓN), but (CONCRETAMENTE) the one child that the only have a father because his granfathers died when arrived to the (CAMPO DE CONCENTRACIÓN)

(En primer lugar, la valla en la parte del niño hijo de un soldado nazi, simboliza la inocencia que tiene él. En un principio la valla le parece algo inofensivo y cuando le da con la pelota es cuando se da cuenta de que es una valla electrica. Cuando conoce al otro niño judío, la valla no le supone ningún impedimento ya que acaban siendo amigos y juegan a través de ella. Finalmente por parte de este niño, llega un momento en la pelicula en que la valla deja de ser totalmente una barrera y la traspasa para pertenecer al mundo de los judios.)

Firstly in my opinion, (LA VALLA) in the part of the child (HIJO DEL SOLDADO NAZI SIMBOLIZA) the innocence of his. (EN UN PRINCIPIO LA VAYA LE PARECE ALGO INOFENSIVO) and when he play with the balloon and this touch (LA VAYA, ES CUANDO SE DA CUENTA DE QUE TIENE ELECTRICIDAD) but he don't (NO ENTIENDE POR QUÉ). When he met the other (JUDIO) child, (LA VALLA NO LE SUPONE NINGUNA BARRERA YA QUE ACABAN SIENDO AMIGOS) and they play together (A TRAVÉS DE ELLA). Finally (POR PARTE DE ESTE NIÑO LLEGA UN MOMENTO) in the film (EN QUE LA VALLA DEJA DE SER TOTALMENTE UNA BARRERA Y LA TRASPADA PARA

Figure 31. Group 3. Participant 2. EFL Version 1 text.

She showed she was aware of the fact that she would have a second session with the possibility of looking up the words or expressions she would need. Nevertheless, she succeeded at remembering some words at the beginning and failed to recall most of them as she had not been able to remember them in the meantime and

never checked them out. As she carried out the revision and edited a some parts of the text (words, groups, sentences or even paragraphs), she realised she had forgotten the words she remembered to have looked up, she put into practise some other compensatory strategies that helped monitor her text: she deleted the irrelevant or unknown information, she paraphrased or she even let a sentence incomplete. This is a feature of those EFL writers with limited linguistic competence in EFL (Silva, 1993; Stevenson et al., 2006; Tyriakoglu et al., 2019)

All in all, revisions differed substantially due to the use of the L1 in the EFL revision. The translation of words, groups and even sentences set the direction of this revision as there was barely a reflection on the content or organisation as that had been done before and the draft for those ideas to be deployed in the text had been done in the first session.

The EFL revision turned out to be an exercise of translation from L1 into EFL that lost accuracy as revision went by. On the other hand, the use of a text and words in L1 to guide revision allowed this participant to maintain an accurate text structure as well as an appropriate distribution of contents according to the writing task. These findings suggest that this participant's writing skills are consolidated according to the task and its genre particularly in EFL (Leki, 1998; Murphy & Roca de Larios, 2010), she would need, however, to improve her language proficiency. Furthermore, according to the questionnaire, she was aware of the use translation and she was not conscious of how often she employed deletion. She did not have to care about the development of ideas in the text as she had already set the outline in Spanish.

Group 3. Participant 3.

Table 82. Group 3. Participant 3. Experimental Condition 3. Revision Data.

	L1 - Spanish	EFL
Revision Time	00:04:15	00:03:55
Transformations	6	5
Version 1 Length	332w	220w
Revision Length	327w	217w

Table 83. Group 3. Participant 3. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	1	1	1	1
Text Organisation	2	2	2	2
Grammar	3	3	1	1
Vocabulary	2	2	1	1
Mechanics	1	1	1	1

For this participant revisions took a similar time in both languages and consisted of similar actions and very similar strategies as depicted in table 82. On the other hand, the quality of texts did not improve after revision in neither language as table 83 shows.

Transformations L1

Adequacy

He declared he thought about the task and the reader in his questionnaire. He did not show much of it but changed a sentence just to adjust it to the writing and improve the register. That is probably what he implies when he said that it sounded better.

G3.P3.L1			
Begin	End	Text transformed	Transcription
00:03:05	00:03:15	3 rd paragraph Substitution Sí que es verdad New text Es cierto	Voy a borrar esto y voy a poner. Lo he sustituido porque quizá este conector queda mejor que el otro que había.
'I am going to delete this (phrase) and I am going to write ("Es cierto"). I have replaced it because perhaps this connector sounds better in the sentence than the previous one'			

Cohesion

In terms of cohesive elements, within the few transformations implemented by this participant, there were some instances. He reflected upon the use of connectors and punctuation in the text. He deleted and added, in line with what he replied in the questionnaire. He went for an infrequent use of adding contents and he rather went for deletion or substitution, which he did in a very small scale. He also rearranged a paragraph that will be commented later on.

G3.P3.L1_2			
Begin	End	Text transformed	Transcription
00:00:55	00:01:00	2 nd paragraph Substitution Sí que New text ,	Voy a eliminar esas dos palabras para poner una coma, lo he puesto más que nada porque pienso que como norma ortográfica encaja mejor.
'I am going to use a ";" (semi-colon) to clarify'			

Coherence

This revision did not help much improve the quality of the text. Nonetheless, a few interesting aspects could be noticed. He had stated in the questionnaire that he envisaged rearrangement as a strategy for revision. He did so in order to reorganise the structure of the text. He did not add content just an addition that had to do with the correct use of a connector as explained below.

G3.P3.L1_7			
Begin	End	Text transformed	Transcription
00:02:35	00:02:45	3 rd paragraph Rearrangement Last 5 lines of the second become the third paragraph	Bajo otro párrafo porque considero que bajando es como para cortar y tener otra idea.
'I am putting down this paragraph because I consider that, by doing that, I am providing a new idea'			

Correction

There were no instances of correction in terms of spelling or grammar, although he had made some blatant mistakes. His metalinguistic awareness did not allow him to spot such errors, it was quite unusual for an undergraduate pre-service teacher even in L1. He admitted he cared about it frequently in the questionnaire but he did not in L1 and neither did he in EFL.

Reading

This participant read silently both texts and started transforming the texts as he went through the paragraphs. That is what he stated at the beginning of his revision. Contrariwise to what he did during the process of revision, when he filled out the questionnaire he answered that he read the text aloud while revising.

G3.P3.L1			
Begin	End	Text transformed	Transcription
00:00:00	00:00:45	NONE	Voy a leer a ver si mejoro la manera de escribir... Después de haber leído el primer párrafo pienso que lo voy a dejar igual, a ver si luego cambio algo.
'I am going to read just to try to improve my writing... After having read the first paragraph, I am going to leave it like that, maybe later I will change something'			

Transformations EFL

This participant's EFL proficiency barely reached the A2 level. The quality of his text did not improve after revision. It was the same as before revision and grammar and spelling mistakes were spotted in his text in English. He missed them badly. In fact, he was conscious of that:

G3.P3.EFL_1			
Begin	End	Text transformed	Transcription
00:00:00	00:00:48	NONE	Estoy leyendo el texto que escribí el otro día en inglés, voy a ver qué puedo solucionar.
'I am Reading the text I wrote the other day in English, I am going to check what I can solve'			

Adequacy

No instances or efforts to change the register or any other features of adapting the text. It is a usual behaviour in limited language proficiency writers and, especially, in EFL.

Coherence

He hardly took care of the content and just added a sentence to complete a line. As it can be assumed it had no influence over text quality.

G3.P3.EFL_4			
Begin	End	Text transformed	Transcription
00:01:25	00:01:30	1 st paragraph Addition Or other races	Voy a añadir otro elemento.
'I am going to add another element'			

Likewise, he split a paragraph into two. She had done the same in the L1 revision and it made sense.

G3.P3.EFL_6			
Begin	End	Text transformed	Transcription
00:02:00	00:02:20	2 nd paragraph Rearrangement Separates paragraph	Como para clarificar que es un tema distinto: un párrafo nuevo.
'As a way to make clear it is a different topic: a new paragraph.'			

Cohesion

He did paid attention either to the elements that could connect sentences or boader parts of the text.

Correction

Even though he had stated he paid attention to grammar and spelling mistakes, the text is full of them and very few were corrected.

G3.P3.EFL_8			
Begin	End	Text transformed	Transcription
00:02:40	00:02:45	3rd paragraph Substitution Ont New text one	Corrijo una falta de ortografía Q: ¿Qué pasaba?) A: Que había una falta de ortografía
'Now I am correcting a spelling mistake. Q: What was the matter? A: There was a spelling mistake'			

In line with the other participants in this group - EFL low proficiency writers - his transformations are mostly in low-level features (Manchón & Roca de Larios, 2011; Tiryakoglu et al., 2019) such as word choice, spelling and grammar mistakes

On the other hand, he is the only participant in this group that was openly aware of the organisation of the text. In both texts, he realised that a long paragraph could be divided into two and he did improve the organisation of the text as Chenoweth & Hayes

(2001) identified for writers with a higher FL proficiency. He did not elaborate on the topics well enough, though. From this statement, a likely explanation is that this participant was aware that paragraphs are units of meaning in itself that complete part of the whole meaning of the text and he lacked of some necessary EFL linguistic knowledge regarding those formal aspects mentioned above.

Reading

He engaged in silent reading as he did in L1 and in both questionnaires he contradicted what he eventually did. Reading is the essential activity in revision and he spent most of his time doing that.

Group 3. Participant 4.

Table 84. Group 3. Participant 4. Experimental Condition 4. Revision Data.

	L1 - Spanish	EFL
Revision Time	0:09:40	0:09:45
Transformations	12	8
Version 1 Length	232w	212w
Revision Length	376w	356w

Table 85. Group 3. Participant 4. Analytic text quality before and after revision in L1 & EFL.

Text Quality	Version L1	Revision L1	Version 1 EFL	Revision EFL
Content	2	2	2	2
Text Organisation	2	2	3	3
Grammar	3	3	1	1
Vocabulary	2	3	2	2
Mechanics	2	2	1	1

Coincidentally, this participant's revision took more or less the same amount of time and it was also distinctive from the others as he spent most of the time in both sessions rereading his revision and undertook some transformations after he had gone through the whole text (advanced planner) and Table 84 makes it evident. However text quality only improved with respect to vocabulary in L1 as most of the transformations focused on that particular aspect (Stevenson et al., 2006). He made sure he found out the names of the characters as he could not remember them in his first version which had baffled him up to a certain extent.

With respect to text quality, formal aspects remain in low levels in consonance with his EFL proficiency, the aspects related to organisation of text and observation of genre improved, though, as depicted in Table 85.

Transformations L1

This participant was aware of the cues he had left on the text so that he could remember which words he had to change when facing revision. By leaving the gaps in the first version, this participant and the rest of those who carried out the same strategy overlooked the possibility of using paraphrasing or rewording (Roca de Larios et al., 2008; Stevenson et al., 2006). They took advantage of deferred revision in order to do so.

Coherence

In his revision of this text that he wrote in Spanish, he went for the gaps he left in the second paragraph, typed them and got back to the beginning of text where he started reading silently. He brings up a recurrent feature of which he seems to be aware: the working memory:

G3.P4.L1_1			
Begin	End	Text transformed	Transcription
00:00:15	00:00:20	2 nd paragraph Addition Bruno	Voy a añadir los nombres de los chicos de la película. Los cambio porque, si no, luego se me olvidan.
'I am going to add the names of the boys in the film. I am changing them because otherwise I will forget them.'			

Cohesion

Once he had made sure he remembered the names of the boys in the second paragraph. He reread the text several times. Later on, as he revised the text, he represented the text mentally and concluded it when he read the first paragraph.

He also made use of addition so that the meaning of the story, in his own words. He actually did not add much. When he implemented those changes in L1 and EFL he claimed:

G3.P4.L1_8			
Begin	End	Text transformed	Transcription
00:03:10	00:03:30	2 nd paragraph Substitution y de repente New text De repente,	Lo he cambiado para añadir un poco de texto y se entienda mejor la historia.
'I have changed it to add more text and to try to make the story more understandable'			

Correction

During the time he was reading, he focused on spelling mistakes he had overlooked before. Although he had answered he cared about the macro-meaning of the story he put forward, his revision revealed his attention was on superficial, meaning-preserving modifications.

Reading

By and large, he was the participant, in the whole study who spent more time reading after he had claimed he had revised the whole text before. As he revised the whole text from the beginning to the end, he paid attention to form. He spotted two spelling mistakes. Rereading several times was used to evaluate the text (Roca de Larios et al., 2008; Tillema, 2012), however, he did not introduce severe changes that affected the meaning either locally or globally.

At this point, and once he had made sure all the gaps he had left for names of the characters were properly replaced he started to read silently again, which is an action that none of the participants in this group had done. After 5 minutes of revision, he read silently in case he could add some more information.

G3.P4.L1_15			
Begin	End	Text transformed	Transcription
00:05:15	00:07:15	NONE	Estoy leyendo a ver si puedo añadir algo más, desde el segundo párrafo, es dónde empiezo a hablar ya un poco de la valla. Es que el significado de la valla yo creo que es ese.
'I am reading in case I can add something else, from the second paragraph that is when I start to talk about the fence. The thing is that I think that (what he referred to in his text) is the meaning of the fence'			

Transformations EFL

Coherence

As in L1, this participant read the text silently. This was the beginning and started his revision as he came across what he found suitable to be edited. As he went through the text, he added some words. In two cases he states that it has to do with the content and will improve the understanding of the message:

G3.P4.EFL_3			
Begin	End	Text transformed	Transcription
00:01:35	00:01:40	1 st paragraph Addition With this age	Voy a añadir esto para que se entienda un poco más la frase y ya está.
'I am going to add this bit ("with this age") so that the sentence que be more comprehensible and that is it'			

Correction

At the same time, reasoning for discarding other options took place: he felt that what he had written was not correct, he should not go for a false friend and chose a simple option that made more sense:

G3.P4.EFL_8			
Begin	End	Text transformed	Transcription
00:04:10	00:04:30	1 st paragraph Substitution Have New text Does	Esta palabra la voy a cambiar porque “have” es “tener” entonces “hace actividades” (translates from the text in English). Aquí quiero poner “aquí podemos ver a una persona que realiza actividades...” es que “realise” era un false friend, creo, entonces voy a poner “he does”.
‘I am going to change this Word because “have” is “tener” then “hace actividades”. What I mean to say here is “aquí podemos ver a una persona que realiza actividades...”; the thing is that “realice” is a false friend, I think, so I will say “he does”.			

He did add some information that involved the comprehension of the role of a character. In this attempt, he added a sentence to the second paragraph but made a spelling mistake that was repeated in the text (“because”) and a grammar mistake, as he was unable to use the infinitive properly. However, by doing that, he improved grammar and meaning. Before he finished, he read the whole text again.

Reading

After three and a half minutes of revision, he read the whole text. It is then, at a point at which some other participants decided to finish their revision, when he confirmed that he needs rereading from the very beginning.

G3.P4.EFL_6			
Begin	End	Text transformed	Transcription
00:03:25	00:03:30	NONE	Voy a pegar otra leída pero creo que ya está
‘I am going to reread it again but I think I am done’			

That second part of a revision lasted twice the time, during which the revision went the same way, editing started in the first paragraph and goes forward. The transformations had to do with spelling, grammar or word choice that turned out to

improve the formal correction of the text. In the case of the word choice, he verbalised in Spanish the text that was written in English.

4.3.4. Discussion

In this exploratory study, the processes of deferred revision carried out by expert writers and pre-service teachers with different EFL proficiency level have been illustrated. Participants have showed diverse patterns of facing this particular type of revision in both languages in accordance to what Silva (1993) described when analysed several L1/EFL studies. Although, according to previous research (Tillema, 2012; Van Weijen, 2008), the amount of texts written in order to ascertain a writing style or describe individual writing patterns would need to be at least four texts in a given language. The results of this study suggest that some features are shared by participants with their groupmates and with other participants in the other groups. In relation to the results, we have accounted for before, some significant aspects are emphasized straightaway.

On the one hand, expert writers cared about the formal aspects of their texts either in L1 and EFL as much as PSTs in both, the intermediate and elementary groups. Experts went as far as the sentence level and introduced optional changes in their L1. They frequently verbalised that they had their readers in mind and their transformations were carried out with such purpose which stands in line with previous findings (Van der Bergh & Rijlaarsdam, 2001). However, very little content was added and the cohesion and coherence were little affected, besides, the quality of texts did not improve prominently in any case which is common feature among L2/FL writers (Tiryakoglu et al., 2019) but not quite so for L1 writers. The effects in the first study uncovered a shifting self-perception of the writers on aspects related to coherence (the organisation of the content through the texts) which may suggest that participants realised they had probably faced revision, in general terms, revising lower-level features and the completion of the tasks altered their perceptions.

The TAP revealed that experts appeared to be more satisfied with the text from their first version. Intermediates and elementaries PSTs were not as much, besides with respect to either the meaning of the text or the formal aspects - grammar, spelling and vocabulary - they mostly implemented transformations of the latter sort in both L1 and

EFL. However, those PSTs who did change in terms of meaning in L1 did so too in EFL.

In contrast, the use of metacognitive strategies differed. It all seems to suggest that experts rely on their language and writing proficiency to be self-confident on their first versions and during the deferred revisions of their texts. They showed to be aware of what the task entailed, how they should face the first and the second version and they were conscious of their EFL proficiency and up to which extent it could exert an influence to their texts.

It could suggest that experience provides writers with a metacognitive knowledge that brings about a sense of self-indulgence or self-reliance, particularly if they are sure of themselves in terms of language proficiency. This could also be applied to intermediate participants as some of them showed similar characteristics, however, intermediates overlooked formal mistakes and failed to improve aspects related to the content and coherence despite their efforts.

Another relevant finding that stood out was the fact that the EFL proficiency had an impact on text quality. However, some participants in all three groups failed to fully meet the features of an essay although they had had time between the first version and revision to check the requirements of the task and get familiar with the writing medium (Van Waes & Schallens, 2003) in terms of content and organisation. It could imply that they had not a completely accurate representation of the task, or they performed it partially. Despite that in the pre-task questionnaire everybody had declared a frequent attention to the reader of the essay structure (Cf. Section 2. Study 1). Such outcome could also be a part of the consequence of the overload of the working memory (Kellogg, 1996) particularly in EFL.

Another salient feature is the generation of sentences with respect to the time spent and the resources employed. Longer revisions took a long time in some of the biggest chunks of text whether added or substituted. Sentence generation occupies a great place in the use of the WM depending on the structure of the sentence and the grammatical features involved (Kellogg et al., 2016). The inclusion of a more data would provide further insights if the written products were to be approached from the ability to deploy syntactic awareness (Celaya & Navés, 2009).

TAP did also turn out to be a suitable resource to collect the data for qualitative analysis and the verbalisation of actions provides a deeper insight into the patterns followed by participants. It has also become evident that typing and expressing one's thoughts at the same time was an effortful job (Tillema, 2012). The whole process of revealing the intentions during the monitoring of the actions undertaken has turned out to be very demanding in terms of attention for both participants and researcher. In fact, TAP revealed as in previous studies (Chenoweth & Hayes, 2001; Van Steendam et al., 2010; Stevenson et al., 2006; Tillema, 2012; Tiryakoglu et al., 2019; Van Weijen et al., 2009) several compensatory strategies such as substituting words or changing the intended meaning because of the limited EFL proficiency (Murphy & Roca de Larios, 2010; Tiryakoglu et al., 2019). They were aware of their use as one of them stated in segment G3.P4.EFL_13:

La frase esta la canvie. Estic dubtant en com es "valla" sé que està mal perquè així no me sonava. Ho esborre tot i deixí, esborrí algunes paraules ometent informació. I vaig afegir la frase final, afegint informació.

I am changing this sentence. I am not sure how to say "valla" (fence), I know that is wrong since it did not ring a bell like that [she had written "ferer" instead of "fence"]. I deleted some words and omitted some information. I added the last sentence which added some information.

All in all, after having dealt with all the cases of delayed revision of L1 and EFL texts some points should be taken into account:

Representation of the task

Participants had different representations of what the whole activity was like even when they had received written and oral instructions and had been given time to ask questions about it before the first version and revision. Deferred revision is not a recurrent activity and it was understood in different ways. It was, supposedly, a time to stick to the topic and engage in error correction although the way to carry out the whole process in L1 and EFL was different as it was portrayed. Maftoon et al. (2014) asserted that their participants assumed their texts' quality would improve if they had time for a deferred revision. Nevertheless, the results we got so far do not lead us to support that participants took a great advantage from this type of revision in terms of

quality and deployment of metacognitive regulation or self-regulation strategies that guided it. Being so, some authors have stressed the need of special training for students and teachers' trainers (Fidalgo et al., 2011; Graham & Harris, 2017; Kodituwakku, 2008; Ruan, 2005; Xiao, 2007).

Textual properties

Since we approached our analysis by explicating the awareness of the observation of the textual properties it is fair to state that all of them were taken into account by participants. It is evident that correction was on top in terms of predominance and knowledge. Smaller attention was paid to aspects concerning macrotextual relationships, particularly in English (Silva, 1993). Explicit reflection and intervention needs to be considered (Crossly & McNamara, 2016), especially if text quality in those terms is not greatly improved.

Use of information gaps

Some participants left gaps to be fulfilled in the deferred revision. They were used as signs and recalling points to make sure which aspects they need to check after the completion of the first text (Stevenson et al., 2006). That seems to suggest that it was either a strategy put forward during previous instruction or it could mean a spontaneous way of signposting. Some of them used those cues to translate into English the meaning they had elaborated in their L1.

Use of several languages during revision

One of the features of the participants was the arbitrary use of three languages all along the deferred revision which defined them as “multicompetent language users” (Machón et al., 2009, p. 7). It must be noted that only Catalan speakers engaged in trilingual translanguaging (Velasco & Garcia, 2014) - writers whose linguistic repertoire included several languages at an academic level - whereas participants who had Spanish as first language moved only from their L1 to English and the other way around.

Trilingual translanguagers engaged in sophisticated switches as they carried out their revision under a TAP. Particularly during the backtracking phases of their

texts. They reread the texts in English and some of them translated literally to check if they had written in English what they meant to say in L1 or L2. In fact, one of the characteristics of this study is the fact that some L1 Catalan participants who wrote in English translated into Spanish while engaging in this activity. It was noticeable that most of them, according also to the objective of their revisions, engaged in a retrospective backtracking to check “the correspondence between their communicative intention and their linguistic expression” (Manchón et al., 2009, p. 113).

Use of languages in writing and TAP

As stated the TAP was conducted in participants' L1s which did not correspond to the language they chose to write their texts in. It shows the evidence of a language in contact context with the uses of languages depending on the task and the environment in which communication takes place. At least one participant in each group wrote in Spanish even though his/her L1 was Catalan. Moreover, one participant in the elementaries group opted for a text in English, 'rejected units' in Spanish that would guide later editing and TAP in Catalan. Such activity requires further interest in terms of morpho-syntactic deployment (sentence generation) and meaning-making in relation with the impact of WM capacity in the whole process and text quality.

Use of L1 in EFL writing

In a way or another, all participants in the elementary group and one in the intermediate one used such strategy as a self-regulating and compensatory operation (Allal & Chanquoy, 2004; Manchón et al., 2009) they translanguaged to guide them through revision. In fact, the use of L1 lead their revision since they used was a priority for three out of the four participants in the group. In our study, participants used it mostly in order to monitor their writing process and help set the outline to generate and organise ideas (Manchón et al., 2009; Ruan, 2014; Sasaki, 2009).

The use of these whole units (words, sentences or paragraphs) in L1 in EFL texts, L1 was used in their texts and appeared in their first versions. These 'rejected units' (Celaya & Navés, 2009) which are part of the cross-linguistic influence of the L1 & L2 (in this multilingual case) in EFL writing. None of the participants left a L1 term in their EFL texts once they handed in their final versions of revision. These items

in L1 on the texts were used as cues or signposts, in fact three participants left words or even sentences in L1 to be looked up in the meantime and translated during revision. Those words did actually guide the revision as participants changed them as soon as revision began. One of the participants who used the L1 guide revision. She wrote several sentences, even paragraphs that she either deleted as she could not remember or was not able to translate the L1 text. She also declared she had looked up words and information but could not recall the whole amount of data she needed.

That was a strategy implemented by the participants with the lowest EFL proficiency in the intermediate group and three of the elementaries. They were aware they did it and why they used it. Indeed one of the participants from the elementaries group observed that in the segment G3.P3.LE_10 when she stated that:

Jo vaig escriure el paràgraf en castellà, el vaig traduir i vaig posar les paraules que no sabia entre parèntesi. Ara ja el tinc traduït i el puc esborrar.

I wrote the paragraph in Spanish, I translated it and wrote the words I did not know between brackets. Now that I have translated it [into English], I can delete it.

Translation

Most of the participants used translations as they read during the EFL writing text and, particularly, deferred revision. Translation from EFL to L1 or L2 stands for one of the features of the multilingual setting and the diglossic use of languages in education took place while revising in EFL. Different participants translated their so-far texts from English to their L1 or L2. In all three groups there was at least one of the participants who had Catalan as the first language and some of them wrote in Spanish. As depicted above, some of them wrote their texts in English, translated into Spanish to make sense of the text and spoke out loud their reasoning in Catalan if that was their L1. This phenomenon and its implications calls for future research.

4.3.5. Appendix

Experts

G1. P1. Condition 1. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:00:50			Silent reading
2	00:00:51	00:00:55	1 st paragraph Deletion Su necesidad de jugar	Voy a suprimir esto porque esta frase está mal construida	
3	00:01:00	00:01:05	1 st paragraph Substitution le lleva New text lleva al alemán		
4	00:01:10	00:01:15	1 st paragraph Addition de la valla		
5	00:01:15	00:01:55			Silent reading
6	00:01:55	00:02:05	2 nd paragraph Deletion a lo que tememos	Voy a suprimir esto porque no añade mucha información	
7	00:02:40	00:03:10	2 nd paragraph Substitution el miedo simboliza New text Construimos vallas ante el miedo que nos suscita lo	He sustituido porque luego en la segunda frase he puesto simboliza otra vez y luego no era lo que quiero decir: la valla no simboliza el miedo si no la barrera que ponemos ante el miedo.	
8	00:03:10	00:04:10			Silent reading
9	00:04:15	00:04:20	2 nd paragraph Rearrangement Separate into different paragraphs	Ahora voy a hacer un punto y aparte aquí que queda bien, se lee mejor y empezamos otro tema	

10	00:04:25	00:04:40	3 rd paragraph Substituion el niño aparece como un ser New text el niño alemán es el ser		

G1. P1. Condition 1. EFL Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:00:30			Silent reading
2	00:00:50	00:01:25	1 st paragraph Addition J.K. Rowling	Voy a escribir el texto, voy a añadir el nombre de la autora de las novelas de Harry Potter. Voy a ver dónde pongo el nombre para que la frase tenga sentido.	
3	00:01:30	00:01:45	Reads aloud		
4	00:01:50	00:02:25	1 st paragraph Deletion Harry	Voy a suprimir el nombre de Harry porque realmente no hace falta. (Reads the text out loud) Sí, así tiene ritmo.	
5	00:02:25	00:02:50			Reads aloud
6	00:02:50	00:03:05	1 st paragraph Substitution The story of HARRY Potter New text HARRY Potter stories	Reads the new text as she types it	
7	00:03:05	00:03:10	1 st paragraph Addition that became	Reads the new text as she types it. And rerads it out loud again	
8	00:02:50	00:03:05	1 st paragraph Substitution The story of HARRY Potter New text HARRY Potter stories	Reads the new text as she types it	

9	00:03:25	00:04:40			Alternates silent and loud reading
10	00:04:45	00:04:50	2 nd paragraph Addition for the kid		
11	00:05:10	00:05:15	2 nd paragraph Deletion Not nice for the kid at all	Voy a suprimir esta frase porque es como muy coloquial y el texto bastante formal con lo cual ese 'not nice at all', no es formal, se diría en el lenguaje hablado	
12	00:05:20	00:06:45	Reads 3 rd and 4th paragraph		
13	00:06:45	00:06:50	4 th paragraph Addition Always	Voy a añadir 'always' porque queda mejor	
14	00:06:55	00:07:00	4 th paragraph Addition he	Voy a añadir el sujeto	
15	00:07:05	00:07:10	4 th paragraph Spelling goog New text good	Aquí tengo una errata voy a poner una del lugar de la 'g'	
16	00:07:25	00:07:45			Reads aloud
17	00:07:50	00:09:45	4 th paragraph Addition Apparently when the lord of darkness tried to kill Harry, the baby was like a mirror and that was the cause of Voldemorts dead.	Voy a añadir algo porque esto me ha quedado así. El problema es que el texto no está centrado en el tema que se me ha dado. Yo estaba contando muchas cosas y me he dejado el meollo de la cuestión para el final	

G1. P2. Condition 2. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:00:20		Esta frase potser és massa llarga però és inevitable"	Starts reflecting on the sentences of the text. The text is not broken down into different paragraphs the whole text is a paragraph!
2	00:01:45	00:01:50	1 st paragraph Substitution La nissaga situa Harry New text Harry se situa	Així és més fàcil d'entendre tal i com està escrit la nissaga, sona molt fort Trobe que sobrava, de vegades repetir-se... trobe que més avall també ho dic	
3	00:02:35	00:02:40	1 st paragraph Deletion la nissaga	He llevat la nissaga una vegada més. quan ho he vist la primera volta em sonava que hi hagut ahí	
4	00:03:30	00:03:35	1 st paragraph Deletion En aquesta pel·lícula"checked	He llevat l'última part de l'oració. Em preocupe molt per les frases molt llargues, algo que retrec als meus alumnes i que després faig jo és per una qüestió de semàntica"	It is a minor meaning issue.
5	00:04:20	00:04:25	1 st paragraph Substitution de l'estil de New text com ara la de	Este de l'estil de no m'agrada, 'la figura profètica' (l'lig en veu alta) L'arrel és pràcticament la mateixa - No és un camp semàntic perquè el contingut és quasi bé el mateix	
6	00:04:50	00:05:15	1 st paragraph Substitution la meitat bondadosa New text a bondatdecision	Cap a la meitat bondadosa, en comptes d'incidir més en les bondats i els contes binaris, més curt i més senzill	

7	00:05:30	00:05:35		Ahí tenim una frase de 7 o 8 línies, mare de Déu senyor	Judgement
8	00:05:55	00:06:10	1 st paragraph Substitution - sí que es pot identificar en en els i les lectures de la nissaga una certa adulació New text Sí que es pot identificar article the una certa adulació en el públic lector	Canvie les frases en llenguatge genèric P: Una qüestió estilística? R: Exactament	
9	00:06:10	00:06:15	1 st paragraph Addition Full stop	Separate les frases, (llig rapid en veu alta)	The participant spends a minute thinking of the appropriateness of the sentence in the paragraph. The modification is
10	00:06:45	00:06:55	1 st paragraph Substitution En aquest sentit veneren no només per així, no només veneren	Canvie este no només d'ací lig en veu alta el que va escrivint	
11	00:07:50	00:07:55	1 st paragraph Deletion entral Although	Vaig a llevar central, sobra. Com que ací estic afegint connotacions negatives, convindria ficar un connector: encara que, si que hi ha coses que hem de destacar"	
12	00:07:55	00:08:15	Finally	Crec que sí, clar! (as he separates part del text sentence in a different paragraph types)	
13	00:09:37	00:09:40	2 nd paragraph Addition També	Trobe que completa la frase, es la part critica de la profecia i la part critica de l'individualisme	

G1. P2. Condition 2. EFL Transcription

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:01:30	00:02:10	1 st paragraph Deletion The direction of	Estem en el primer paràgraf, supose que serà per a reduir la complicació[...] Ho he llevat perquè no quedava massa clar. En el nou text he posat el subjecte més clar. Quan escric en anglés mire a vore on està el subjecte. Torna enrere.	
2	00:02:30	00:02:55	2 nd paragraph Substitution Reality New text The real life	Aquesta es una substitució... per llocs comuns del llenguatge,estic pensant en la cançó de Queen. Is this the real life? Avoltes eixos llocs comuns si en la cançó es diu això en la cançó, a lo millor queda millor així eixa expressió	
3	00:03:35	00:04:30	3 rd paragraph Deletion Just as his colleague	Suprimisc això per a no afegir complicacions, quan escric de vegades, després et rellegies i dic què complicat. Tendisc a fer les coses més curtes en la segona escritura. O buscar maneres de dir les coses més senzilles. Estava preparant una història per a un congrés i utilitze el Googles trasnlate, intentes escriure en valencià i t'ix una construcció i et fa la traducció directa i dius no. No queda bé. Ho intente directament	
4	00:05:10	00:05:40	3 rd paragraph Rearrangement This is what, in sociology, we call	Sonava millor. Al final en canvis xicotets... l'abús del canvi xicotet	
5	00:05:55	00:06:15	3 rd paragraph Substitution Nice New text Joyful	He repetit nice abans. Aquesta lhe pensada varies vegades però he posat un sinònim el primer que se'm va ocòrrer va ser eixe que no sé si està bé, espere que sí.	
6	00:06:20	00:06:50	2 nd paragraph Deletion For real	l'he llevat perquè no té sentit afegir, és una traducció de bona veritat.	

G1. P3. Condition 3. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:01:35		A mi el que m'agrada és fer una mena d'introducció i crec que açò em valdria com introducció	Reads aloud 1 st paragraph, hesitates on the spelling of Hogwarts
2	00:01:35	00:02:00		Ací m'ha eixit la vena sociòloga	Reads aloud 2 nd paragraph, justifies the content of that paragraph
3	00:02:05	00:02:20		Jo mentre estic llegint em fixe absolutament en tot, comes, puntuació, accents, expressions i ha de sonar bé! (Què vol dir això?)	Reads aloud 2 nd paragraph, justifies the content of that paragraph. Explains his revision process.
4	00:03:20	00:03:25		Esta idea reforça molt el que acabe de dir	Justifies the word choice
5	00:04:10	00:04:15		Ací també era important repetir el "No todos..., no todos..., no todos..." Està fet a popòsit i també el tema de la sonoritat	Justifies style
6	00:05:10	00:05:15		Un problema que tinc j és que a voltes les frases les faig massa llargues i es pot perdre el fil	Reads the 3 rd paragraph
7	00:05:45	00:06:15	3 rd Paragraph Rearrangement Separates part of a long sentence and divides paragraph		Gets back at the sentence and carries out action

8	00:06:15	00:06:30		Vaig dedicar molt de temps i per això no estic trobant moltes errades ortogràfiques, tipogràfiques, etcètera, etcètera...	
9	00:07:40	00:08:10			Rereads loud 3r paragraph
10	00:08:20	00:09:10			Rereads and hesitates about the spelling of Voldemort.
11	00:09:10	00:09:20		Jo el que intentat ací és anar més enllà de la pel·lícula perquè crec que és el que es demanava en l'exercici. Crec que havia de fer una reflexió que anara més enllà de la pel·lícula	Justifies style and content
12	00:09:20	00:11:40		Crec que a nivell estructural no canviaria res. Ara estic revisant el text a nivell d'estructura, més que detall, vaig a entrar als temes en el contingut, cuidant la forma. El contingut és tan important com la forma, de fet, La forma és part del contingut. Crec que el llenguatge és correcte, és el que es demana, un text formal. El text ha de fluir, si no el lector es perd. Em sembla estrany no haver trobat res que canviar.	Reads aloud

				L'únic problema que pot haver és que les frases són massa llargues però, a priori, les deixaria perquè gramaticalment són correctes. (Incideix en el tema)	
13	00:11:40	00:12:10		Com es demanava una reflexió al respecte, jo ho he dut al meu terreny que és el de la sociologia, una cosa que és impossible separar. Jo sóc jo i la meua formació.	
14	00:12:10	00:12:30		Per si de cas, ho estic tornant a revisar. A més les coses que cite, en ser professor de sociologia, es tracte en classe també. És curiós com a partir d'un tema que aparentment, no té res a vore, com un va enllaçant-ho amb les coses que li resulten familiars (reads aloud) Un últim paràgraph més a mode de conclusió. Tanca el cercle. Des del meu punt de vista un text ha de ser com un cercle.	Reads again

G1. P3. Condition 3. EFL Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:00:40			Reads aloud
2	00:00:45	00:00:50	1 st paragraph Deletion ?	Això ho vaig a comprovar i crec que em vaig equivocar	
3	00:01:10	00:01:30		El que faig és un xicotet resum, ací el tema és el simbolisme de la tanca a la pel·lícula,	Reads aloud and explains his intention
4	00:02:30	00:02:50		Açò formaria part de la pròpia introducció com el tema de la tanca podria representar per a mi dos qüestions diferents. [...] Estem parlant de barreres, estem parlant de límits que separen mons diferents (tradueix el que ha escrit en anglès)	Reads aloud and explains the meaning of the text
5	00:02:50	00:03:20		Igual després busque algun sinònim, no queda mal tampoc...	A word comes up twice in the same paragraph but he postpones the substitution.
6	00:03:45	00:04:00		Ací el que he fet és en dur-me aquest tema de la tanca de metall al terreny de la sociologia i als elements d'estratificació social i per què són importants.	Relates the topic he covered with his field of expertise
7	00:04:35	00:05:30		Quan u no sap sobre què van a preguntar-li, agafa els recursos que té a mà.	Justifies why he chose the topic and thinks about the fact that the reader may not have the knowledge about the topic or the reasons provided.

8	00:05:30	00:07:30		Pense que es correcta eixa expressió Com no és la meua llengua no sé si algunes expressions resulten informals o no massa formals...	It is a a question about “to fit with something”
9	00:07:30	00:08:20			He does not change anything doubts about the choice of a different adjective more formal than 'good'.
10	00:08:20	00:09:40		Es una frase molt llarga però vaig a mantindre- ho com està	Hesitates about the correctness of a grammar structure: 'whether something is real or not'. He eventually leaves it as it is.
11	00:09:40	00:10:25			Justifies the type of text structure
12	00:10:30	00:10:35		Li donen un grau de formalitat més alt	Justifies the choice of not contracting auxiliary verbs and negations.
13	00:10:40	00:11:50			Explains the choices in terms of vocabulary and content and reads aloud at the same time.
14	00:11:50	00:13:50			Explains contents and reads aloud and hesitates.
15	00:14:00	00:14:05	2 nd paragraph Addition 'n'		Adds 'n' de an in front of attractive
16	00:14:20	00:14:25		Lleve açò perquè ja ho sé	He gets rid of a question mark he had used to signpost the words 'concentration camp' since

					he was not sure it was the right expression.
17	00:14:40	00:16:15			He reads all the way down the text and misses two mistakes: 'children life goes' and the article before 'extraordinary'
18	00:16:20	00:16:25		En no ser la llengua materna costa més posar-te a pensar en una llengua que no és el teu	

G1. P4. Condition 4. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:20	00:02:55		Vaig a llegir-lo tot per a refrescar o recordar, perquè clar encara ho tinci, en funció d'això, abordaré, si més no, per parts, val, per a determinar si estic segur que allò que havia d'anar a la introducció ha d'anar o no	Silent reading
2	00:02:30	00:02:40	1 st paragraph Deletion a	Sobra la preposició en eixe complement directe. Ahí plantege el tema a partir d'una pregunta	
3	00:02:55	00:03:20	2 nd paragraph Addition "D'alguna manera"	Ací falta un connector per a introduir eixa idea" "Per a vincular la idea que acabe de dir amb la idea queve després	
4	00:03:55	00:04:15	3 rd paragraph Substitution punt New text coma	Ací fa falta puntuació ... és una oració molt llarga de tres línies i a més hi ha subordinades per ahí. S'ha de segmentar de manera que siga més intel·ligible.	
5	00:04:20	00:04:30	3 rd paragraph Addition subjecte	Fa falta punt i seguit, El subjecte que després reprèn. Punt i seguit. He partit una oració.	
6	00:04:40	00:04:45		Un punt i seguit abans d'eixe connector. He partit una oració ahí. Pose un connector que el que fa és fer una síntesi d'allò que he dit	
7	00:04:55	00:05:10	4 th paragraph Substitution	Vaig a borrar este connector perquè ja l'he usat abans, se repetiria en el	

			D'alguna manera New text així doncs	text per a que no fora massa recurrent"	
8	00:05:20	00:05:45	4 th paragraph Substitution renegueu New text reconegueu	"Ací n'hi ha un error de paraula no sé si és per picatge o per què,	
9	00:05:45	00:06:00			Reads from the beginning of the text.
10	00:06:00	00:06:10	2 nd paragraph Deletion "com avançàvem"	El problema és que havia inclòs moltes subordinades i això dificulta molt la llegibilitat i l'enteniment. Crec que és un element sobre.	
11	00:07:10	00:07:20	2 nd paragraph Deletion Deletes a whole sentence	Ací novament he eliminat una altra subordinada	
12	00:07:20	00:08:40			Reads silently and in a low voice

G1. P4. Condition 4. EFL Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:05	00:02:45			Silent reading
2	00:03:20	00:03:30	1 st paragraph Substitution its - possessiu New text the	La construcció anava forçada, eixe atribut no necessitava eixe possessiu, pense que anglès... ben bé ahí no hauria d'anar perquè focalitze en el subjecte i no en l'argument."	
3	00:05:50	00:06:10	2 nd paragraph Substitution the New text that	Què esta la gent esperant... Crec que faria falta més un demostratiu que un article	
4	00:06:20	00:06:55	2 nd paragraph Substitution seemed New text checked	Ací canviaré un verb, perquè en primera instància, ' <i>la nostra conducta necessita ser aprovada i comprovada pel col·lectiu, la gent que ens envolta</i> ', ací he utilitzat una paraula: semblant, crec que significa. Jo el que volia dir, ací el que havia posat, és una paraula que volia dir comprovada i aprovada... per una qüestió de semàntica. Pensava que és més encertat al que jo volia dir.	Participant translates into L1 as he is reading in FL and reflecting upon the grammar issues in FL. It is a minor meaning issue.
5	00:07:20	00:07:40	2 nd paragraph Substitution he New text	"Ací el subjecte està mal perquè està parlant de JK Rowling, que és una dona, i el subjecte està en masculí, hauria de ser ("she" he types)"	

			she		
6	00:07:50	00:08:25	2 nd paragraph Substitution election New text decision	"Una altra qüestió , ara. És una errada de vocabulari, perquè "election", si no recorde mal són comicis electorals. Estic reparant en canvis semàntics"	
7	00:08:25	00:09:20			Silent reading
8	00:09:25	00:09:50	4 th paragraph Addition article the	"Este paràgraf, després del "finally" parle dels efectes especials i pense que estic focalitzant en això, en els efectes especials i, no estic parlant del gènere, crec que cal un article."	
9	00:10:25	00:11:40	3 rd paragraph	Açò pense que és una altra idea, estic parlant una part tècnica, és una idea que, bé hauria d'anar en un altre paràgraf ja que està on estic parlant de la part econòmica que generen els llibres o les pel·lícules. Hauria de suprimir-la o dedicar-li un paràgraf en especial a eixa idea. Crec que la vaig a suprimir.	Reflection upon the coherence of the sentence in relation with the whole text. Although the ideas are not related to the topic of the essay, they are rather linked to the contents of the film The participant spends a minute thinking of the appropriateness of the sentence in the paragraph.
10	00:11:40	00:13:25	2 nd paragraph Substitution From the other side New text Although	Ja tinc clar les parts del text, cada paràgraf a què esta dedicat i em faria canviar, per un altre cantó, a un altre connector. Ahí he posat Per una altra banda i crec... que seria més apropiat posar "although", que siga concessiu. Estic	The participant justifies the text structure and how the content is arranged. Participant spots a change in the meaning of the paragraph and its coherence with the rest of the

				<p>parlant que no és res nou, no ha inventat res, està basat en contes i mites tradicionals: la figura de l'heroi.</p> <p>Com que ací estic afegint connotacions negatives, convindria ficar un connector: encara que, sí que hi ha coses que hem de destaca, en primer lloc...</p>	text. He makes a mistake in terms of spelling, though!
11	00:13:30	00:14:15	<p>4th paragraph Substitution for the other side New text Finally</p>	<p>Estem palant de les bondats, jo ací hauria de fer (hesitates and rereads the text - mumbles a few unintelligible words- for about 15 seconds) Crec que sí, claro (as he types <i>for the other side</i>)"</p>	Participant changes the discourse marker to introduce a new paragraph with a different sense
12	00:14:20	00:14:30	<p>4th paragraph Rearrangement sentence in a different paragraph</p>	Aquesta idea la vaig a preservar per a un altre paràgraf perquè havíem dit que estava parlant de la part tècnica	
13	00:14:50	00:15:15	<p>4th paragraph Addition But the problem</p>	Not verbalised	The participant starts to add a new line but stops, deletes the line, and starts to type a new line with different content!
14	00:15:30	00:18:05	<p>4th paragraph Substitution But the problem New text Sadly, many adults doesn't like that special effects. They are</p>	<p>"Ha de ser propers al dia a dia (translates what he has written so far into L1) Clar jo ara estic pensant en valencià, en anglés near, no sé si és la paraula (hesitates 25 secs)</p>	<p>The participant hesitates for a while (15sec) Carries on writing and stops after must be for another while (1minute) Continues reasoning of his thoughts and even</p>

			looking for more realistic movies. They must be		
15	00:18:10	00:19:20	4 th paragraph Substitution They must be (Hesitates to find the accurate expression) New text Films must be like our real worlds	Ostras! Com ho dic això? Claro, they are looking for [...] (silence for about 1 minute) En llegir el discurs, he replantejat el contingut. He començat per aquelles coses o carències, la part més argumental que té a vore amb els valors i l'argument i, aquesta segon part que té a vore amb la part més operativa, més logística. He afegit tres línies parlant de per què no podria funcionar eixa pel·lícula.	Word choice is the main hurdle to reach the intended meaning
16	00:20:45	00:22:45	5 th paragraph Addition "Finally, Business is business. Maybe cinemas as an art far time ago, but nowadays, it had to report some money.	La idea que havia desplaçat, que tenia a vore amb els ingressos i els royalties i els beneficis que generava. Que l'havia pegat a la part tècnica. Ja la puc incloure si cree un altre paràgraf, el premi té connotacions negatives.	Types the text silently
17	00:22:50	00:22:55	5 th paragraph Rearrangement "You can see the incomes from royalties"	Val ara ja puc afegir eixa idea	
18	00:23:00	00:23:15		Hi ha alguna cosa per ahí, de vocabulari però no sé resoldre. Ara s'aproxima més al que voldria dir però no sóc capaç ara de...	Reads silently and states a final judgement

				<p>He arribat al límit d'on jo puc corregir perquè no sabria com canvia, hi ha una cosa que dubte si està correctament però és que no sé l'alternativa. Puc notar que hi ha alguna qüestió de vocabulari o d'estructures gramaticals que no sé si són així però ara mateixa no sóc capaç de...</p> <p>Amb els canvis introduïts i, una volta llegits, estic més satisfet. Sé que hi ha alguna cosa, sé que hi ha coses que grinyolen. Si ho canviara, es quedaria coix i no estaria tan content perquè hi ha algunes idees que jo necessite que estiguen ahí.</p>	
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Intermediates

G2. P1. Condition 1. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:00:50	Reads the text silently	Vaig a començar llegint el text per a saber què puc canviar i què no puc canviar	
2	00:01:05	00:01:10	1 st paragraph Addition es decir el Gobierno o los altos mandos	O estava clara, crec que no queda clar que les persones del poder siguen les del govern o l'administració	
3	00:01:30	00:01:50	1 st paragraph Substitution Uno de los que dirige el campo de concentración New text Uno de los dirigentes del campo	Ací vaig a canviar "campos de concentración" per a no repetir en la mateixa frase.	
4	00:01:55	00:02:30			Reads silently
5	00:02:30	00:04:35	5 th paragraph Addition A new paragraph New text De hecho, algunos de los grupos que actualmente luchan por los derechos humanos y por la recuperación de la memoria histórica y que además, están ayudando a las familias de las personas que estuvieron en estos campos a recuperar sus cuerpos, están utilizado la simbología de esta película como lema o símbolo identificador.	Vaig a afegir una informació que he trobat sobre alguns grups de reivindicació contra els camps de concentració que han utilitzat la simbologia de la pel·lícula per al seu lema, el que passa és que no sé quins grups són	Some spelling mistakes

			”		
7	00:05:50	00:06:00	6 th paragraph – at the beginning Addition “Por otro lado	Vaig a introduir un connector, perquè com he afegit un paràgraf nou per a que el text tinga sentit	
8	00:06:00	00:06:55			Reads the rest of the text

G2. P1. Condition 1. EFL Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:00:45			Reads silently
2	00:00:45	00:00:50	1 st paragraph Spelling mistake Addition Appeard New text appeared	Vaig a canviar esta paraula perquè n'hi ha un error	
3	00:01:40	00:01:45	1 st paragraph Substitution have New text Has	Vaig a canviar-ho perquè hi ha un error gramatical	
4	00:02:00	00:02:05	1 st paragraph Substitution their New text His	Este pronom està mal escrit	
5	00:02:15	00:02:20	1 st paragraph Substitution were New text was	Vaig a canviar-ho perquè hi ha un error gramatical	
6	00:02:20	00:03:15			Reads silently
7	00:03:15	00:03:20	5 th paragraph Spelling mistake Addition	Vaig a canviar esta paraula perquè m'he menjat un p	

			opportunity New text opportunity		
8	00:04:15	00:04:25	6 th paragraph Addition full stop	Vaig a ficar ací un punt perquè si no la frase és molt llarga	
9	00:05:10	00:05:20	7 th paragraph Substitution for New text To	Vaig a canviar esta preposició perquè crec que estava mal	Reads silently for a minute

G2. P2. Condition 2. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:10	00:01:30			Silent reading
2	00:01:40	00:02:05			Separates paragraphs with a line so they stand out easily
3	00:02:35	00:03:30	1 st paragraph Substitution se supone que el niño va evolucionando New text podemos observar como los personajes van creciendo hasta convertirse en adultos	Como los protagonistas son niños, hasta que se convierten en adultos	
4	00:04:05	00:05:10	1 st paragraph Substitution pero no es capaz de cuidar de sí mismo, posee una comitiva de guardaespaldas a su disposición New text y por lo tanto todos los personajes tienen la misión de protegerles	Diría que como es el encargado de salvar al mundo, los personajes que le rodean son los encargados de protegerle. En vez de que posee una comitiva de guardaespaldas. Y	
5	00:05:10	00:05:20	1 st paragraph Deletion y por lo tanto todos los personajes tienen la misión de protegerles	Y lo que resta de la frase lo quitaría. "y por lo tanto todos los personajes tienen la misión de protegerles" Creo que poniendo esta frase antes se puede obviar esta frase de antes.	

6	00:05:45	00:07:30	<p>2nd paragraph Substitution Es incluso tratado como un ser superior por sus mejores</p> <p>New text se le ofrece mayor importancia en las películas que a los otros personajes principales</p>	<p>Porque ser superior es como algo Le ofrecen más importancia en la pelis que a Ron y a Hermione estos dos también son personajes principales, a pesar de que gira todo en torno a ellos.</p>	
7	00:07:50	00:09:00	<p>2nd paragraph Substitution en un principio se supone que simplemente nos los presentan como dos amigos del niño elegido, que deberán acompañarlo en su camino</p> <p>New text En la serie podemos observar como en diferentes ocasiones son quienes tienen que defender al niño elegido,</p>	<p>Y aquí cambiaría, porque como he cambiado lo que he puesto anteriormente en el párrafo, Pues queda un poco falto de sentido el resto. Y, en vez de poner que son dos amigos del niño elegido que le acompañan en su camino. Pues podría que, además de ser sus mejores amigos, por lo que hemos dicho antes del contenido, que además de ser sus mejores amigos, pues también hay ocasiones en las que deben defenderle</p>	
8	00:09:30	00:09:55	<p>2nd paragraph Deletion En cambio, una vez transcurre la serie podemos observar cómo pasan a formar parte del equipo de guardaespaldas del niño elegido.</p>	<p>Habiendo cambiado lo de arriba, pues tampoco acabe de concordar con lo que he escrito anteriormente. Lo quitaría.</p>	

9	00:10:00	00:10:50			Silent Reading
10	00:10:50	00:11:10	3 rd paragraph Deletion supuestamente	Si alguien lo leyese no dejarle una remota posibilidad que no fuese así Dejar claro que es así [...] que no fuese ambiguo que fuese claro	
11	00:11:40	00:12:15			Silent Reading
12	00:12:20	00:13:21	4 th paragraph Substitution Salvarnos a todos del terror New text Salvar el mundo	Ampliaría a todo, se supone que Lord Voldemort representa todo lo malo, él (Harry) intenta acabar con todo eso"	
13	00:13:30	00:15:10	4 th paragraph Substitution medicamento que sirve para curar el mundo New text que debe salvar a la humanidad per salvar al planeta	"como he puesto arriba salvar el mundo no me gustaria repetir el término, salvar a la humanidad por ejemplo, [...] Salvar el planeta un término que incluya a todo"	El participant dubta en l'elecció per a cohesionar el text i no repetir la mateixa idea a eixe paragraf
14	00:15:20	00:16:20	4 th paragraph Deletion cuando alguien tiene miedo de pronunciar el nombre de Voldemort o los dementores, piensa en Harry Potter y se le arregla el problema, una especie de religión.	Al revisar el párrafo desde arriba y comenzar a leerlo desde arriba cuando llegas al final, todo lo que se queda al final pierde el sentido si cambias lo de arriba" Creo que es una información que se podría obviar, no clarifica nada ni añade nada	Aportació de sentit dins el paragraf

15	00:16:25	00:16:40	5 th paragraph	Creo que con este párrafo se entiende fácilmente	
16	00:17:30	00:18:55	6 th paragraph	En la película y en los libros se le atribuyen estas características para que el lector o el que lo está viendo tenga la impresión de que también es un ser que está ensalzando.	Alternar la lectura en voz alta y la lectura silenciosa. EL participante mira d'explicar la relevancia del personaje en la historia y la necesidad de ser explícito al texto.
17	00:18:55	00:19:35	per a que no hi haja espai entre ells		Bring paragraphs together
18	00:19:35	00:20:10			Reads the text from the start again
19	00:20:15	00:20:30			lectura en voz alta en trobar algun element susceptible de ser modificat
20	00:20:30	00:20:40	2 nd paragraph Substitution comma New text Full stop	Le daría una mayor pausa, lo que viene a continuación no tiene una relación tan directa como lo anterior	
21	00:20:40	00:21:15			Silent Reading
22	00:21:25	00:21:30	2 nd paragraph Deletion Harry Potter		
23	00:21:40	00:22:45	2 nd paragraph Deletion oració debido a que	"Creo que aquí ya no aparece Harry Potter, es el único humano. Aquí "debido a que nosotros sabemos quien es el niño elegido por eso he quitado el nombre de Harry Potter	

24	00:22:45	00:23:20			Silent Reading
25	00:23:20	00:24:05	Visual arrangement	<p>Este último párrafo lo separaría como conclusión pero también tengo que separar el primero que lo consideraría como introducción.</p> <p>Y, en este último párrafo, cortaría porque creo que este párrafo resume bien lo que dicen los dos anteriores.</p> <p>Dejaría este párrafo como conclusión como conclusión de lo que se ha leído anteriormente"</p>	The text ends up divided into three parts: the first paragraph, a three-paragraph body and one more as a conclusion.

G2. P2. Condition 2. EFL Transcription.

Episode	Begin	End	Text transformed	Transcription	Comments
1	00:00:10	00:02:55		"Si tengo que cambiar lo cambiaré una vez haya leído el texto entero" Lectura silenciosa	Silent Reading
2	00:04:30	00:05:15	1 st paragraph Substitution Horrors human can create New text was a victim of the situation in Europe	"Esto estaba pasando en Europa (el cambio) es por focalizar un poco más, concretar"	
3	00:05:15	00:06:10			Silent Reading
4	00:06:40	00:06:50	2 nd paragraph Deletion your intuition can help you to know	"situación en el la película se ve muy claramente y en el libro se también lo especifica muy claramente y aún careciendo de cualquier sentido de la intuición puedes saber lo que les está pasando al niño porque explícitamente te lo han dicho o lo has visto"	
5	00:07:20	00:07:25	2 nd paragraph Deletion "that"	"para que tenga sentido el resto de la oración que venía a continuación"	
6	00:07:30	00:07:40	2 nd paragraph Deletion Living	was living awful moment living in the territory Si omitimos este living que había ahí incluso ese living de ahí (el segundo) facilita la lectura	

7	00:08:45	00:09:00	2 nd paragraph Substitution certain New text given	igual podría poner at any given time" ... Cuando los chalaos que estaban allí dentro les diese la santa gana, pasaría aquello es algo que no está marcado en el calendario... at a certain time parece algo más concreto y any given time es algo más inconcreto, realmente no lo sabemos	
8	00:09:15	00:09:45	2 nd paragraph Reads aloud		Silent Reading
9	00:10:30	00:10:40	2 nd paragraf Addition -s one → ones		Grammar mistake.
10	00:10:40	00:11:20	2 nd paragraph Addition coma between "men" i "as"	"no sé, creo que la coma ayudaría a recalcar la idea de que su padre pertenecía a ese grupo del que estábamos hablando, le daría más especificidad, te centra más. Como en la coma te tomas una pausa al leer Si lo tienes en una oración así sin coma y sin pausa y sin nada creo que no se le da la importancia que yo le quiero dar ahí.	
11	00:11:35	00:12:25	2 nd paragraph Substitution as we saw on the film New text as the film shows	"por si alguien no lo ha visto... Es una sustitución para ampliar de quiénes estoy hablando... Estoy suponiendo yo que todo el mundo la ha visto así que...	

12	00:13:35	00:13:50	3 rd paragraph		Separates words
13	00:13:40	00:13:50		abans de traduir no cambiaría nada, expresa bastante bien lo que quiero. Al leerlo estoy traduciendo	Translates into L1 aloud
14	00:14:35	00:14:45	3 rd paragraph Substitution likely New text like	likely está bien puesto? Entonces diría like y pondría directamente like y quitaría likely por asegurarme	
15	00:14:56	00:15:00	3 rd paragraph Addition even though	"y aquí cuando pongo la coma, his dad was living like a king, his dad was one of those Esa frase necesita algo entonces pondría even though his dad a pesar de que su padres era uno de esos..." se introduce la frase de una manera mejor	
16	00:16:20	00:16:25	3 rd paragraph Addition how	añado el how si no creo que carece de sentido	
17	00:17:20	00:18:10	3 rd paragraph Deletion coma	lo que pongo antes de la coma no tiene sentido si dejo el verbo detrás de la coma,	
18	00:18:35	00:18:40			Separate words
19	00:18:50	00:20:10			Reads sliently

G2.P3. Condition 3. EFL Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:00:10			Reads aloud
2	00:00:10	00:00:15	1 st paragraph Deletion I'm going to tey to explain	Açò no sé què és, no sé per què ho tinc ahí. Voldria posar "to tell" (She probably meant to say "I'm going to try to explain"	
3	00:00:50	00:00:55	2 nd paragraph Substitution to New text two	He canviat to la preposició per two, no sé per què. Em liaria i ho canviaria	
4	00:01:05	00:01:15	2 nd paragraph Addition scar	Vaig a posar la paraula "scar" perquè no me'n recordava com es deia	
5	00:01:30	00:01:35	2 nd paragraph Addition a scar with the shape of a thunder	He afegit informació perquè crec que és important saber quina és la marca que té	
6	00:01:50	00:02:00	2 nd paragraph Addition "thnder scar"		
7	00:02:00	00:02:15		"his adventures to learn the magical life" repeats magical. Buah, pues no sé si està bé. Ho deixe així.	Hesitates. Reads aloud

8	00:02:15	00:02:45		No m'he en recordat de buscar esta informació i ho deixo així. (She doesn't complete the gap with the info missing. Even without the info the line makes sense)	Reads aloud
9	00:02:45	00:02:50	2 nd paragraph Addition wizardry	He afegit la informació de què va l'escola de Hogwarts	
10	00:03:25	00:03:30	4 th paragraph Substitution three New text four		
11	00:03:30	00:03:35	4 th paragraph Substitution is going to be New text is will be		
12	00:03:35	00:04:40		No vaig a afegir res més per si de cas la fastidie	

G2. P3. Condition 3. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00:	00:00:10	1 st paragraph		Reads aloud
2	00:00:10	00:00:25	1 st paragraph Substitution Auswich New text Auschwitz	Vaig a canviar este nom perquè estava mal. Auschwitz. Que ho he buscat per internet este matí.	
3	00:00:25	00:00:35			Reads aloud
4	00:00:35	00:00:40	2 nd paragraph Substitution que son New text , dos niños,	Vaig a llevar açò que no m'agrada com queda (reads)	
5	00:00:45	00:00:50	2 nd paragraph Addition Shmuel	[y el otro] Shmuel vaig a ficar-lo que no me'n recordava i l'he buscat este matí també en Internet	
6	00:00:50	00:01:10	2 nd paragraph		Reads aloud
7	00:01:15	00:01:20	End of 2 nd paragraph Addition Bruno	Vaig a ficar Bruno ací que queda bé	
8	00:01:20	00:01:30			Reads aloud

9	00:01:25	00:01:30	3 rd paragraph Addition Bruno	(There was a gap)	
10	00:01:30	00:01:35	3 rd paragraph Addition	reads aloud	
11	00:01:40	00:02:20	3 rd paragraph Addition "A Bruno le llama la atención la gran cantidad de personas que se encuentran en dicho campo y la forma tan peculiar que tienen de vestirse, un pijama de rayas azules y blancas"	reads aloud	
12	00:02:20	00:02:35			Reads aloud
13	00:02:35	00:01:25	3 rd paragraph Addition Schmuel	(There was a gap)	
14	00:02:45	00:02:50	3 rd paragraph Substitution Schmuel New text Bruno	Replaces name.	
15	00:02:55	00:03:00	3 rd paragraph Addition Schmuel	(There was a gap)	
16	00:03:10	00:03:15	4 th paragraph Addition Bruno	(There was a gap)	
17	00:03:25	00:03:30	4 th paragraph Addition	(There was a gap)	

			Schmuel		
18	00:03:40	00:03:30	4 th paragraph Substitution ellos New text los internos	Vaig a canviar ellos por los internos	
19	00:04:15	00:04:20	5 th paragraph Addition Bruno	(There was a gap)	

G2.P4. Condition 4. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:05	00:01:30		Vaig a rellegir-lo sencer	Silent reading
2	00:01:30	00:03:00	<p>1st paragraph Substitution aquests obstacles venen marcats per ideologies New text Aquests obstacles són deguts accions marcades</p> <p><i>Falta la a entres deguts i accions</i></p>	jo havia posat que hi havia al Vull posar que aquests obstacles per unes ideologies que tenen seues Has revisat eixa idea per a que s'entenga bé I has afegit una sèrie de paraules Si dius "aquests obstacles venen marcats per ideologies està bé" però així s'entén millor, crec.	Mixes loud reading with the text she intends to write.
3	00:03:00	00:04:00			Very quiet reading, not complete silent though.
4	00:04:00	00:06:00	<p>1st paragraph Addition sense tindre en compte qui és l'altre</p>	He afegit una oració sencera per a que s'entenga millor també, és que a lo millor com tu tens unes idees en el cap i les vols escriure, les escrius i te penses que estan bé però a lo millor l'altra persona que no està en el teu cap no sap el que estàs posant - l'altra persona vols dir el lector - el que està llegint-ho, clar! -Amb el que acabes d'afegir-li	

				- Una millor comprensió - Estàs afegint informació? -No, és el mateix però d'una altra manera	
5	00:04:05	00:04:10	1 st paragraph Substitution ja que New text perquè		
6	00:04:10	00:06:10			Silent reading mixed with some parts aloud
7	00:06:10	00:06:15	1 st paragraph Substitution per què New text que	de per què no, de que no es poden relacionar, la tanca es com un obstacle visible	
8	00:06:55	00:07:05		El primer paràgraf és el que millor explicat, o siga, el que millor dona a entendre la meua opinió del simbolisme de la tanca. Després no recorde molt bé el que ve a continuació però crec que és més explicació del que passa. Crec que estes coses no te les tindria que explicar, no?	Opinion about her own text
9	00:07:10	00:07:40			Reads the 2nd paragraph sliently

10	00:07:40	00:07:45	2 nd paragraph Substitution en anterioritat New text anteriorment	Bueno açò més que res és perquè siga diferent. En realitat és lo mateix però m'agrada més anteriorment. Per criteri propi, -no hi ha canvi de significat, no? -No	Finally as she reads the whole paragraph again, deletes anteriorment for good and nothing replaces the time expression/adverb
11	00:07:45	00:08:10		El problema és que...	Talks about extra-textual content and how it is present in the text
12	00:08:10	00:09:55	<p>Ahí estiguí molt de temps pegant-li voltes. No sé si deixar-ho aixina. Ací jo explique que el problema és que ara te pareix impensable que unes persones poden matar els altres simplement ideologies o per creences. No? però perquè ningú té el dret de llevar-me la vida a una altra persona.</p> <p>Però que ara, per exemple, no hi ah guerres o almenys no hi ha guerres a la majoria dels països.</p> <p>Aleshores nosaltres ho vegem com injust que se facen estes coses i després dic que ara es poden visitar els camps de concentració. A vore, les guerres estes de les que parle ací, no són les mateixes guerres que hi havia. És que antes no era una guerra. Bueno, sí i no! No sé si està ben explicat.</p> <p>Bueno i que dic que ara visitar en un camp de concentració, sí que és possible però has de tindre com la sang molt freda per a poder visitar-lo.</p> <p>Bueno, molt freda, no. Però jo per exemple seria incapaç de visitar-lo perquè em dóna molta llàstima, de fet et vaig escriure això perquè un minut abans d'entrar, una amiga meua estava visitant el camp de concentració d'Auswitz i estava pujant fotos.</p> <p>i me pareix que no has tingut que viure ninguna situació aixina per a que t'afecte tant.</p>		<p>Reads and adds a word at the end of the reading</p> <p>Reasoning</p>

			<p>Ací conte que avantpassats meus sí que han viscut aquestes injustícies quan passaven ací. i açò és lo que crec que no està ben explicat. "I jo com a persona conscient del que va succeir, no, perquè jo no sóc conscient de tot el que va succeir però sí que sóc conscient de la injustícia." (reads text and adds a new word when she finishes reading)</p>		
13	00:09:55	00:10:15		<p>i açò és lo que crec que no està ben explicat. "I jo com a persona conscient del que va succeir, no, perquè jo en realitat no sóc conscient de tot el que va succeir però sí que sóc conscient de la injustícia, ja està" (reads text and adds a new word when she finishes reading)</p>	Gets back to previous sentence to avoid repetition of words
14	00:10:15	00:10:25	<p>2nd paragraph Substitution injustícies New text penumbres</p>	<p>He canviat "injustícies" per "penombres" per a que no es repetisca No sé si està ben escrit penumbres en valencià</p>	
15	00:11:20	00:11:25	<p>2nd paragraph Deletion un</p>	<p>Un suficient, no, suficient. El lleve perquè està mal</p>	
16	00:11:25	00:11:45			Reads the 2 nd paragraph aloud
17	00:12:00	00:12:30			Read the 3 rd paragraph silently

18	00:12:25	00:12:35	3 rd paragraph Substitution infants New text xiquets	Ho canviem perquè abans ja s'ha repetit. Pose infants per que no hi haja tanta repetició de la mateixa paraula	
19	00:12:50	00:13:00	3 rd paragraph Addition Cap	Pose cap per a recalcar que en realitat ells ni són conscients del que ha passat, ni tenen culpa de que haja passat això. El que té culpa és el que té una ideologia que està fent mal.	
20	00:13:30	00:12:50	3 rd paragraph Substitution dic New text refererisc	Crec que s'escriu aixina. He canviat dic perquè és com molt personal, he posat em referisc perquè ells no son conscients... Llig el text a continuació	Still a spelling mistake
21	00:13:50	00:13:55	3 rd paragraph Substitution aquests New text els menuts		Substitutes as he reads aloud
22	00:14:00	00:14:50	3 rd paragraph Deletion i aquest és un fet realment important que succeeix en l'actualitat	Açò no sé si estarà ben explicat: (lectura en veu alta del text)A vore, jo dci "Em refereisc a innocencia perquè els menuts no són conscients realment del que suposa la tanca però tampoc són ignorants i això és un fet que passa" ara perquè tots	

				diguem són molts xicotets i no saben el que estan passat però tenen ulls i es donen compte del que passa	
23	00:14:50	00:15:30			Reads aloud
24	00:15:30	00:15:50	3 rd paragraph Addition "que tenien"	És per intentar explicar-ho millor, crec que no feia falta però, bueno, té igual	Stops in order to read and think, it takes several seconds.
25	00:16:40	00:16:45	3 rd paragraph Addition en quant als xiquets de la pel·lícula		Mistake on the connector.
26	00:17:15	00:17:45	3 rd paragraph Substitution oberta New text lliure	Evitar en el mateix paragraf dos paraules iguals, aleshores en pensaments no pots posar res al respecte i ací pots posar un ment lliure	She rereads the final part of the text up to "oberts". Since there is a similar word around, she replaces the first one "oberta". In the meantime, she reflects to decide which word will be substituted and which word she will be using.
27	00:18:15	00:18:20	3 rd paragraph Substitution respecte New text En quant	També per a que no es repetisca	Rereads and states the need to change the discourse maker.
28	00:18:35	00:19:45	3 rd paragraph diré - com abans-		She thinks about changing a word but does nothing eventually.

G2.P4. Condition 4. EFL Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:45	00:00:45			Silent reading
2	00:00:45	00:01:05	1 st paragraph Substitution Harry Potter is a film about New text: Harry Potter's film is about	Ho he canviat perquè si pose Harry potter is a film, Harry Potter també és un ppersonatge. Si poses Harry Potter's film sí que s'entén que és la pel·lícula de Harry Potter	
3	00:01:05	00:01:45			Silent reading
4	00:01:45	00:02:00	1 st paragraph 1a línia Substituion That New text This	(Reads aloud and changes demonstrative)	
5	00:02:30	00:02:55	1 st paragraph Addition	Ho havia explicat d'una manera però no estava bé	

			“The bad character of the history wants to kill Harry Potter because he is”		
6	00:02:55	00:03:20	Generating ideas to continue with the previous sentence. Re reads what she had previously written		Silent reading and hesitation
7	00:03:25	00:03:55	1 st paragraph Addition “The bad character of the history wants to kill Harry Potter because he is” + “the soon of a magician, James Potter”	Sí podem posar-ho així	
8	00:04:15	00:04:20	1 st paragraph Deletion “This kid is a magician,.. “	Ho he canviat pq no s’entenia bé. Jo explique perquè per a mi és important la pel·lícula. - Això en quin paragraf, En el primer paragraf he fet un mini mini mini resum de lo que és la pel·lícula de Harry Potter. Dic que Harry Potter és un xiquet elegit per a salvar al món (reads and translates what she has actually written in English)	
9	00:04:20	00:05:05			Reads again and gets back to paragraph 1
10	00:05:05	00:05:30	1 st paragraph Addition “against Evil. Voldemort,”	(Reads the paragraph aloud and adds “against Evil” as it is written in the heading of the activity.)	

				És que no sé com s'escriu Voldemort, té igual vaig a posar Voldemort!	
11	00:05:35	00:05:55	1 st paragraph Substitution History New text story	És que mira n'hi ha un problema no sé si és historia s'escriu així (history) o story (Substitutes as she speaks) Mira, ho vaig a deixar així. Explains story in L1	Rereads what she had previously amended from take 1
12	00:06:45	00:06:50	2 nd paragraph Rearrangement	Explains content and the 1st paragraph is a summey of the film. Voldemort vol matar-lo pq és el fill d'un mag, com que tots volen amagar-li que Voldemort els ha matat. Mira això t'ho explique ací (2nd paragraph) , mira, t'ho vaig a juntar. Perfecte. T'ho he juntat perquè es quedava massa curt el resum. I l'altra part (2nd paragraph) és com també part del resum.	
13	00:06:50	00:07:20		Espera un segon perquè estic parlant en present i	Reads aloud and translates into L2 (Spanish) not the language of L1 Text or comments
14	00:07:20	00:07:25	New 1 st paragraph Substitution Had New text	Vaig a posar-ho en present perquè ho estic posant tot en present "has"	

			has		
15	00:07:25	00:07:30	New 1 st paragraph Substitution Had New text has	“has good luck”	
16	00:07:45	00:07:50	New 1 st paragraph Substitution During the film New text In the film	In the film, canvie eixa paraula perquè ahí es repetia during, during	
17	00:08:00	00:08:05	New 1 st paragraph Substitution Had New text has	Jolin, una altra volta has	
18	00:09:00	00:09:40	New 1 st paragraph Addition “after that he wants to do the same with his soon”	Açò no està ben explicat. (Gets back to 2nd line, 1st paragraph, carries out changes, silently) Canviar un poc el contingut perquè estava mal explicat. Tells the story in L1.	
19	00:09:40	00:13:00			Silent reading and some hesitations
20	00:13:05	00:15:30	New 1 st paragraph Addition All the people who want to protect Potter helped him when he has a problem, and also, some of them,	Harry Potter viu males situacions però que té gent que l’ajuda, el recolza com a que estava mal explicat.	Comments after she has done all the tranformation – high cognitive load?)

			don't say him the reason why his parents died	He posat "bad situations" però no volia posar "bad situations". Aleshores per intentar juntar els dos paràgrafs i per intentar unir-ho he posat que Voldemort és el personatge roïn de la història, que mata a J. Potter i després ell vol matar al seu fill, Harry Potter que es el personatge principal	
21	00:15:35	00:15:55	1 st paragraph (Substitution) wants to protect New text love	No sé si "protect" existeix que vaig a posar "who love Potter" Tota la gent que vola a Potter l'ajuda quan té un problema y també alguns d'ells no li diuen la raó per la qual han mort	Replaces on previous amendment
22	00:15:55	00:16:50	1 st paragraph Deletion From Because he's the soon of a magician To But he has good luck	Ara açò ho llevem, i ja enllacem amb lo altre. Això és un bon punt, que l'ajuden. (reads aloud the text she is deleting)	(Reads text in English) Justifies the intro as part of the story is relevant to this text
23	00:17:40	00:17:45	New 1 st paragraph Changes tense Was saved New text Has been saved	He posat el temps verbal	
24	00:17:45	00:17:50	1 st paragraph Addition word		

			good		
25	00:17:50:	00:18:30		Te l'estic contant en present (la història) però en realitat jo l'he vist en passat.	Starts reading the whole 1 st paragraph again. Changes the tense again. From past to present.
26	00:18:30	00:18:35	New 1 st paragraph Changes tense has New text Had	She reads the text aloud and changes verb tenses from present to past	
27	00:18:35	00:18:40	New 1 st paragraph but in a line above from the previous change!!! Changes tense wants New text wanted		
28	00:18:50	00:18:55	New 1 st paragraph but in a line above from the previous change!!! Changes tense Don't New text Didn't		
29	00:19:15	00:19:20	New 1 st paragraph died New text Were died		
30	00:20:30	00:20:40	New 1 st paragraph Addition in which		

31	00:20:50	00:20:55	New 1 st paragraph Addition but	Estos connectors són per a unir	
32	00:21:05	00:21:10	New 1 st paragraph Substitution Win New text wined		She translates what she has written in English and it is a narrative
33	All the previous changes 21:30 minutes spent in rearranging, reformulating the first paragraph which is a summary of the gist of the saga.				
34	00:22:00	00:22:05	2 nd paragraph Deletion I think	I Think I like the film, no. I like the film. Ho lleve perquè estava com mal expressat.	
35	00:24:50	00:25:30		L'altre dia quan vaig fer el text, volia explicar-ho davant, després darrere, ho passí davant i ara darrere (the reasons why). Ara ho canviaré per a vore si ho puc posar millor. (She is giving her opinion but not reflecting upon the topic of the essay)	Reads second paragraph and translates what she has written down
37	00:26:15	00:26:20	2 nd paragraph Deletion I like this film	“Cortar y pegar” he refet el paràgraf perquè no té molt de sentit	
38	00:26:25	00:26:30	New 2 nd paragraph Addition About the film, which I am going to explain after and I like it	Reads the text in silence.	

39	00:28:05	00:28:10	2 nd paragraph Deletion The	Vaig a llevar açò perquè després es repeteix. He afegit <i>*ferdes</i> per a que s'entenguera millor. Lo que volia dir em costà l'altre dia també d'explicar	
40	00:28:25	00:28:35	2 nd paragraph Deletion A		
41	00:29:30	00:29:35	2 nd paragraph Deletion In the film		
41	00:30:15	00:28:20	2 nd paragraph Deletion Of it		
42	00:31:10	00:31:20	2 nd paragraph Addition The gender Harry Potter's films	Ho canvie això per a que siga més formal	
43	00:31:20	00:31:50			Reads the whole paragraph 2 again
44	31:50	00:31:55	2 nd paragraph Substitution Don't New text Do not		
45	00:32:15	00:32:20	2 nd paragraph Substitution That is action and unreal New text (action and unreal)	Ho pose entre parèntesis per a una millor comprensió	
46	00:33:00	00:33:35	4 th paragraph- beginning Addition		

			The feelings that I mentioned before are because		
47	00:33:45	00:33:50	4 th paragraph Deletion That I have said before	Açò ho llevem perquè ja ho he afegit a primera frase	
48	00:34:05	00:34:10	4 th paragraph Substitution This New text these	És que quan és plural és "these"	
49	00:34:30	00:34:35	4 th paragraph Deletion In the New text On Sundays afternoon		
50	00:35:00	00:35:10	5 th paragraph Addition That		
51	00:35:15	00:35:20	5 th paragraph Substitution To reflect New text To see reflected	Era una qüestió de significat, de gramàtica ja he fet canvis abans	
52	00:35:30	00:36:00			Reads silently

Elementaries

G3.P1. Condition 1. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:02:00		Voy a leerlo para ver qué cambios son necesarios	Reads the whole text through silently and makes just one change at the end of the text
2	00:02:00	00:02:45	Last paragraph Substitution Quería transmitir es que se trataba New text Quiere transmitir que se trata	Si lo pongo así tiene más sentido, (hesitates) espera un momento, (rereads)	

G3.P1. Condition 1. EFL Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:15	00:00:25	1 st paragraph Substitution Welmannered/educado New text Well-mannered	El que he ficat subratllat es perquè no sabia dir-ho en anglés i ho he buscat al diccionari.	Highlighted words
2	00:00:25	00:00:35	4 th paragraph Substitution retos New text challenges	Ací challenge ho canvia perquè ho havia buscat.	Highlighted words Goes straight away to change this word
3	00:00:55	00:01:05	2 nd paragraph Substitution impulsos New text mind	Vaig buscar una paraula que quedava bé	Highlighted words
4	00:01:30	00:01:40	3 rd paragraph Substitution Envuelto y rodeado New text Between people	M'ho vaig escriure en castellà i vaig utilitzar	Highlighted words
5	00:01:55	00:02:05	3 rd paragraph Substitution it New text That values	El "it" crec que estava mal I l'he canviat	Changes format to make sures he remember to change some words
6	00:02:25	00:02:30	3 rd paragraph Substitution have	Ahí fique has perquè havia de ser "has"	Metalinguistic awareness of some elements

			New text Has		
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G3. P2. Condition 2. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:30	00:00:35	1 st paragraph Addition ido	Sempre faig un paragraf introductori al tema, en aquest cas la pel·lícula... He afegit ido perquè quedava millor aixina	
2	00:01:00	00:01:10	2 nd paragraph Substitution Para New text A	En el primer paragraf després de la introducció... Vaig canviar el “a” en lloc del para perquè abans hi havia un altre para Et costa menys llegir-lo si no es repeteixen tant les paraules	Cohesion improves Reading + reader consciousness
3	00:02:05	00:02:15	3 rd paragraph Substitution Un personaje New text Harry Potter puede servir como	Vaig canviar “personaje” per Harry Potter perquè després apareixia “personaje” I vaig afegir una frase per a que tinguera més sentit la continuació.	
4	00:02:40	00:02:45	3 rd paragraph Substitution Si New text Sí que	Vaig canviar una falta que tenia el “si” sense accent. I vaig afegir el que.	
5	00:03:00	00:03:10	3 rd paragraph Addition De los peligros que pueden darse en el mundo	Estic afegint informació necessària.	

6	00:04:10	00:04:20	4 th paragraph Substitution Del mundo New text De la actual sociedad	Vaig canviar mundo perquè ja ho havia posat abans, per a no repetir	
7	00:04:20	00:04:45			Reads silently

G3.P2. Condition 2. EFL Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:20	00:00:25	1 st paragraph Substitution NACISMO New text Nacism	Canvie les paraules en castellà perquè les he buscat	
2	00:00:40	00:00:45	1 st paragraph Substitution SOLDADOS NAZIS New text Nazis soldiers	(Això ho has buscat al diccionari) Sí	
3	00:00:55	00:01:05	1 st paragraph Substitution HIJO New text Son	No sabia exactament qué posar “child” o “son”, aleshores vaig buscar canviar, bé realment ho vaig traduir	
4	00:01:10	00:01:20	1 st paragraph Substitution SOLDADO NAZI AL MANDO New text Nazi soldier	Esta paraula “soldado nazi”; “al mando” no me’n recordava com era i ho vaig deixar en “soldado nazi”	
5	00:01:20	00:01:25	1 st paragraph Substitution CONDENADOS	Esta paraula la vaig canviar perquè també la vaig buscar	Missed the following Word in the text “judío” and changes this one.

			New text Obligated		
6	00:01:35	00:01:40	1 st paragraph Substitution JUDIOS New text jews		
7	00:01:45	00:01:55	1 st paragraph Substitution SUFRIR EN UN CAMPO DE CONCENTRACIÓN New text Suffer in a concentration camp	Campo de concentració també ho vaig buscar perquè ho posava moltes voltes però no sabia com se deia. En este primer paragraph sí que me'n recordava de les paraules exactes perquè i sí que les vaig buscar	
8	00:01:55	00:02:00	1 st paragraph Deletion Concretamente		
9	00:02:05	00:02:10	1 st paragraph Substitution CAMPO DE CONCENTRACIÓN New text Concentration camp		
10	00:02:30	00:02:35	1 st paragraph Deletion THE WHOLE PARAGRAPH SHE HAD WRITTEN IN SPANISH	Jo vaig escriure el paràgraf en castellà, el vaig traduir i vaig posar les paraules que no sabia entre parèntesi. Ara ja el tinc traduït i la el puc esborrar	
11	00:02:45	00:02:50	2 nd paragraph Substitution LA VALLA New text	Vaig buscar “valla” que no la sabia i damunt la vaig posar mal	She hasn't even read the heading.

			ferer		
12	00:03:10	00:03:15	2 nd paragraph Substitution HIJO DEL SOLDADO NAZI SIMBOLIZA New text The child od the nzai soldier	La de hijo del soldado nazi la vaig traduir, tal cual, (ja l’havies buscat abans?) sí.	Spelling mistakes!!!!
13	00:03:25	00:04:25	2 nd paragraph Substitution EN UN PRINCIPIO LA VAYA LE PARECE ALGO INOFENSIVO New text Firstly time they think it was innoferive when they play with the ball	En este paràgraf no havia bsucat totes les paraules i és quan comence a canviar unes per altres. Esta és la primera paraula que canvie. Com no me la sé estic dubtant i no la pose. Me la vaig deixar per al final però no. Estava fent-ho d’alguna manera que jo sabera dir-ho. Per a que tinguera sentit vaig canviar el “he” pel “they” i vaig canviar la frase.	Deletes the whole sentence in Spanish. Changes balloon for ball and adds a new sentence
14	00:03:40	00:03:45	2 nd paragraph Substitution balloon New text ball		
15	00:04:45	00:04:55	2 nd paragraph Substitution LA VAYA, ES CUANDO SE DA CUENTA DE QUE TIENE ELECTRICIDAD New text Is when they know the reality	Vaig continuar amb la següent frase que no sabia dir-la i... Esborre tot lo de darrere i deixe només això	When she doesn’t know how to say something. Gets rid of the text!

16	00:04:55	00:05:00	2 nd paragraph Deletion NO ENTIENDE POR QUÉ		
17	00:05:00	00:05:05	2 nd Paragraph Substitution New text JUDIO	Ho canvie igual que en el primer paragraph	
18	00:05:10	00:05:35	2 nd paragraph Deletion LA VALLA NO LE SUPONE NINGUNA BARRERA YA QUE ACABAN SIENDO AMIGOS	La frase esta la canvie. Estic dubtant en com es “valla” sé que està mal perquè així no me sonava. Ho esborre tot i deixí, esborrí algunes paraules ometent informació. I vaig afegir la frase final. Afegint informació.	Changes information as she is not able to translate literally what she meaant to say
19	00:05:50	00:05:55	2 nd paragraph Substitution New text A TRAVÉS DE ELLA Without problem	Vaig afegir la frase del final	Ut supra
20	00:06:00	00:06:10	2 nd paragraph Substitution New text POR PARTE DE ESTE NIÑO LLEGA UN MOMENTO		
21	00:06:15	00:07:00	2 nd paragraph Substitution EN QUE LA VALLA DEJA DE SER TOTALMENTE UNA BARRERA Y LA TRASPASA PARA PERTENECER AL MUNDO DE LOS JUDÍOS New text	Com tenia tantes frases i no totes les havia buscat. Ací me'l pensí en el moment amb paraules que jo sabia dir Pensí que posava.	

			They are friends and they learn about each other		
22	00:07:00	00:07:30		El segon paràgraf en castellà l'he borrat i ara estic fent el tercer en anglés	
23	00:07:30	00:07:35	3 rd paragraph Substitution LA VALLA New text The ferer	Està altra volta mal. És que les paraules del 2n paràgraf som com les del primer , les havia buscat i me'n recordava. Perquè està "judío" "Simboliza"	
24	00:07:45	00:07:50	1 st paragraph Substitution JUDIO New text Jew		
25	00:07:55	00:08:00	3 rd paragraph Substitution SIMBOLIZA New text Simbolize		
26	00:08:00	00:08:05	3 rd paragraph Substitution SIGUE SIENDO New text Is	La paraula eixa "sigue siendo" no sabia dir-la	Reduces the complexity of the expression
27	00:08:40	00:08:45	3 rd paragraph Substitution PREJUICIOS New text Any problems with the other child		Circumlocution

28	00:08:50	00:08:55	3 rd paragraph Substitution Confia New text together	Ho he canviat pel together i au	
29	00:09:10	00:09:15	3 rd paragraph Substitution EL UNO DEL OTRO New text Each other		
30	00:09:30	00:09:35	3 rd paragraph Deletion A PESAR DE SUS DIFERENCIAS Y LA VALLA	La següent frase la lleve perquè no sabia dir-la, l'he esborrada i he omés eixa frase	
31	00:09:40	00:09:45	3 rd paragraph Substitution NO SUPONE UNA BARRERA ENTRE AMBOS YA QUE New text This doesn't suppose a problem because	LA mini frase que he fet l'he feta per una altra en anglés nglés	
32	00:10:10	00:10:15	1 st paragraph Substitution CAMPO DE CONCENTRACIÓN New text Concentrate camp	El busquí i el pose	
33	00:10:20	00:10:25	3 rd paragraph Deletion LE PIDE		

34	00:10:25	00:10:30	3 rd paragraph Substitution CONSIGUEN TENER New text have		
35	00:10:30	00:10:35	3 rd paragraph Substitution ENTRE IGUALES New text Like equals	Pose equals que realment tampoc sé si està bé.	
36	00:10:50	00:10:55	4 th paragraph Substitution VALLA New text The ferer	L'últim paràgraf que és com el final per a concloure és No el vaig traduir perquè era com per a fer la reflexió. Com per a més lliure. No vaig posar-lo en castellà. No són idees fixes sinó com la meua opinió.	
37	00:10:55	00:11:00	4 th paragraph Substitution EL uno al otro New text Each other	En la última frase estic afegint una frase que no estava abans.	
38	00:11:30	00:11:40	4 th paragraph Substitution Incluso la consiguen vencer New text They can stay together in the same place		The translation has not much to do with the previous

G3.P3. Condition 3. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:00:45		Voy a leer a ver si mejoro la manera de escribir... Después de haber leído el primer párrafo pienso que lo voy a dejar igual a ver si luego cambio algo	Reads the text silently
2	00:00:55	00:01:00	2 nd paragraph Substitution Sí que New text ,	Voy a eliminar esas dos palabras para poner una coma, lo he puesto más que nada porque pienso que como normar ortográfica encaja mejor.	
3	00:01:25	00:01:30	2 nd paragraph Addition Si	Y aquí un si para que tenga más coherencia	
4	00:01:45	00:01:50	2 nd paragraph Deletion Si	Ahora aquí borro el si	
5	00:01:50	00:01:55	2 nd paragraph Addition ,		
6	00:01:55	00:02:35			Reads silently
7	00:02:35	00:02:45	3 rd paragraph Rearrangement paragraph	Bajo otro párrafo porque considero que bajando es	

			Last 5 lines of the 2nd become the 3rd	como para cortar y tener otra idea.	
8	00:02:45	00:03:05			Reads silently
9	00:03:05	00:03:15	3 rd paragraph Substitution Sí que es verdad New text Es cierto	Voy a borrar esto y voy a poner. Lo he sustituido porque quizá este conector queda mejor que el otro que había.	
10	00:03:15	00:04:15			Reads silently

G3.P3. Condition 3. EFL Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:00:48		Estoy leyendo, el texto que escribí el otro día en inglés voy a ver qué puedo solucionar	Reads silently
2	00:00:48	00:00:50	1 st paragraph Addition ;	Voy a poner un punto y coma para clarificar	
3	00:00:50	00:01:25		Sigo leyendo	Reads silently
4	00:01:25	00:01:30	1 st paragraph Addition Or other races	Voy a añadir otro elemento	
5	00:01:30	00:02:00			Reads
6	00:02:00	00:02:20	2 nd paragraph Rearrangement Separates paragraph	Como para clarificar que es un tema distinto, un párrafo nuevo.	
7	00:02:20	00:02:40			Reads silently
8	00:02:40	00:02:45	3 rd paragraph Substitution Ont New text one	Corrijo una falta de ortografía (¿Qué pasaba?) Que había una falta de orotografía	
9	00:02:40	00:02:45	3 rd paragraph Substitution perons New text persons	Y ahora otra	

10	00:02:45	00:03:55			Reads silently till the end
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G3.P4. Condition 4. L1 Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:15	00:00:20	2 nd paragraph Addition Bruno	Voy a añadir los nombres de los chicos de la película. Los cambio porque si no luego se me olvidan	
2	00:00:20	00:00:25	2 nd paragraph Addition Pavel		
3	00:00:25	00:01:30			Starts reading the first paragraph
4	00:01:30	00:01:40	2 nd paragraph Substitution (el nombre del chico judío) New text Pavel	Vale aquí voy a cambiar el nombre del chico... A Pavel	
5	00:01:40	00:02:05		Yo del primer párrafo no cambiaría nada lo veo bastante completo	
6	00:02:05	00:02:10	2 nd paragraph Addition Bruno	Ahora de momento solo estoy añadiendo los nombres de los chicos (¿ no te acordabas cuando lo escribiste?) Sí	
7	00:02:25	00:03:10	2 nd paragraph Addition Ya que no hay gente alrededor de la casa y él les un chico que tinene muchas ganas de jugar y conocer gente nueva	Vale aquí voy a añadir(starts typing)	
8	00:03:10	00:03:30	2 nd paragraph Substitution y de repente New text	Voy a modificar este conector, lo he cambiado para ñadir un poco de texto y se entienda major la historia.	

			De repente,	(más información?) sí	
9	00:03:40	00:03:45	2 nd paragraph Addition Pavel	Aquí voy a cambiar el nombre del chico	
10	00:03:45	00:03:50	2 nd paragraph Addition Bruno		
11	00:04:00	00:04:05	2 nd paragraph Substitution Totalmete New text totalmente	Uy, aquí le falta una “n”	
12	00:04:15	00:04:20	2 nd paragraph Substitution tunel New text túnel	Uy, aquí le falta una tilde	
13	00:04:20	00:05:05			Reads silently
14	00:05:05	00:05:10	2 nd paragraph Addition Bruno	He cambiado los nombres y un par de tildes y un conector para que se entienda un poco mejor la frase	
15	00:05:15	00:07:15		Estoy leyendo a ver si puedo añadir algo más (¿desde donde lees?) desde el segundo párrafo, es donde empiezo a hablar ya un poco de la valla. Es que el significado de la valla yo creo que es ese.	Reads silently
16	00:07:15	00:08:15		Creo que ya he acabado, creo que ese es el significado. Le voya pegar otra leída	Reads silently

17	00:08:15	00:08:20	2 nd paragraph Substitution gennte New text gente	Uy, mira es que... (typo mistake spotted and corrected)	
18	00:08:20	00:09:40			Reads silently until the end

G3.P4. Condition 4. EFL Transcription.

Segment	Begin	End	Text transformed	Transcription	Comments
1	00:00:00	00:00:45		Primero voy a leer lo que escribí el otro día, muy despacio	
2	00:00:45	00:00:50	1 st paragraph Addition he	Vale aquí voy a poner, esto que era el “he”, un determinante?	
3	00:01:35	00:01:40	1 st paragraph Addition With this age	Vale aquí voy a añadir esto, más que nada para que se entienda un poco más la frase y ya está	
4	00:01:45	00:02:55			Reads silently
5	00:02:55	00:03:00	1 st paragraph Addition real	Vale aquí voy a añadir, son más que nada adjetivos para que se entienda un poco mejor	
6	00:03:00	00:03:35		Me voy a pegar otra leída pero yo creo que ya está	Reads silently
7	00:03:35	00:04:10			Reads again from the very beginning
8	00:04:10	00:04:30	1 st paragraph Substitution Have New text Does (improves grammar and meaning!!)	Vale, esta palabra la voy a cambiar porque “have” es tener entonces (translates from the text written in English) aquí quiero poner “aquí podemos ver a una persona que realiza las actividades y los esfuerzos” es que realice era un false friend, creo, entonces voy a poner... “he does”	
9	00:04:30	00:05:30		Esta palabra es que no la sé (awesome)	Reads silently and hesitates

10	00:05:30	00:05:40	1 st paragraph Substitution Have New text has	Vale, esta tambien tengo que quitarla: “have”	
11	00:07:30	00:07:50	2 nd paragraph Addition “because Voldemort is a very bad person and his objective is kill another families.”	Aquí voy a añadir una frase, más que nada para añadir algo más, que sea un pelín más largo y que se entienda mejor la intención de Voldemort.	
12	00:08:00	00:08:05	3 rd paragraph Addition ,	Aquí voy a poner una coma. Le he puesto coma porque después de un conector me gusta poner coma.	
13	00:08:10	00:08:15	3 rd paragraph Deletion ,	Y aquí la quitó. Había puesto una coma (Harry, ...)	
14	00:09:05	00:09:10	3 rd paragraph Substitution you New text we	Y aquí voy a quitar el “you” y voy a poner el “we” para englobarnos a nosotros y no solo a una persona	
15	00:09:10	00:09:45			Reads silently

Chapter 5.

General Conclusions,

Teaching Proposals,

Limitations and

Future Research

5.1. GENERAL CONCLUSIONS

In the last part of this dissertation, the results and discussions of the two sections will be reviewed and the findings are examined. Some teaching suggestions have been put forward alongside with the limitations and future research.

The main aim of the two studies was to shed some light on how pre-service teachers, university undergraduate students, faced deferred revision in different languages and writing tasks. Particularly, the purpose was to find out what kind of actions of metacognitive regulation our participants would be able to carry out during the deferred revision of a summary and an essay in two different languages their L1 and EFL.

The studies presented in this dissertation took place in a multilingual context and our findings can give account of the situation of this particular setting with respect to teachers in the initial stages of their education at a university level. Besides, it offers a view on how these participants faced those tasks and can provide an opportunity to guess what their mastery of metacognitive regulation is like with depending on the languages, the tasks and their EFL proficiency as well as what their needs are in terms writing skills training for their future practice.

The questions that led our research are guiding the outline of our final conclusions:

RESEARCH QUESTION 1.

How can the metacognitive regulation of pre-service teachers be evaluated in the deferred revision of writing tasks in their L1 (Spanish/Catalan) and in English as a Foreign Language (EFL)?

After the revision of the different writing models (Berninger & Swanson; 1984; Flower & Hayes, 1981; Kellogg, 1996, 2008; Scardamalia & Bereiter, 1987; Takala &

Vähäpääsi, 1983) and the conception of revision and its components in the different models (Hayes et al., 1986; Allal & Chanquoy, 2004), the metacognitive regulation in our studies has been evaluated after having adapted and validated Allal's (2000) proposal and completed with Chanquoy's (2001).

The metacognitive regulation is conceived as the actions that writers undertake to transform the text they have written so far into the intended text, Allal and Chanquoy (2003) labelled these actions as transformations. In each one of them, the following dimensions were identified and validated by the researchers: the language involved, the type of transformation, the relationship towards the language conventions and the textual object of the transformation. Similar taxonomies were put forward by Sommers (1980), Faigley and Witte (1981), Monahan (1984) and Stevenson et al. (2006) and so their findings have been used as the basis for comparing the results obtained. In this sense, the first specific objective of this dissertation (OB1):

OB1. To study and analyse the international literature devoted to the research in writing skills and metacognition, including L1 and EFL, in order to explain this research's foundations by using validated models.

Moreover, the review of the literature brought about the suggestions of the design of the writing tasks completed in order to collect data for the analysis. They were designed so that they would entail a different cognitive effort, a knowledge-telling and a knowledge transforming task (Scardamalia & Bereiter, 1987) or a type II and type III according to Takala & Vähäpääsi's (1983) taxonomy. They were inspired in previous research papers in which the most common type was the argumentative text or the essay, as knowledge-transforming (Chenoweth & Hayes, 2001; Manchón & Roca de Larios, 2011; Rinert & Kobayashi, 2009; Roca de Larios et al., 2008; Sasaki, 2000; Stevenson et al., 2006; Tillema, 2012; Tiryakoglu et al., 2019; Schoonen et al., 2003; Van Weijen et al., 2009) either in L1 or EFL. In younger writers or other cases, writers composed narrative texts as knowledge-telling type of text (Allal, 2000; Chanquoy, 2001; Manchón et al., 2009)

The fact that part of the studies were accepted and presented in an international conference where the references and models were demanded suggests that the literature review was in line with the research trends in writing research. Besides, these

descriptors were settled through a pilot study in which the different dimensions of the transformations were validated. This process for both studies stands for the achievement of the second specific objective (OB2):

OB2. To define and validate descriptors related to the metacognitive control in written texts in EFL as well as to design tasks suitable from those descriptors that evaluate those skills.

What kind of metacognitive self-regulatory strategies do PSTs use when revising their writings?

As far as the actions of metacognitive regulation are concerned or *transformations*, writers focused on single words as the most frequent feature, particularly in EFL. Furthermore, the substitution was the predominant type of transformation in both languages, and addition reached similar figures in L1.

The aforementioned findings are expanded to the way that writers envisaged the purpose of their text. The task of revision they undertook entailed optional changes concerning the language conventions as they substituted words that had little impact on the meaning of the text although as it was mainly superficial and did it differently in L1 and EFL. Another important amount of transformations was conventional and participants took their time to correct the wrong words as they varied, though, depending on the task and the EFL proficiency.

The findings exposed above bring about a rather static mental representation of the text in the deferred revision of the texts (Alamargot & Chanquoy, 2001). In other words, these participants' revisions focused on lower-order skills, i.e. spelling and grammar (Tiryakoglu et al., 2019), and unfrequently engaged in textual coherence and cohesion (Chenoweth & Hayes, 2001). Such features are in line with the Inhibition Hypothesis put forward by Stevenson et al. (2006) and confirmed by Van Steendam et al. (2010).

However, a report of a few subtle details can enhance the understanding of the outcomes. On the one hand, more transformations were carried out in EFL, the higher the EFL proficiency, the more transformations implemented. Higher-levels' displayed a more dynamic representation of texts, more focused on the content to be included in

the texts, the macro-meaning of the text they were writing than those formal, low-level changes (Allal, 2000; Stevenson et al., 2006).

The results of the dissertation advocate for a systematic intervention of the revision process, at least, in educational backgrounds. They suggest that reflection on how to carry out the revision, particularly deferred revision as it seems to recalibrate the attentional resources (Chanquoy, 2009; Galbraith & Torrance, 2004; Van der Bergh & Rijlaarsdam, 2001), and what aspects writers should be aware of are needed in both languages. A kind of intervention that should include a previous self-assessment or a metacognitive check so that writers gained knowledge of how they face this particular type of texts' revision bearing in mind the differences in the cognitive effort made by writers when engaged in the writing tasks (Kellogg, 2008)

By identifying and quantifying the actions described and having calculated the effects of the variables at stake that have been mentioned in the part devoted to discuss the results and the conclusions presented, it can be stated that the second (OB2) and third (OB3) objectives of this dissertation have been accomplished:

OB2. To define and validate descriptors related to the metacognitive control in written texts in EFL as well as to design tasks suitable from those descriptors that evaluate those skills.

OB3. To assess future teachers' metacognitive control in tasks of deferred revision in EFL and in their native language, using tasks with different cognitive demand (tasks involving knowledge telling and knowledge transforming).

What is the effect of the writing task (essay or summary) on their use of regulatory actions and text quality?

There were significant differences between the types of metacognitive regulations or transformations whether participants wrote a summary or an essay that may suggest that participants faced their revisions in a different way. Their EFL proficiency did also matter and it all points to raising the awareness of the specific

aspects of the tasks and the hindrances that writers may encounter when undertaking them.

On the one hand, the essays entailed more transformations, the attentional resources needed to complete a knowledge-transforming task may be responsible for this difference. Moreover, summaries were also revised predominantly by adding or substituting words that tried to correct formal mistakes.

On the other hand, essays' revision seems to be faced differently: words were substituted mainly. However, the scope of these substitutions involved also longer units, even paragraphs that, in turn, added information to the texts and a deeper impact in the meaning of texts particularly in EFL.

With respect to the EFL proficiency of participants, these findings reveal that essays required a higher effort and participants managed to implement them successfully according to the purposes of the task (Alamargot & Chanquoy, 2001). The differences show a more flexible and dynamic mental representation in the case of the essays: more attention to content and with a deeper textual impact due to the demands of the genre. Summaries, a type of text linked to a knowledge-telling task, had more quality on those grounds, participants did not need to carry out such effort due to a lighter cognitive load.

Lower-levels seemed to have relied on their first versions, did not vary their mental representation of the text since they did not implement major changes. Moreover, deferred revision implied a time for grammar and vocabulary and little for content particularly in essays. It all seems to point that interventions should emphasise the awareness of the need for reflection of the fact that lower EFL proficiency participants did take as much advantage of deferred revision to improve the quality of their writings as higher-levels gives some food for thought. It calls for making Lower-levels aware of the aspects involved in revision.

As far as the text quality is concerned, it improved after revision in all languages except for the summary in L1, may well be influenced by the scores in mechanics due to the mistakes in spelling. In any case, the mastery of orthography is an evident challenge for the pre-service teachers and, as a social concern, since they are to be the practitioners to be in charge of it in primary schools, its mastery must be assured in pre-service teacher education.

Results did also show that the summary turned out to be a task in which higher text quality standards related to content and text organisation than the essays which

reveals that participants who undertook the summary struggle in the formal aspects of the language. It unveils the effects of the lack of proficiency in these aforementioned aspects.

It was proved right that deferred revision may help reduce the distance between the text written thus-far to the intended one and quality enhancement (Miller, 1984; Sommers, 1980) and particularly deferred revision as it alleviates the cognitive load (Chanquoy, 2009; Galbraith & Torrance, 2004; Van der Bergh & Rijlaarsdam, 2001). Nonetheless, it stood out that writing tasks that entail a different amount of cognitive effort in terms of organisation of the text and its content alongside it (knowledge-telling & knowledge transforming) may need different ways of approaching when they are to be revised. Furthermore, it became evident that there is room for improvement with respect to mastery of the formal aspects of the language, in this case spelling and verb formation.

The discussion and conclusions on the findings regarding the comparison of both tasks lead us to assert that the third objective (OB3) of this dissertation was also reached:

OB3. To assess future teachers' metacognitive control in tasks of deferred revision in EFL and in their native language, using tasks with different cognitive demand (tasks involving knowledge telling and knowledge transforming).

RESEARCH QUESTION 2.

What is the effect of the EFL proficiency? Is there a transfer of metacognitive skills from L1 to EFL?

The results discussed show discrepancies when writers hold different EFL proficiency in the deployment of metacognitive regulation. Lower-level participants focused on more word-based substitutions in an attempt to correct superficial mistakes in EFL or to add or modify tiny portions of content in L1, whereas higher-level

participants used strategies of revision that enabled them to keep similar degrees of quality in both languages (Stevenson et al., 2006). The lack of language proficiency in the EFL exerts as a barrier that prevents writers to transfer the focus of their revision in L1 to EFL. Such findings could be in line with the assumptions of the WM overload experienced by FL writers (Van der Bergh & Rijlaarsdam, 2001; Hayes, 2006).

The EFL proficiency seems to be an indicator of quality of content and text organisation as high in L1 writing as in EFL's (Silva, 1993; Tiryakoglu et al., 2019; Van Steendam et al., 2010). In those cases in which the writing tasks entailed higher attentional resources the handling of information focused on aspects related to lower-skills: formal aspects of the language rather than the coherence of the content covered and the organisation of the text. This feature is easily observable in L2/FL writing (Silva, 1993) and has been correlated with lower levels of metacognitive awareness in the foreign language (Bui & Kong, 2019; Dülger, 2011; Knospe, 2017; Qin & Zhang, 2019; Yanyan, 2010). Moreover, the language in which the task must be carried out, whether L1 or EFL, may be considered as a factor of variability in the scope and focus of revision which seems to interfere in the transference of deferred revision strategies, there seems to be a barrier for the transference of those strategies when the tasks are carried out in L1 compared to EFL.

In brief, those writers with higher EFL proficiency seemed to be more able to transfer their strategies from their L1 to EFL and so, the metacognitive regulation skills they displayed were up to some extent different to lower-levels: they were mainly word-based although with more sentence-oriented instances, substitutions that somewhat transformed the sense of the text. By doing so, the quality of their texts in L1 and EFL showed alike figures. Instead, those participants with lower EFL proficiency revealed higher quality in L1 as their revisions in EFL were scarce and focused, almost totally, on words that barely had impact on the global meaning of the text. There was a part in which differences stood out since both groups maintained the similar scores in both languages: mechanics, that is to say, spelling. These conclusions lead to advocate for conducting further research so that the insights on the transference of metacognitive regulation strategies in writing between languages could be enlarged.

The review on the metacognitive regulation in two languages and their implications between their L1 and EFL, the third (OB3) and fourth (OB4) objective of this dissertation have been achieved:

OB3. To assess future teachers' metacognitive control in tasks of deferred revision in EFL and in their native language, using tasks with different cognitive demand (tasks involving knowledge telling and knowledge transforming).

OB4. To analyse the influence of the level of English proficiency in the metacognitive control and the quality of texts in the process of deferred revision.

RESEARCH QUESTION 3.

What are the differences between texts produced in EFL and L1 and what are the reasons underlying these differences?

In terms of text quality, the texts produced in L1 received higher scores before and after revision than the EFL texts in both languages and tasks. The written production in L1 had higher quality and contained fewer errors. However, higher EFL proficiency participants wrote EFL texts that had similar quality to their own ones in L1 as previous research has showed (Sasaki & Hirose, 1996; Stevenson et al., 2006; Tillema, 2012; Tiryakoglu et al., 2019; Van Gelderen et al., 2003; Van Steendam et al., 2010, Wu & Wen, 2002).

It all seems to indicate that the insufficient linguistic proficiency in EFL to transcribe their ideas into adequate linguistic units (Whalen & Menard, 1995) inhibits the attentional resources towards the strategic knowledge (writing strategies) to achieve the pragmatic and textual goals required by the writing task. In other words, a higher command of the language enables writers to spend more attentional resources on aspects concerning high-level skills rather than grammar and spelling (Chenoweth & Hayes, 2001; Stevenson et al., 2006; Tiryakoglu et al., 2019). In fact, the differences in terms of scores in Content and Text Organisation remained in a similar level, that is to say, writers with lower EFL proficiency struggled to develop a topic coherently and

thoroughly and arrange it adequately, in general terms, in EFL as it requires high-order processing (Schoonen et al., 2001; Silva, 1993; Tiryakoglu et al., 2019). Deferred revision had an impact so in text quality that it has proved to be effective, up to higher extent in EFL than L1, and it would make sense to be included in writing interventions.

As for the analytic assessment of the errors, in L1 were mostly related to spelling whereas in EFL spelling was on top as well followed by the use and conjugation of verbs.

It suggests that there is a lack of proficiency in this particular matter among the pre-service teachers in both languages. The *house cleaning* (Graham et al., 1995) representation of revision has left this dust under the carpet and it should not be overlooked since it can be assumed that all participants in both sections made sure they had paid enough attention to this particular matter. This sort of formal errors does not prevent writers from getting the message across with their texts but brings about some food for thought on the orthographic knowledge of HE students and the way these writers faced the revision of such a visible language feature convention. Even though spelling mistakes do not impede text comprehension, a special intervention on this kind of formal aspect of the language should be undertaken, particularly, for pre-service teachers who will be in charge of making sure that primary students master this kind of language convention.

Likewise, the differences in the mistakes related to verbs in EFL in the task, as they were more present in the summary, puts forward the extent to which participants struggled with the use and, particularly, the formation of the verbs, mostly the past tenses and their conjugation. It did however depend on the EFL proficiency of the participants. If metalinguistic awareness can be identified as a predictor of efficient writing, this part can be used to justify the need for specific grammar reflection as part of the features involved in the writing instruction.

In terms of meaning, the use of words in L1 was present and had an impact on the texts depending on the EFL proficiency. At the same time, the use of false friends depended largely on the length of the texts written and the EFL proficiency of the writer. Their presence in the texts and their deployment by users are topics covered in the following parts of this chapter. As it can be drawn from the results, the amount and type of mistakes made were different in EFL and, in a similar way in L1. In this sense, the use of false friends and, particularly of L1 words as compensatory strategy by lower levels (Manchón et al., 2009; Murphy & Roca de Larios, 2010; Rinnert &

Kobayashi, 2009) was statistically evident in section 1 and stood out in the lower EFL proficiency PSTs in section 2.

On the whole, the main differences in the texts seems to be in EFL since in L1 the performances of pre-service teachers of different EFL proficiency levels and experts were similar. An issue was encountered, though, in the amount of spelling mistakes in L1, particularly in the summary task. Lack of language proficiency in participants' own L1 and lack of attention are plausible explanations and both call for a reflection on the pedagogical approach to the teaching and learning of orthography. On the other hand, the texts in EFL showed that content and text organisation should be improved in those ones composed by Lower-levels who devoted their attentional resources during revision to the substitutions of words to correct what they had written in line with the Inhibition Hypothesis (Stevenson et al., 2006). The use of the L1 may also be conceived as a strategy to alleviate the cognitive load of managing the FL vocabulary at once. Further research in the use and purposes of L1 in EFL writing and how it is dealt with in formal instruction may be considered necessary as to decide if it should be used depending on the writers EFL proficiency and how.

These findings and their conclusions are related to the fourth objective OB4 set for this dissertation:

OB4. To analyse the influence of the level of English proficiency in the metacognitive control and the quality of texts in the process of deferred revision.

RESEARCH QUESTION 4.

What are the differences between experts and PSTs in their use of metacognitive strategies in deferred revision?

What are experts and PSTs' patterns of behaviour with respect to the use of metacognitive strategies related to textual properties?

The self-perception questionnaires showed the distance between what writers think they do and what they actually do. As it was elaborated on in section 2 and the

literature overview, the contrast of experts, advanced and novice writers has been recurrent in the writing research in L1 or L2/FL (Kobayashi & Rinert, 2007, 2008; McCutchen, 2011; Sasaki, 2000; Sasaki & Hirose, 1996; Sommers, 1980; Van Steendam et al., 2010). In this case we depicted the perception of the participants as they were divided into three groups: (i) experts, (ii) intermediate EFL proficient PSTSs and (iii) elementary PSTs.

To start with, experts and elementary PSTs seemed to be more optimistic about the frequency of use of the majority of strategies. They thought they used those strategies and their awareness did not correspond to the actual use, before and after the completion of the writing tasks. Particularly, those strategies related to frequency of use of the types of transformations. It stood out that actual frequencies of use of addition, deletion, substitution and rearrangement before and after revision and self-perception were rather impaired.

On the other hand, intermediate PSTs displayed a more realistic self-perception if compared to the actual revision and the deployment and awareness of use of the strategies.

In EFL, the lower the EFL proficiency in the PSTs the more frequent the use of translation. A strategy that increased in perception after the completion of the tasks alongside with reading. However, even though these groups suggested an increase in the perception of the frequency of use of reading aloud, it decreased particularly in the elementaries' group. A possible explanation for it is the overload of the working memory due to the use of the phonological loop during the reading aloud which could be the reason why these participants may not hold an accurate mental representation of the text. In addition, lower-levels used translation as a resource to make meaning from their L1 to EFL which seems to overwhelm the attentional resources in the working memory (Kellogg et al., 2016)

Operations of metacognitive self-regulation

Experts showed a clearer representation of the text as they focused on conventional changes as much as optional particularly in L1. Intermediate PSTs went for optional transformations more dynamic whereas elementary PSTs focused on conventional transformations more static representation of the writing task.

The way experts faced the process of writing and which were the parts suitable to be transformed, they addressed their transformations mostly to a sentence level with semantic changes in L1, nevertheless, they carried out more single-word, superficial transformations in EFL. On the other hand, intermediates and elementaries focused on formal word-based transformations in L1 and EFL, pretty much like experts did in EFL. There were, however, instances of deeper textual reach in L1 as rearrangements and substitutions at textual level took place even though they were minor which suggest that their writing proficiency may be on track to a higher competence

It can also be concluded that almost all groups and participants chose mainly substitutions and, after them, additions that gained presence in L1. Allal and Saada-Robert (1998) as explained by Allal (2000) labelled substitutions and rearrangements as complex adjustments. It turns out to be a question to shed some light on whether the substitutions entail a more complex reasoning or if it depends on the age of the writers or the writing skills of the participants since they can be considered skilled. In addition, an insignificant use of rearrangement was registered although participants' self-perception of its use was very frequent.

Patterns of behaviour and use of strategies in deferred revision

The recording of the processes of deferred revision and the use of the think-aloud protocol showed a constant attention to correction, the parts concerning grammatical accuracy and spelling were properly looked after and captured most of the attention the participants, in line with Stevenson et al.'s (2006) Inhibition Hypothesis. This kind of behaviour was more explicit and constant in the Elementary PSTs.

During revision, experts showed a more self-assured attitude towards the first versions of the texts they had written. Their revisions were shorter in time and carried out fewer transformations. Intermediates showed a different behaviour among themselves as two of them engaged in almost 30-minute-long revisions where they carried out numerous transformations. Elementaries, on the contrary, got involved in revisions similar in length to experts, with slightly more transformations and a predominance of superficial transformations.

With respect to the act of reading, the emergent planners, those writers who "wrote what came to their minds" (Tiryakoglu et al., 2019), outnumbered the advanced

planners. In other words, the vast majority of participants edited the text as they evaluated that it needed to be transformed, just a few read the whole text before they actually started editing the text. Whether emergent or advanced, deeper and more thorough research may be conducted to find out the influence of this strategy in EFL writing across different educational stages.

Reading, either aloud or silent was the most time-consuming action they performed, moreover, a final reading seems to be a common strategy so that participants could eventually spot the deviations from the language conventions, which was a general concern. In fact, re-reading is an activity noted as part of the part of the sub-process of generating ideas for text writing as stated by Van der Berg and Rijlaarsdam (2006, 2009). It seems to be a recurrent trait in the writing models portrayed in the literature review section of this dissertation (Berninger & Swanson, 1984; Hayes et al., 1987, 2012). As it was highlighted before, participants did not reread or just read their texts aloud frequently in EFL and its use or absence of it makes a difference between experts and elementaries: elementaries avoided it as pronunciation of the words may enhance the phonological loop and overload the working memory impeding comprehension and evaluation of the text written up to that moment. A strategy that experts with the highest EFL level used to indicate that their text was appropriate or "sounds good" (Silva, 1993).

Elementaries made use of the translation or the use of L1 as a common compensatory strategy in different ways: on-line while reading or by using the L1 to signpost a particular word/s, sentence/s in the first version of the texts only to be replaced by the necessary words in the revision. The use of the L1 into L2/FL texts has been stated as a part of the features of novice or FL low-level writers in L2/FL similarly to the participants at Manchón et al. (2009) who looked for the equivalents in English and struggled to convey the intended meaning of certain words in FL.

The previous analysis and discussion of the differences and similarities exhibited by participants from these three groups have allowed to fully achieve the fifth specific objective (OB5):

OB5. To compare expert writers' and pre-service teachers' (PSTs) use of metacognitive regulation strategies in the process of deferred revision and both in EFL and in L1.

In addition, the completion of the second study has also allowed this research to contribute to achieve the first two objectives (OB1) and (OB2):

OB1. To study and analyse the international literature devoted to the research in writing skills and metacognition, including L1 and EFL, in order to explain this research's foundations by using validated models.

OB2. To define and validate descriptors related to the metacognitive control in written texts in EFL as well as to design tasks suitable from those descriptors that evaluate those skills.

The literature in L1 and EFL related to revision and metacognitive regulation in particular those papers that covered the aspects concerning the assessment of writers' perceptions, the comparison between experts and less skilled writers and text quality has been thoroughly reviewed.

All in all, the results and conclusions of the studies presented revealed that participants faced the process of deferred revision in a rather diverse way in terms of metacognitive regulation. Its impact on the quality of essays and summaries, the sort of language conventions flawed as well as the perceptions of the participants and the scrutiny of their routines, as mentioned above, points to discuss the several teaching proposals in order to make pre-service teachers more aware of the aspects to be revised and how to do it efficiently. That is to say, self-regulate their writing process to become self-efficient writers so that they could, in turn, provide primary school students with the resources to do so from that early stage. The proposals constitute the achievement of the sixth objective (OB6) and are described in the following subsection.

5.2. Teaching Proposals

Learning to revise is a lengthy, complex endeavour

Linda Allal and Lucile Chanquoy

There is an almost unanimous voice on the side of researchers from different contexts who claimed or are claiming for a methodological implementation of measures concerning the the teaching and learning of metacognitive strategies in a balanced and precise manner and the need for their inclusion in pre-service teacher education (Dülger, 2011; Farahian, 2015; Kodituwakku, 2008; Qin & Zhang, 2019; Ruan, 2014; Xiao, 2007; Yanyan, 2010). In this section, several pedagogical implications are discussed and different teaching recommendations are suggested so that the last objective set in this research project is fulfilled: (OB6) "To propose pedagogical recommendations for teaching and learning metacognitive regulation operations based on the findings of this research and evidence-based models."

On the one hand, there is the consideration of the process of revision as a specific part to be taught even differentiated from the writing process (Monahan, 1984). Likewise, Chanquoy (2009, p. 92) in her revision of revision insisted on the idea of "separating writing and revising processes seems to be efficient to support writers revising their text, specifically to read their text and to take into account text meaning, instead of just correcting formal errors". Both authors had observed that expert or competent writers and basic or less skilled writers have similar objectives when revising texts and their transformations (Allal & Chanquoy, 2004) the changes undertaken in the deferred revision in this dissertation focused mostly on superficial aspects with little impact in the meaning and structure of texts both in writers' L1 and EFL. It all together aligns with, the need for an instruction of metacognitive strategies as asserted above.

Deferred revision may stand for a chance to improve the quality of texts as showed by Chanquoy (2001) and Faigley and Witte (1981) and corroborated by the results of the dissertation, however, no matter the methods involved the explicit

instruction of metacognitive strategies must be present at some stage of the intervention. The awareness of the aspects covering the metacognitive regulation could be tackled with the use of questionnaires or survey, learning diaries, journals or peer/s interaction and collaboration and the use of think-aloud protocols (Anderson, 2008; Karlen, 2017) that should be part of the intervention before starting before, during and at the end of the writing task and, particularly, during the deferred revision of the text.

It seems relevant that the aspects concerning the awareness of the readership, the development of the ideas through the text and its coherence and the textual meaning as a whole should be highlighted as it can be gathered from the results of the questionnaire in section 2. Besides, an emphasis of revision of formal aspects would be also required alongside a metalinguistic reflection when necessary since some of these errors have diminished the quality of text in a great extent particularly in EFL, since high proficiency is a predictor of higher text quality. As research as showed, revision techniques may include collaborative group work, pairs or dyadic interaction, or individual and, even, teacher-guided that may be followed by a whole group brainstorming spell. The difficulties experienced during the whole revision process would also pay for a think and the affective part of the completion of the task could also be present in the reflection (Hayes, 2012).

The last part of the proposals involve the assumption of including the previous resources into writing methods aligned with self-regulated writing (Fidalgo & Torrance, 2017; Graham & Harris, 2017) which include the reflection of the teaching procedures stated above, moreover, the development of metacognitive skills should the underlying approach to a multilingual, pluriliteracies teaching policy (Cenoz & Jessner, 2009; Coyle, 2015; Lorenzo et al., 2011) in which writing skills are to be developed in all the languages and non-linguistic subjects present in the educational stage: primary, secondary and tertiary / higher education.

Interventions in deferred revision

Chanquoy (2001) suggested that deferred revision would lead to deeper and more frequent revision facilitating the improvement of text quality since it unburdens the cognitive load of any writing task and frees up space in the working memory, particularly in EFL, and allows writers to keep the attention to the mental

representation of the text and helps to reduce the distance to the intended text. Such recommendations can be applied to the writing at the classroom level.

The use of deferred revision in a given writing task is not a common practice although it was suggested that could promote the fluent translation of thoughts into actual text (Galbraith & Rijlaarsdam, 1999). When teachers or lecturers postpone the revision of a text they know that it may turn out to be a lengthy activity that not every student will face the same way. As we have portrayed before, our participants engaged in the deferred revision of different tasks in diverse ways and carried them out differently. It proved that writers' metacognitive knowledge on what, when and how to revise differed in L1 and it did, particularly in EFL. In this particular language, writers are reported to usually engage in tasks addressed to their teachers in class tasks and focus on language accuracy (Bui & Kong, 2019; Qin & Zhang, 2019; Ruan, 2014; Silva, 1993; Tiryakoglu et al., 2019). So revision and, particularly deferred revision, should be a guided process where writers can gain awareness on those aspects.

Salvador-Mata and García-Guzmán (2009, p. 74-75) proposed to carry out different strategies that would involve self-regulation, they included "reading comprehension strategies, revision guides, text processor as an aiding resource, collaborative writing, teacher's guide and support". In this regard, following Fidalgo and Torrance's (2017) Cognitive Self-Regulated Instruction (CSRI), writers should become conscious of the process of writing and gain awareness of the amount of times they actually devote to revision, either online or immediate, by brainstorming how writers perceive the revision of their texts (individually, in pairs or small groups, as stated above). All thoughts could be posted on virtual platforms where students can always get back to their posts and their peers' so that they can keep track of how their own procedures of revisions were and how these models evolve through time. Open Moodle or Padlet could do the job for teachers to keep record of students' previous knowledge so that they can also monitor their students' process.

In a later stage, teachers can point out which aspects writers focus on when they revise their texts depending on the age and writers' declarative and procedural knowledge (De Keyser, 1998) of the process of revision. It may involve a reflection on what those aspects consists of and be determined by the content, the genre and its characteristics, the type of grammar and vocabulary involved, the spelling conventions as well as who the reader/s will be. In fact, a part of the awareness and the motivation

can reside in designing real-world writing tasks so that these procedures could be transferred to future practice (Richards & Rodgers, 2014; Lorenzo et al., 2011).

In this case, the teacher should model a kind of revision from students' productions by eliciting which aspects they should focus on from making meaning by arranging the contents coherently to the formal aspects to be born in mind. Graham and Harris (2018) suggested mind-mapping to establish the relationship between the main ideas to be developed in the text. Peer correction or peer feedback (Allal, 2000; Bui & Kong, 2019; Van Steendam et al., 2010) has also been proved to be a powerful tool for writers to gain awareness of the aspects to be revised, a discussion with a peer or with a teacher (if it were a formal education context) should encourage writers to modify the mental representation of their texts.

There may be, however, some setbacks. To start with, curricula, in general terms, are not designed to focus on a particular skill and as it was presented above, this type of instruction could take longer since it is a rather process-oriented approach and may not meet the timing planned to cover a particular topic. Secondly, some educational backgrounds can be more demanding than others in terms of final text quality and teachers may be tempted to skip in-class reflections and follow-up students' posts. That is why, the procedures to be implemented must be applied to all subjects and in every writing task, and it also involves the coordination of teachers from different years and modules/subjects and those in charge of every entry-form. That would apply to all subjects and all languages through which instruction is delivered in a school.

Multilingual writing education

The multilingual dimension of the educational context in Valencia's area should, by no means, be overlooked. It must be noted that the didactic proposals suggested here are framed by the scope of our research and pre-service teacher education. At this point, it is important to take notice of the legal framework with respect to languages and requirements for primary school teachers and students. After all, the aim of these recommendations is to improve pre-service teachers' writing skills so that they can use them in their duties as teachers and grant them to be able to make their future primary school students learn them since all of them should be considered as competent in different languages or multicompetent subjects (Manchón et al., 2009).

The proposals in this section are in line with the assumptions of the need of a multilingual education (Cenoz & Jessner, 2009) or pluriliteracies approach (Coyle, 2015) which has into consideration several factors that the participants of our study will have to face and have been born in mind. In a situation of languages in contact, both languages (Catalan and Spanish) are part of the school curriculum from nursery to upper secondary, in other words, all students receive their education in both languages and depending on the students setting can be considered as L1 or L2.

There are, for sure, two languages of instruction plus a foreign language that is English. The local authorities through the current legislation have also encouraged and supported the schools that will have a second foreign language, what has been known as “2+2”, in other words, (L1+L2) + (FL1+FL2): two official languages and two foreign languages via the 'Llei de Plurilingüisme' - Plurilingualism act - (Generalitat Valenciana, 2018). Besides, the instruction of non-linguistic subjects is, at the time of speaking, compulsory in primary education as well.

These principles are embedded in multilingual education or, as Meyer & Coyle (2017) have elaborated, on a pluriliteracies approach which entails a different conception on the organisation of the curricula in the different subject matters, the languages and the methodological measures to be implemented at schools. This will have to be included in the training of primary school teachers and it is compulsory for every teacher to be familiar with such policies as it is on the competences to be developed by teachers as part of their undergraduate modules as stated on the Memoria de Verificació, the equivalent of the university courses' curricula (Universitat de València, 2011). Moreover, graduate primary school teachers have a great responsibility and play an essential role in implementing such programmes, likewise, it also means an opportunity for innovation and participation in research projects which can turn out to be international.

Embracing a multilingual or pluriliteracies approach on learning means to assume what researchers have put forward about how the cross-linguistic influence (languages affect other languages learning) enhances the possibilities and opportunities of improving the writing skills (Cenoz & Jessner, 2009). The objective of a multilingual educational system is to make sense of how learning activities are administered to "pluriliterate" students who, in turn, may be able to take advantage of these metalinguistic and metacognitive awareness. In our context, students' L1 and L2 possess similar grammatical systems which should stand for a premise at the time of

deciding a methodological approach for organising the school curriculum and the actual teaching. That is a similar line as outlined by Pascual-Granell (2006) who advocated for the integration of languages which entails reducing duplicities so that...

- Learners have the chance to reflect on which aspects should be taught differently and which other aspects languages (L1, L2 / FL) have in common or differ slightly.
- Learners can develop their competences up to a deeper and greater extent and, in the case of writing, practice for several genres and different types of texts.
- Writing skills and the coordinated methodological implementation of interventions, on the one hand, make students aware of the advantages of systematic practice of metacognitive regulation. It may also engage them, additionally, into a constant reflection during production of texts in different subjects, particularly non-linguistic areas.

These principles guide the regulations proposed by the local authorities in this local context. Nonetheless, Eckstein et al. (2018, p. 4) observed that a kind of translingual approach that some practitioners and theorists have remarked that L1 and L2 (FL) writing approaches and that there are "legitimate practical, cultural, and theoretical differences that separate the two fields" and should be taken into consideration. In this case, it is up to the teachers and school administrators to set the guidelines for the linguistic policies that is the reason why an effective and complete training is needed. Moreover, there exists a need to report the results to the administrations since it is a legal requirement in this educational setting and report of teaching practices, in this case writing, should attach to a discrete and academically granted model of interventions.

Formal instruction: writing interventions

The formal instruction is the milieu where learning is constructed. In this sense, teachers become the facilitators of students' self-regulated learning process in the acquisition of writing skills. Metacognitive regulation in writing becomes the core of

interventions (Fidalgo et al., 2011) which have been emphasized by some particular authors and the following aspects have been highlighted:

The writing interventions are to be defined by the singularity the educational setting where it takes place. Different writing instruction programmes have been implemented and reported recently The Netherlands, Belgium or Spain since the results assessment of the primary students writing skills would need improvement particularly in L1 (Bouwer et al., 2018; De Smedt et al., 2016; López et al., 2018; Rietdijk et al., 2017; Van Steendam et al., 2010) In the light of this interventions a model of reporting them for further research was proposed by Bouwer and De Smedt (2018). The previous references alongside with some other proposals in L1 (MacArthur, 2012, 2016; Moore & MacArthur, 2012). In EFL, in different contexts, authors have claimed that there is a need for instruction in this particular matter in EFL (Dülger, 2011; Kodituwakku, 2008; Maftoon et al., 2014; Ruan, 2014; Xiao, 2007; Yanyan, 2010).

In our proposal for a writing instruction, the role played by the official languages in the territory is similar and it is conceived as the development of the common underlying competence states by Cummings, 1981 as cited by Pascual-Granell (2006) and the consideration of English as the first foreign language. In any case, writing instruction should entail activities that foster the pragmatic and formal aspects of languages and the cognitive and metacognitive dimension of learning languages.

On the one hand, students should be aware of the ways they face the writing tasks with a reflection of all the aspects considered to be genre-bound, from text organisation to recurrent grammar features. This kind of reflection alongside with the metacognitive will enable students to set clear goals and decide the most efficient strategies to undertake the writing tasks according to their knowledge, besides a clearer understanding of what the assessment criteria helps writers as Hayes (2004) substantiated students' revision skills could be improved by providing them with better understanding of the assessment criteria..

The more detailed the criteria are defined and the more aware writers are about them, the easiest the metacognitive knowledge will arise. These recommendations by Hayes imply setting, monitoring and revising the goals for the writing task at hand and stand in line with proposals which postulate self-regulated writing, like Graham and Harris's Self-Regulated Strategy Development (SRSD) and Fidalgo and Torrance's

Cognitive Self-Regulation Instruction (CSRI). The actual review of the criteria with the students at different stages of the intervention can keep the writers on track. Apart from guiding the writing process, the use of descriptors can help teachers and school administrators to match their interventions with the learning outcomes set by curriculums.

Last but not least, evidence-based validated evaluation criteria facilitates in-service practitioners to take part in research which improve their professional skills, enables them to establish fairer judgement about the students attainment of skills and allows them to reflect and act according to the results obtained. If this type of reflective behaviour embedded in a paradigm of action research turns out to be a collective attitude (Uhl Chamot, 2008), learning processes will be enhanced. As a result, the students may gain deeper insight of declarative and procedural knowledge of each subject and acquire and develop the competences entirely.

The improvement of EFL metalinguistic knowledge is a question to be considered since the explicit teaching of grammar seems to be an outdated pedagogical practice and the trendy holistic methods pay more attention to meaning-negotiation. In this sense, Task-based Language Teaching (TBLT) and Content and Language Integrated Learning (CLIL) are amongst the trendiest methods in the teaching of a foreign language and should offer the possibility to engage in the reflection of formal aspects of the language as well as the metacognitive skills employed. It calls for more hours of instruction and a special emphasis on metalinguistic awareness that can be a helpful if a holistic approach is taken in multilingual context there is the need for practitioners to assess learners as multicompetent individuals (Cenoz & Jessner, 2009).

5.3. Limitations & Future Research

Limitations

Different aspects may restrain the validity of the results of the studies presented in this dissertation. First of all, this exploratory studies offered just a transient picture of what participants could perform at the time of the implementing the writing tasks. These results and conclusions apply to these participants. However, the methods used

and the quantitative and qualitative analysis reinforce the study and, at the same time, claim for replication with larger samples of participants and backgrounds, different writing tasks, in which more processual information could be obtained by using keylogg software and bringing in the data.

Moreover, revision is one the most researched features of was addressed but deferred, postponed, delayed revision entails particular procedures and data is difficult to be retrieved due to the amount of different sessions since the writing tasks were not embedded into general courses. It is rather complicated to either expand it to more participants, a larger sample, or get more texts from same subjects, after all four texts are the alleged minimum amount of texts to set a writer's style (Van Weijen, 2008). However, the participants could suffer the effects of weariness if they had to engage in similar writing tasks in just one session. In fact, in research process with a considerable amount of texts the writing sessions have been split into different sessions (Knospe, 2017; Tillema, 2012; Van Weijen, 2008) or a time limit has been set (Crossley & McNamara, 2016; Manchón et al., 2009; Stevenson et al., 2006).

With respect to the qualitative, process-oriented study portrayed in section 2, it must be noted the translanguaging characteristic of the whole process and it may well be necessary to determine up to which extent it can influence the outcome of the flow of thoughts, particularly in writing tasks which involve composing a text in L1 and EFL. An extended, translingual dimension of writing research.

Future research

As the final completion of the studies came to an end, a series of future research issues raised and they may mean a follow-up to this dissertation. The multilingual context of our research, the participants from different educational stages and the writing tasks and genres invite us to point at different directions.

With respect to the operations of metacognitive regulation in deferred revision, it would be advisable to trace compendium of operations in different educational stages from primary to upper secondary, even vocational training and try to obtain more generalizable results. It would also pay to compare them with a greater group of expert writers from a much more wide variety of fields of study so that it would provide a clear picture of what they are like, at least, in the same context this research has taken place and others with different L1s and or FLs.

On the other hand, the results bring some food for thought in the design and implementation of writing instruction that seems to be convenient and has also been advised explicitly (Farahian, 2015; Kodituwakku, 2008, López et al., 2018; Ruan, 2014; Xiao, 2007). A design of an intervention that suits the needs proposed by writing research trends in terms of revision and the metacognitive regulation becomes almost compulsory. Furthermore, it also seems to be required to compare if the instruction is given in one language, its deployment in similar tasks in another language and the transferability of the revision skills after instruction in other languages and with participants with different L1s, L2s and L3s/FLs in an assessment of a translingual approach (Eckstein et al., 2018). This kind of research on the transfer of skills or the use of the same skills across languages pays longer, longitudinal studies (Rinnert & Kobayashi, 2009).

This dissertation contributes to the comparison of the strategies and patterns of deferred revision used in L1 and EFL and two writing tasks. Future research in this sense could be provided by the use of keylogg software. This kind of resource will enable researchers to identify more features of participants' writing skills in different languages. Participants with similar or even identical profiles, can be compared among them and, ultimately, correlated with text quality (De Angelis & Jessner, 2012; Tiryakoglu et al., 2019).

In any case, it pays to bear in mind which the suitable tasks are and how to face the interventions according to the features of the specific genre. An account of the didactic reasons for choices by following the design principles and the learning activities and outcomes suggested by Fidalgo and Torrance (2017) and Van Weijen et al. (2017) would make sense.

To conclude, it may be stated that an increasing necessity of making higher pre-service teachers aware of adopting a different approach in the deployment of metacognitive strategies during revision was encountered. These strategies should be included in pre-service primary teacher training so that it could be used in their professional practice as well as being part of writing research. This kind of instruction should be brought into the syllabus of in-service teachers' continuous professional development.

Chapter 6.

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