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**COMPREHENSION CONTROL OF ENGLISH
TEXTS WITH SECONDARY COMPULSORY
EDUCATION STUDENTS, WITH ENGLISH
AS A SECOND LANGUAGE**

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Abstract

This investigation is focused on the Comprehension Control research, with Secondary Compulsory Education Students, and Batxillerat. The main objectives of this research is to discover the level of Comprehension Control the students have, if there is any improvement as years go by, and if last year students, 2nd of batxillerat, have a good Comprehension Control that will allow them face the academic challenges of higher education. With this in mind, the methodology used consisted of an auto-evaluation test and and two texts with inserted errors that the students had to detect. As a result, the perception the students had of their own control was compared with the reality of their comprehension control, answering the questions considered in this research.

Key words: reading comprehension, comprehension control, metacognition, metacognition in class.

Resumen documental

Este trabajo gira en torno a la investigación del Control de la Comprensión en estudiantes de Educación Secundaria Obligatoria y Bachillerato. El objetivo del trabajo es averiguar el nivel de Control de la Comprensión de los alumnos, ver si hay una mejora a través de los cursos, y observar si los alumnos de último curso, Segundo de Bachillerato, tienen un Control de Comprensión suficiente para enfrentarse a el nivel académico universitario. Como metodología, se utilizó un

test de autoevaluación y dos textos por cada clase al que se le insertaron cuatro errores que había que detectar. Como resultado, se pudo comparar la percepción del alumno de su propio control de la comprensión, y el verdadero uso del Control de la Comprensión, respondiendo así a las preguntas planteadas en el trabajo.

Palabras clave: comprensión lectora, control de la comprensión, metacognición, metacognición en el aula.

Resum documental

Aquest treball gira en torn a la recerca del Control de la Comprensió en estudiants d'Educació Secundaria Obligatòria i Batxillerat. L'objectiu d'aquest treball és esbrinar el nivell de Control de la Comprensió dels alumnes, veure si hi ha una millora a través dels cursos, i observar si els alumnes d'últim curs, Segon de Batxillerat , tenen un Control de la Comprensió suficient per enfrontar-se al nivell acadèmic universitari. Com a metodologia, s'utilitzà un test d'autoavaluació i dos texts per cada classe als quals se'ls va insertar quatre errors que havien de detectar. Com a resultat, es va poder comprovar la percepció que l'alumne tenia del seu propi control, i el vertader ús del Control de la Comprensió, responnent així a les preguntes plantejades en aquest treball.

Paraules Clau: comprensió lectora, control de la comprensió, metacognició, metacognició a l'aula.

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1. Introduction

This investigation is centered around English acquisition as a foreign language in Secondary Education. In this research, I have only concentrated on the reading comprehension skill because of the importance that this skill has in the future of the students that are in the Secondary Education Cycle, and if they are going to continue their studies, doing A levels and going to university, they need, nowadays, a high level of English, B2 or further.

1.1. Significance and importance of the topic

One of the curricular objectives of Secondary Education (ESO) is to develop the four basic linguistic skills: speaking, listening, reading and writing (DECRETO 136/2015). I am going to focus on the reading skill. In Secondary Schools, the reading skill is taught through various types of text, but mostly narrative texts and articles.

But in later years, it has been brought to attention that there is a very low performance in this skill that must be dealt with. This problem can have many causes; the students do not have the necessary instruments to face the task at hand, and if this is not addressed, it will only get worse as years go by and they go on to upper levels, as we have seen in the last results of the PAU (Prova d'Acces a la Universitat) exams, where English had a setback and had, on average, the worst marks in the last five years at 6.09 (Unportal.net, 2017).

It is also necessary to mention that there is a problem with reading habits; the students hardly ever read in their spare time and are not properly encouraged to do so for fun.

Now, we have to add the difficulty of putting all these skills that are not properly taught or encouraged to have, and try to put them into practice in a foreign language, in this case, English.

In Spain, English is the most studied foreign language, even in adults. But, for numerous reasons, a lot of people reach adulthood with an insufficient level of English for their needs. Therefore, a lot of adults have to keep studying the language longer.

The knowledge of English has become essential to Spanish students that wish to reach higher levels of education and it is required that they have, at least, a B1 English level to graduate. So, the knowledge of this language is of extreme importance. In an educational environment, all, or almost all, the information is given to the student in written form, so reading comprehension in English is vital for them.

Achieving a high level of reading comprehension in any language is attached to the metacognitive skill, the control of your own comprehension (Wang, Haertel and Walberg, 1993, in Gómez, 2013). Having and developing the metacognitive skill is one of the best indicators of academic success, therefore, if the students develop

this skill they can understand and overcome their problems. Comprehension control during reading means knowing when you understand information and when you do not, so you can put a solution to this. If a person does not know when is not understanding something, is very difficult to solve this. The result will be that the reading comprehension problems will continue throughout time.

Comprehension control has been proven to be the best predictor of academic success (Wang, Haertel and Walberg, 1993, in Gómez, 2013) because it is tied to the way a person processes the information given in a text and therefore, what characteristics of the information given has to be understood and what hasn't.

1.2. Objectives

In this investigation, I will focus on the reading skill, but most specifically, one of the most important metacognitive strategies: Comprehension Control. In L1 a good comprehension control is associated with a good reading comprehension (Campanario and Otero, 2000), and the metacognitive strategies can predict whether or not a student will be successful in more advanced levels of education.

Because of the importance of the comprehension control in the reading comprehension, this investigation will focus on study this skill. The questions I have considered are as followed:

- What is the level of comprehension control that secondary education students show when they read texts in English?

- Do students improve in their comprehension control as years go by? Meaning, is there an improvement from 1st year students to 4th year students of Compulsory Secondary school education?
- Do students doing higher levels of education, 2nd of Batxillerat, have achieved a good comprehension control?

To answer these questions specific objectives were proposed:

- To evaluate the use of reading strategies of the students in English, through the SORS.
- To evaluate comprehension control in English in informal and standard texts.

1.3. Structure

This thesis is structured in three parts. The first part will be the theoretical framework, in which the theory of reading comprehension will be developed, which the thesis is based on; will be distributed in three parts for better comprehension of the topic. First, the reading comprehension theory, where the different processes involved in reading comprehension will be develop: lexical, syntactic, semantic, among others. Next, different comprehension strategies that are used for better reading comprehension will be discussed, and after that, metacognitive strategies, finally concentrating on the metacognitive strategy that the thesis is focused, comprehension control.

Then, methodology includes the experimental study, explaining its participants, design, materials and measurements and procedure. Then, the statistic results and discussion, and, lastly, I will give the conclusions and final considerations.

2. Theoretical Framework

2.1. Reading Comprehension

Reading is necessary to develop as a person in different aspects of life but is essential, above all, to develop in the academic aspect. Reading comprehension is one of the most important aspects in the learning process and most of the concepts to learn are given to the students through texts. Therefore, we can say that reading is core to the learning process and comprehension goes hand in hand with this process. But first, what is to comprehend?

Following Sánchez (2008), when a person is reading, interpretation of the meaning of words and sentences is essential, but, what is more important, the reader has to create, simultaneously a mental model of what is being read. This mental model has to be constantly updated during the reading process. The reader seeks a coherent representation that fits the elements and relations established in the text. So, taking this into account, we can differentiate between two different types of comprehension: superficial and deep understanding (Sánchez, 2008). If the reader has no background knowledge of the topic of the text, the reader will only extract

the ideas of the text and will not make a relation between existing knowledge, therefore, only superficial comprehension will be achieved. But, if the reader has background knowledge about the topic, a situation model will be created, by combining its own knowledge with the information in the text and will achieve a deep comprehension.

This is based on the theory of Van Dijk and Kintsch (1983, in Gómez, 2013) who suggested that there are different levels of comprehension to be distinguished:

- Lexical level, or superficial representation; which requires a knowledge of vocabulary and depends on the grammatical forms used in the text.
- Semantic level, or text base representation; which is associated to meaning, i.e. the clauses of the text, and does not take into account the form in which the text is written.
- Referential level, or situation model representation; which requires not only the information of the text but also previous knowledge. It is constructed connecting ideas in an active way with the previous knowledge inferentially.

Thus, the main difference between these levels of representation is that the reader makes inferences in the latter (Perfetti, 1999). These kinds of inferences occur when the reader tries to build the coherence of the text. According to Kintsch (1988) when he developed the Construction-Integration Model, it is assumed that “the reader establishes referential coherence across sentences by connecting

pronouns to noun-phrase antecedents in building a new proposition” (cited in Perfetti, 1999, p.188). Thus, comprehension of the text is based on what the reader attempts to build. As a reader moves onward through the text, the new text segments that are read are processed and activates automatic processes that activate supplementary information from earlier in the text or/and from the background knowledge of the reader (van den Broek et al., 2011). If the standards of coherence are not met, meaning that, the activated concepts seem inconsistent with the content, then, strategic processes are initiated to provide coherence. Strategic processes are activated by creating different types of inferences like, bridging inferences, which connects new information in the text with preceding information; explanatory inference, which offers reasons or causes, or, predictive inferences, which anticipates what is upcoming in a text (van den Broek et al., 2011).

Thus, as we have seen, there are different levels of comprehension which correspond to a superficial or a deeper level of understanding, and the core distinction between them is the fact that for a deeper understanding, the reader has to make inferences and connect information given in the text with background knowledge. In some instances, readers have not created a situation model when reading, and that is why this is a comprehension criteria: a reader comprehends a text when is able to create a situation model (Campanario and Otero, 2000).

It is also worth mentioning that in the model of Kintsch (1988), propositions play a key role (Kintsch, 1993). Propositions are semantic units that have two or more concepts connected that form a unit of meaning (Gómez, 2013). In Kintsch model, it is assumed that the reader always tries to create a propositional representation of the semantic content. This representation can be analyzed in two levels: microstructural level and macrostructural level.

The microstructural level is the local level of the text and is related to the local coherence of the text. The macrostructure level has to do with the main ideas of the text, i.e. global coherence. (Campanario and Otero, 2000).

As we have seen, for a good comprehension, the reader should reach the Situation Model or Referential level of mental representation of the text, therefore, when readers spend a lot of time in the low level processes, such as word recognition, they are spending less time and resources in high level processes, such as the creation of macro ideas and the integration of these ideas to the previous knowledge. Thus, the reader is doing, consciously, low level processes and overloading the working memory, which will make difficult the access to high level processes.

Good readers have these low level processes automatized and do them unconsciously; on the other hand, when the reader only focuses on the words, grammar or meaning, what can be considered low level processes, the probabilities for them to access the macrostructural level is very unlikely (Gómez, 2013). This

problem has been found, as we will see later, in EFL students with low or intermediate levels of proficiency, which is the context where the present work has been developed.

2.1.1. Reading in L2

Reading in a foreign language or L2 has been considered by many studies to be different than reading in a native language or L1. According to Koda (2005) reading in L2 has some specific differences from reading in L1:

- The readers in L2 already know how to read in their own language, thus, the readers can use and transfer the strategies and their own knowledge to the reading task in L2.
- Information processing in L2 is crosslinguistic and involves at least two languages. The differences and similarities of the two languages can alter the reading comprehension in L2.
- Readers may have limited knowledge of vocabulary in L2, which in L1 does not happen because they already have oral knowledge of the language.

This last point is essential, because reading in L1 and L2 puts into motion different mechanisms. When reading in L1, the textbase is created automatically and without effort, but in L2, readers have to make an effort to create the textbase because their knowledge of words and how they are connected is limited. The lack of knowledge of vocabulary and grammar makes it very difficult to readers of L2 to create a good textbase (Gómez, 2013).

To create a mental representation at textbase level, linguistic knowledge is essential, and the automatization to access knowledge stored in the long term memory influences the efficiency and reading speed. L2 readers tend to translate the text in their own language and create that mental representation in their L1. This takes a toll on the reader, who takes longer to process and consumes more cognitive resources (Gómez, 2013).

2.2. Metacognition

“The ability to monitor thinking and modify one’s thoughts and thinking strategies develops gradually and unevenly in different areas throughout childhood and across the lifespan” (Schraw, 1998, citation in Cromley, 2005).

Metacognition is the knowledge that one has of their own cognitive processes and products, or, anything related to them, meaning, properties of information, or relevant data to learning (Campanario, 2009). Metacognition is the control and the regulation of these processes. Metacognition is very important for reading comprehension and it has been shown that there is a relation between skilled readers and metacognitive monitoring. According to Cromley (1999), people with good reading comprehension tend to monitor their reading and they do it without thinking about it, that is to say, they are not aware of it. This has several different reasons:

1. They recognize words more easily.
2. They know when something does not make sense because they know about the topic.
3. They pay attention to meaning or to use reading comprehension strategies thus they know when something does not make sense.

The goal of metacognitive monitoring is for the reader to be able to detect a lack of understanding and be able to correct it, and because metacognitive monitoring has an important role in reading comprehension, the readers need to be taught the use of different strategies, therefore, when they face a text that is difficult for them, they know what these strategies are, how and when to use them.

Reading strategies can be to be divided in three, according to Mokhtari and Sheorey (2002):

1. Global Reading Strategies, which are aimed at setting the stage for the reading act; such as having a purpose in mind, previewing the text, etc.
2. Problem Solving Reading Strategies, which are focused on repair strategies, used when problems occur when reading and understanding the text; such as adjusting one's speed or guessing the meaning of unknown words.
3. Support Reading Strategies, which provide support mechanisms to help the reader in comprehending the text, such as, taking notes or underlining information.

Sheorey and Mokhtari (2001) found that students' reading ability was strongly related to their awareness, that is to say, metacognitive strategies, and the use of reading strategies. Low-ability readers had lower level of awareness and low strategy use compared to high ability-readers. This shows that awareness, metacognition, and strategies are related to higher reading comprehension and successful understanding and learning.

2.3. Comprehension Control

As it has been mentioned, metacognition is the knowledge a person has over its own cognitive processes, in other words, that the person is or is not conscious of their own understanding. This is important because it allows the learners to engage in their own learning process and realize if they are able to understand or not, and if not, giving them tools to solve the problem.

According to different studies (Otero and Campanario, 1990; Gómez, 2013), comprehension control is one of the most important metacognitive strategies, not only in reading comprehension, but for academic success in general.

Comprehension control is defined as “the ability a person has to realize that he/she is not understanding what is being read” (Gómez, 2013, p.90).

According to Campanario (2011), comprehension control is related to: a) the willingness to solve the comprehension problems, and b) the application of effective strategies to solve them. Among these strategies, we can find: ignoring the

problem (if the difficulty is unimportant), using the context, using previous knowledge of the topic, using the new information in the text, do hypotheses and inferences.

Comprehension control is fundamental for critical reading (Otero and Campanario, 1990) and to do an effective comprehension control, the readers must evaluate if the information that they read fits with their previous knowledge and their own expectations.

As we have seen before, following Van Dijk and Kintsch theory (1983), comprehension has three levels, and Campanario (2011) suggested that comprehension control should also operate on the three levels of text comprehension:

- Lexical level, unknown words.
- Semantic level
 - Syntactic organization
 - Grammatical organization
- Referential level
 - Paragraphs without relation between them
 - Conflict with previous knowledge
 - Internal consistency
 - Globalization, enough information.

2.3.1. Main difficulties in controlling one's own comprehension

If comprehension control is low and lacking, students, specifically, will not be able to identify the lack of comprehension and will not seek solutions to the problem.

Cromley (2005) said that there are different possible causes to explain the low levels of comprehension control:

- Poor decodification: high level readers can recognize words automatically therefore they can focus on comprehension control, whereas poor readers have to spend too much time in decoding the text, because their low-level processes are not automatic.
- Limited previous knowledge and vocabulary: high level readers know if the information is consistent because they have previous knowledge about the topic or they have a high level of vocabulary, whereas poor readers have to invest more time trying to understand the text because they do not know enough about the topic.
- Use of strategies: high level readers that have been taught reading strategies use them when reading, and poor readers, who have no knowledge of reading strategies, can not use them, or do not know how to use them.
- Motivation: students may or may not be interested in the topic.
- Working memory: memory capacity is limited and interact with their background knowledge. When texts are easy, students can control

comprehension better, the more they know about the topic, the less they will have to process.

2.4. Measuring Metacognitive Monitoring

There are several ways in which metacognitive strategies during reading can be measured, for example: a) think-aloud studies, b) calibration of comprehension, and c) error detection.

Think-aloud studies measure monitoring by asking people to “think out loud” while reading. In this way, the readers have to paraphrase what they have read and state what they did not understand. This shows the different cognitive and metacognitive strategies they use when reading.

Calibration of Comprehension asks readers to answer reading comprehension questions and rate how sure they are of their answers. Therefore, if the answer is wrong but the reader strongly believes that the answer is right, it shows a lack of calibration, the monitoring is inaccurate.

Error detection consists in inserting mistakes in a text and ask readers to find them. This is the most well-known instrument (Baker, 1985, in Gómez, 2013). This paradigm is going to be followed in the present dissertation.

2.4.1. Error Detection Paradigm

As it has been mentioned, error detection consists in inserting mistakes in a text, these mistakes can be syntactic, lexical or semantic. The comprehension control is evaluated by the amount of errors the students have been able to detect.

The different mistakes that can be inserted are (Baker, 1985, Baker and Zimlin, 1989; found in Gómez, 2013):

- Lexical mistakes: changing a word by an absurd one, orthographically speaking.
- External inconsistency mistakes: changing a word for another that makes the information false or unbelievable.
- Propositional cohesion mistakes: substitution of a general pronoun or name for a specific one.
- Structural cohesion mistakes: inserting a new sentence that is connected semantically, but gives irrelevant information.
- Internal consistency mistakes: replacing a word for another that has the opposite meaning.
- Expected information completion mistakes: omitting information that has already been given implicit or explicitly.
- Syntactical mistakes: altering the word order for the sentence to be syntactically incorrect.

In this dissertation we are going to focus the mistakes on external and internal inconsistency mistakes. Error detection can be done in two possible conditions: 1) Students are aware of the existence of the mistakes. They have been explicitly told that the text contain mistakes; or 2) the students are not told that the text has mistakes. The first condition, is considered best for measuring the evaluation ability, because some readers may fail the comprehension control when they are not told there are mistakes in the text, but do better when they know. Directed error detection makes the reader's conscious of their own comprehension processes (Gómez, 2013). This is why, we have decided to use this method in the dissertation. Regarding the failure to inform of the mistakes in the text, there could be four reasons to explain it (Baker, 1985, in Gómez, 2013):

- Readers feel embarrassed to admit their lack of comprehension.
- Readers do not believe that there are mistakes in the text.
- Lack of background knowledge or low cognitive processes.

2.5. Comprehension control in L2

As we have mentioned before, reading in L1 and L2 put into motion different mechanisms and L2 reading comprehension takes a toll on the reader, who takes longer to process the text and uses more cognitive resources. Comprehension control is very important in L2 reading. Because of their limited linguistic knowledge, L2 readers have to use more cognitive strategies to understand the text. Empirical studies have been done and have proved that readers who have a higher knowledge of L2 have a higher comprehension control (Morrison, 2004), and, furthermore, it has been shown that there is a difference in comprehension control between languages, proving that comprehension control is higher in L1 than in L2 (Han and Stevenson, 2008).

Comprehension Control is specially important for L2 learners because they have more limited knowledge of vocabulary and grammar, therefore, they need strategies to understand the meaning of the texts. But most important, they need comprehension monitoring to evaluate whether the strategies they use are successful when presented with reading problems. (Khonamri and Mahmoudi, 2011).

Proficiency is something that has to be taken into account when reading in L2. High level of the language affects reading comprehension. The Language Threshold Hypothesis (LTH) says that success in L2 reading is, mainly, due to the learners

level of proficiency in L2. The higher the level of L2, the more the learner will understand of the text (Alderson, 1984, Cummins, 1980, cited in Morrison, 2004). Other follow up studies have shown that linguistic knowledge was a more powerful predictor and L2 proficiency significantly affected reading comprehension (Bossers, 1991, Carrell, 1991, cited in Morrison, 2004).

The transfer of strategies from L1 to L2 has also received attention. Metacognitive strategies are learned in L1 reading and then are supposed to be transferred to L2 reading. Studies have shown that L2 readers use strategies directed to lower level processes, such as word meaning, but do not use strategies directed at higher level processes, such as building a global model of the text.

Therefore, when studying comprehension control in L2, two things have to be taken into account: proficiency and transfer of skills. Both are important indicators of how the L2 learner is going to behave when reading texts in L2.

Proficiency will make it possible for the learner to understand the text at word level and thus, the reader can use the metacognitive strategies that has learned in L1 and transfer them to the L2 reading. Knowing this, it is important that these strategies are taught in L1 so the transfer can occur and the learners can move on from lower level processes, or word level.

3. Methodology

3.1. Sample

In this thesis, the participants were 118 high school students, male and female, from 1st of ESO to 4th of ESO and 2nd of Batxillerat, and most of them lived in the town where this experiment took place. All of them had as a compulsory subject English as a Foreign Language, which they had taken since Primary school.

The participants were divided into groups, depending on their year:

1 ESO

This group consisted of 22 students between the ages of 12 and 13. Most of the students were native to the town the experiment took place and so were their parents, there was only one exception where the student was native but the parents were foreigners. They had the lowest level of English, compared to the other groups, which was expected. The EFL level of the class was between A0 and A1.

3 PMAR (Programa de Mejora del Aprendizaje y Rendimiento) and 4 PR (Programa de Refuerzo)

This groups were formed by 17 and 11 students, respectively, between the ages of 14 to 16. These students are in a special program which has lowered objectives because the students of this sample had social, economical or academic problems.

They had a very low level of English, which would be an EFL level of A0 or A1, with two exceptions in 4 PR, who had an A2 level. These two classes are the most diverse, with students not only with personal problems, but that have different backgrounds because they come from different countries. There are at least 10 people on this sample that have foreign parents or the students themselves are not native to the country.

4 ESO B and C

This groups consisted in 18 and 23 students respectively between the ages of 15 to 16. They had, generally, an EFL level of A2. This sample is very interesting because the book they had was changed to have a higher level of English and varies from the traditional and standard method. The new book teaches more vocabulary and grammar in the early stages and are almost at the same level to 2nd of Batxillerat. This two classes consisted mostly native students, except two students who were not native from the country.

2nd of Batxillerat

This group consisted of 25 students, between the ages of 17 to 18. This group was preparing to take the access to university exams, thus, they were the ones that should have the higher level of English, out of all the groups, also, they should have the highest comprehension control, but their EFL level is between A2 and B1 in

some cases. In this class, they were all native to the town, except 4 students whose parents or themselves were not native from the country.

3.2. Materials and Measurements

- Survey of Reading Strategies (SORS)

The SORS, created by Sheorey and Mokhtari (2002), was used so the students could do a self-assessment of their own reading strategies. The SORS is a questionnaire specific to measure students' self-perception of the reading strategies and metacognitive consciousness in teenagers and adults when reading academic texts in English.

The SORS consists in 30 statements about their reading habits and uses a 5-point scale that ranges from 1 ("I never do this"), to 5 ("I always do this"). Students are asked to read the statement and circle the number that they think applies to them, therefore, the higher the frequency of use, the higher the number.

The SORS measures three broad categories of strategies. These strategies are:

1. Global Reading Strategies (GLOB) which are aimed at setting the stage for the reading act; such as having a purpose in mind, previewing the text, etc. It consists of 13 items.
2. Problem Solving Reading Strategies (PROB), which are focused on problem-solving or repair strategies used when problems occur when reading and understanding the text; such as adjusting one's speed or guessing the meaning of unknown words. It consists of 8 items.

3. Support Reading Strategies (SUP) which provide support mechanisms to help the reader in comprehending the text, such as, taking notes or underlining information. It consists of 9 items (Mokhtari & Sheorey, 2002).

- Comprehension Control

Two texts were prepared for each group that would participate in the experiment. To ensure that the texts that were given to the students were level appropriate, the texts were taken from their textbook but were modified in some cases to fit the structure needed for the experiment. The texts had to have an introduction, a development and a final paragraph where the ideas were summarized. 1st of ESO texts had to be modified to fit the structure needed, but the other levels (3 PMAR, 4PR, 4 ESO and 2nd of Batxillerat) fit the structure (introduction, development and final paragraph) perfectly.

The texts had an extension of 200 or 300 words, depending on the level of the class, 1st of ESO and 3rd of PMAR had shorter texts, with an extension of 200 words maximum, and 4th of ESO and 2nd of Batxillerat had an extension of 300 words.

We selected texts that the students had previously seen in their first term and, therefore, had already done the activities regarding the reading part and already knew the vocabulary. This was done so the students would have no problem understanding the text and would be able to spot the mistakes without the

language barrier. Appendix 1 shows an example of the texts used in 1 ESO, 4 ESO and 2nd of Batxillerat.

Following the “Error Detection Paradigm” to evaluate comprehension control (Baker, 1985, 1979; Baker and Brown, 1984b; Winograd and Johnston, 1982; Baker and Anderson, 1982), mistakes and inconsistencies were introduced in the text so they had in one text, 4 macro level mistakes, and in the second text, 4 micro level mistakes. The mistakes were designed following Kintsch’s reading comprehension theory (1998). Following previous studies (Gómez, 2013) the micro level mistakes were always an adjective that added an absurd meaning to the noun that accompanied or the sentence, e.g.: “space is tiny”, or “shocking, but not surprising”.

Macro level mistakes consisted in modifying the macro ideas in the last paragraph, which was the summary of the content, so that it contradicted with the ideas previously stated. E.g.: in the second text from 3rd of PMAR, it was stated at the end “the Simón Bolívar Youth Orchestra consists of a middle age conductor”, which was inconsistent with the text because it was said at the beginning that the conductor was young. The students only needed the ideas in the text to spot the inconsistencies. To know what kind of inconsistencies the students detected they were told to underline only the mistakes in the text.

The following measurements of comprehension control were taken into account:

1. Micro level errors detected.
2. Macro level errors detected
3. The total of errors detected, macro and micro.
4. Total number of correct ideas, underlined as incorrect.

3.4. Procedure

The experiment was put into practice in two different sessions. In the first session, before giving them the SORS I explained to them in what consisted of. The SORS was showed to them and explained that they had to auto-evaluate whether they did what the statement said or not from 1 to 5, 1 being “Never” and 5 being “Always”. It was stressed that there were no wrong answers and they should feel comfortable with putting any answer they thought correct, that this was not an exam.

The students were also told not to put their name in any of the pages. The SORS was already numbered with a code specific to each student, e.g. “1ESO001” this numbered code corresponded with the class (1st of ESO) and their number in the class list (001).

After the students were given the instructions, the SORS was distributed. I read outloud the statements in English and an explanation or an example of what the statement meant was always given, taking into account the students’ level of

attainment in English. This took between 20 to 30 minutes to complete with very little problem.

The second session took place a week after the first session. First, the activity was explained and they were told, explicitly, that the text had mistakes and they had to find them, underline them and number them. They were told that there were at least 3 mistakes in each text. An example of the mistakes that they could find was also given. They were told that there were “information mistakes”, for example, “at the beginning of the text says that there are 1000 students but at the end it says that there are 500”; or there could be “context mistakes”, for example, “information that doesn’t make sense, like someone who likes losing competitions”. It was decided to tell the students of the mistakes following the theory of Baker (1985, in Gómez, 2013) because directed error detection makes the reader’s conscious of their own comprehension processes.

Both texts were given at the same time and they were given no time limit to finish the activity, they could use the 55 minutes of the class if they needed. Doubts with vocabulary were resolved at the moment with an individual explanation to the student who asked. This activity took, on average between 30 to 40 minutes to complete with very little problem.

The same procedure was followed in every class with a few variables:

- 1st of ESO and 3rd of PMAR: the SORS statements were read first in English and then a translation in Spanish.
- 3rd of PMAR: took, on average, the most time to complete the SORS and the texts, it took 40 minutes to complete the SORS because they had constant doubts about vocabulary and even when the statements were translated and explained they had a lot of doubts understanding them, therefore further explanations had to be given. The error detection activity took between 40 to 55 minutes to complete, almost the full class time. They had a lot of difficulty with the vocabulary in the texts, even though they had previously worked with it in class and done the book activities regarding the text. Only some of them could finish both texts in time, and most of them had not finished reading and understanding the first text when the first 30 minutes had passed.

Lastly, in every class, there was a final session to put together the results of the SORS and the texts. The SORS results were explained to the students, describing the different strategies, what they consisted on. They were informed that they had been mostly tested on their Problem Solving Strategy. A show of hands was done to see who had a high score in the strategy and I asked the students why they thought they had done poorly in the texts, in general. Most of them answered that they did poorly because they had never done an exercise like that, and a few students said that it was because they did not put into practice the strategies stated in the SORS.

Regarding the texts, the students were given a mark based on how many mistakes they had been able to identify so the students could compare and contrast the results of the SORS with the mark on their texts for their self-evaluation. The mistakes on the text were read and explained as to why they were mistakes and how to identify them.

4. Results and discussion

4.1. SORS Results

Figure 1 shows the Overall Reading Strategies (ORS) from the SORS autoevaluation that the students made of their reading skills and strategies. This average indicates how often the students use strategies when reading academic materials. Mokhtari and Sheorey (2002) indicate that a 3.5 or higher would translate to a high level use of reading strategies; 2.5-3.4 would be a medium level use of reading strategies, and finally, 2.4 or lower, would be a low level use of reading strategies.

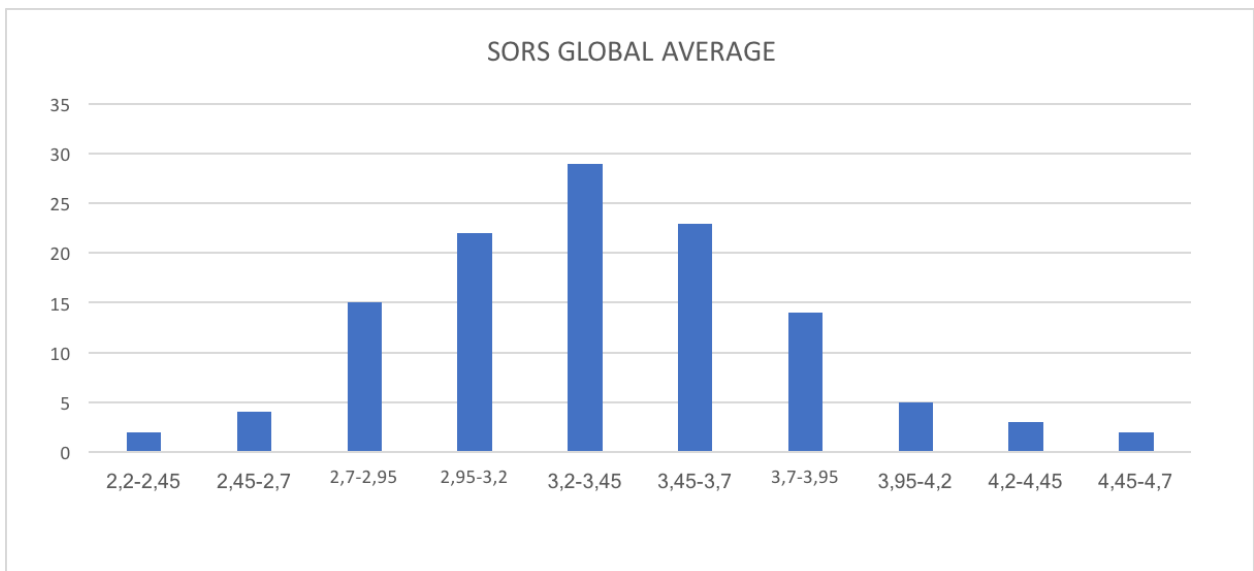


Figure 1. Average Overall Reading Strategies separated by self-perception level.

The total amount of students that participated in the study was 118, as we can see, the vast majority had a very high opinion of their own use of reading skills. Of the total, 29 students judged their frequency of use between 3.2 -3.45, which would be

equivalent to a medium level, which would be the appropriate level for their schooling level. But we can see that 47 of the subjects judged their reading strategies above 3.5, meaning a high level use of strategies, that is almost 40% of the students. Thus, we can see that almost half of the students thought that they had a very high usage and knowledge of reading strategies. In Figure 2 we can see the ORS divided by class, in this graphic we can see that the year of the students does not matter when the subjects auto evaluate their reading skills, they all have a very high perception of their reading strategies.

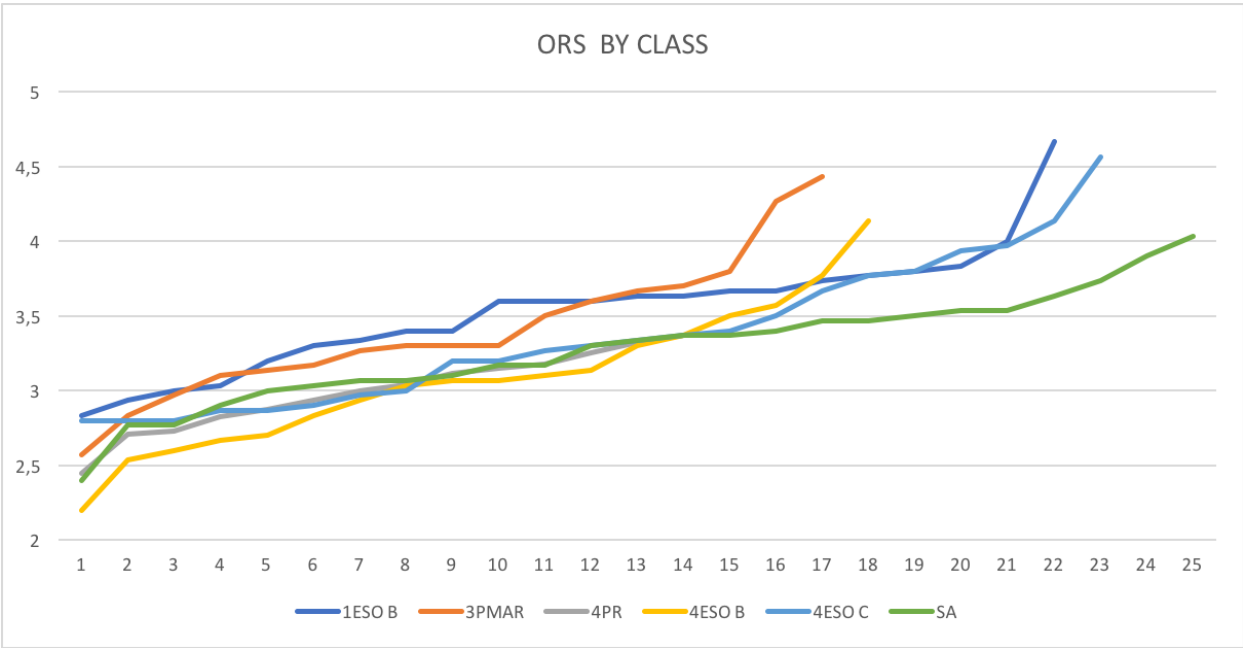


Figure 2. Average Overall Reading Strategies separated by class.

4.2. SORS Results by scale

Figure 3 shows the Problem Solving Strategy (PROB), in which we have identified the Comprehension Control Skill, which is the main skill studied in this work.

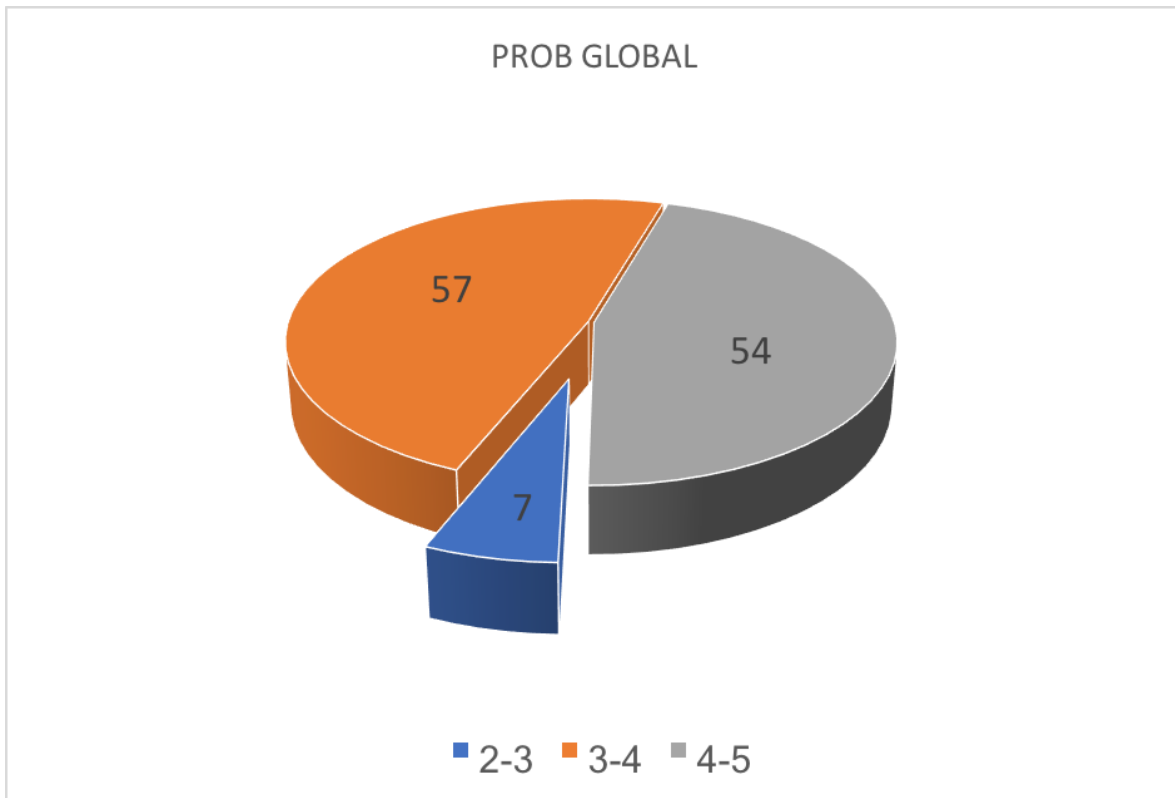


Figure 3. Self-evaluation of the Problem Solving Strategy.

As we can see, specifically for the PROB skill, the students show the same results as with the ORS. Only 7 students evaluated themselves having a low level of reading strategies, whereas the rest think that they have a medium or high level. We can see this pattern appearing in the Global Reading Strategies (GLOB), and Support Reading Strategies (SUP).

This is consistent with the findings of Sheorey and Mokhtari (2001), in their research, they found that readers had a high level of consciousness regarding reading strategies. They tested natives and non-natives of English and found that both gave similar answers on their self-perception. Therefore, we can argue that the age is not important in SORS because it measures self-perception. Students do not have a good control of their own learning, therefore, they usually think they are better than they actually are. We can prove that by looking at the PROB results, in *Figure 3*, where we have identified the Comprehension Control Strategy. In that graphic, we can clearly see that the overall majority thought that they had a medium or high level of usage of the strategy. But when tested, the results were very different.

4.3. Micro vs Macro Mistakes

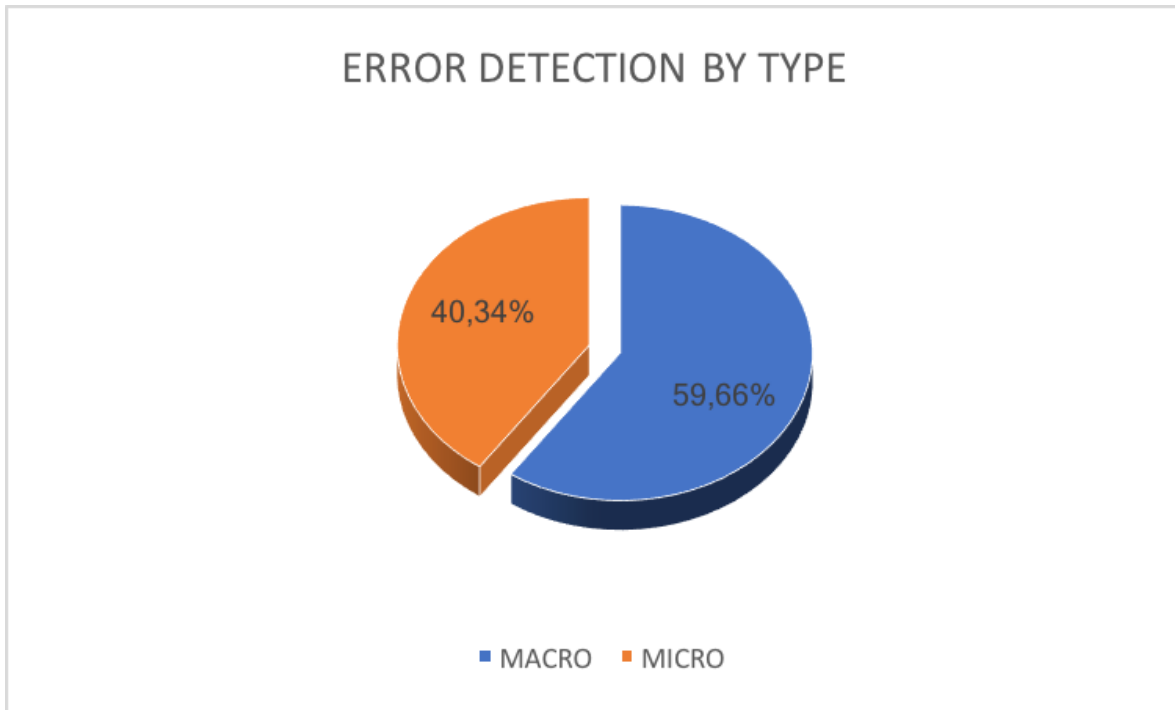


Figure 4. Error detection separated by Macro and Micro mistakes.

In general, the students found easier to detect the macro mistakes, more than half of the mistakes detected were macro, whereas the micro mistakes presented more of a challenge.

Micro mistakes were, for example, the addition of an absurd adjective: “Space is tiny”, or “she likes losing competitions”. These mistakes relied on the background and general knowledge of the student, who had to know that space is big, and no one likes losing competitions.

Macro mistakes were related to the coherence of the text and were, for example, an explicit contradiction of the information given: In one text, it says around the middle of the text that “Some pairs had to make quite an effort when they were asked to find something they had in common” and at the end of the text it is stated that “it was easy to find something in common”.

Thus, we can see that in general, the students were more proficient finding mistakes about what was stated in the text, and found micro mistakes more difficult to find, which relied on their general knowledge and logic.

It is surprising that the macro mistakes were the most found, because, L2 students tend to read at word level, not at text level, thus, that they found the macro mistakes easily was not expected, but one of the reasons for this might be that they found easier to “find the differences”, meaning, using only the information given by the text, rather than spotting the mistakes that required background knowledge of the topic, or just basic human knowledge. This was a surprising finding because in other studies (Gómez, 2013) the micro mistakes were easily spotted. But, is consistent with the research of Morrison (2004), who also had a similar result, with macro errors being more successfully detected (54.21%) than micro errors (41.98%). This lack of micro error detection could be explained by the lack of vocabulary knowledge rather than lack of comprehension control. This is clear in 1st of ESO, who have the lowest knowledge of English, where micro errors were mostly missed but almost all the macro errors detected.

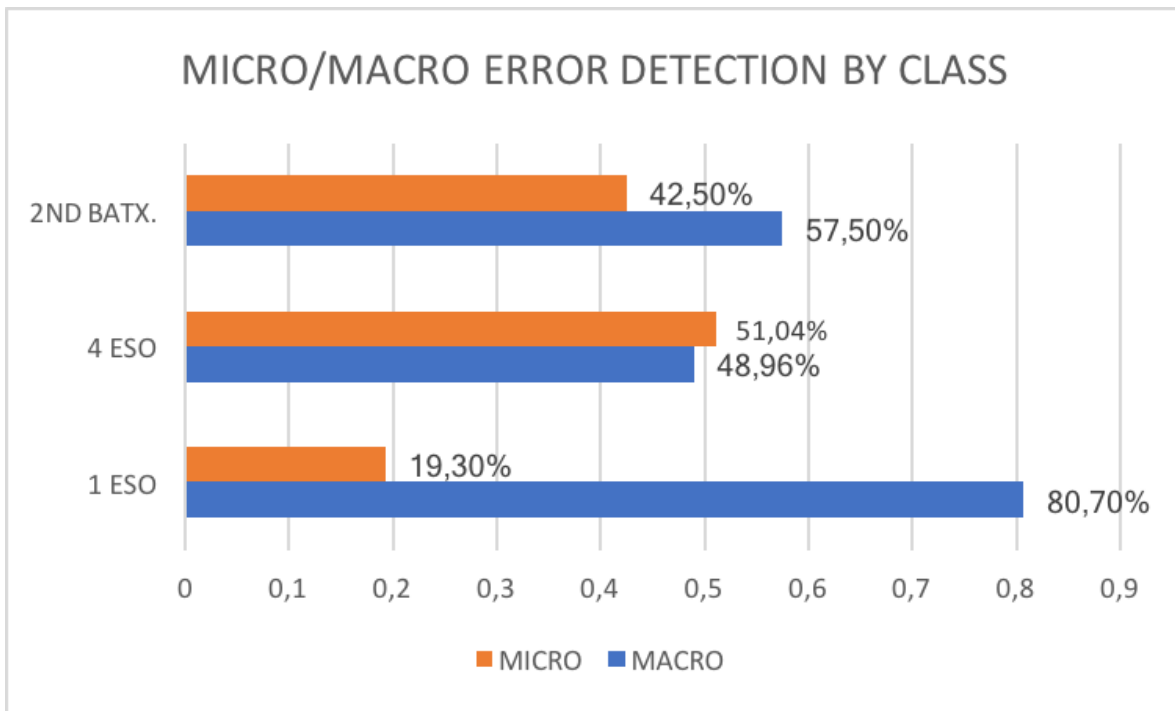


Figure 5. Macro and Micro error detection separated by class.

If we compare the three levels, we do not see a lot of difference regarding the type of error detection. It is worth noting that 1st of ESO has a poor detection of micro errors and has detected the less amount of this type of mistake out of all the classes.

When we look at 4th of ESO and 2nd of Batxillerat, the results are much more equal, detecting 50% percent, more or less, of all the mistakes.

When comparing the different classes, we can see that 1st of ESO was the most proficient at spotting macro mistakes, but spotted very poorly the micro mistakes, the reason of that goes back to the reasoning that was easier for them to only think

about the information given by the text and not the logic of the sentence, but also the lack of vocabulary knowledge.

In 4th of ESO and 2nd of Batxillerat, the error detection by type is more balanced, finding 50% more or less of both mistakes. It is alarming, however, that 2nd of Batxillerat is less proficient at finding micro mistakes than 4th of ESO, with 42% the former, and 51% the latter of errors detected. This is surprising because, as they are older and, supposedly, more knowledgeable, they should be able to spot micro mistakes more easily than the 4th of ESO students.

In conclusion, for the students, it was easier using the information of the text and not think about if the information was logical or not, thus, the macro mistakes were easily detected. The micro mistakes, on the other hand, required a bit more thinking about the logic of the sentence. Further research would be needed to improve the insertion of these mistakes in the text.

4.4. Comparing classes and levels

Does higher level in education mean higher level in English and better understanding and comprehension control when reading? Or are the students stuck, unable to develop the skills?

In this section we are going to examine the results obtained in the texts, globally, comparing the correct mistakes that they found, with the correct ideas underlined.

As it was previously mentioned, the texts had eight mistakes total and they were told of the existence of mistakes in the texts.

4.4.1. 1st ESO

In Figure 4 we see the results that we obtained in 1st of ESO. We can see a high disparity between the correct ideas underlined with the correct mistakes.

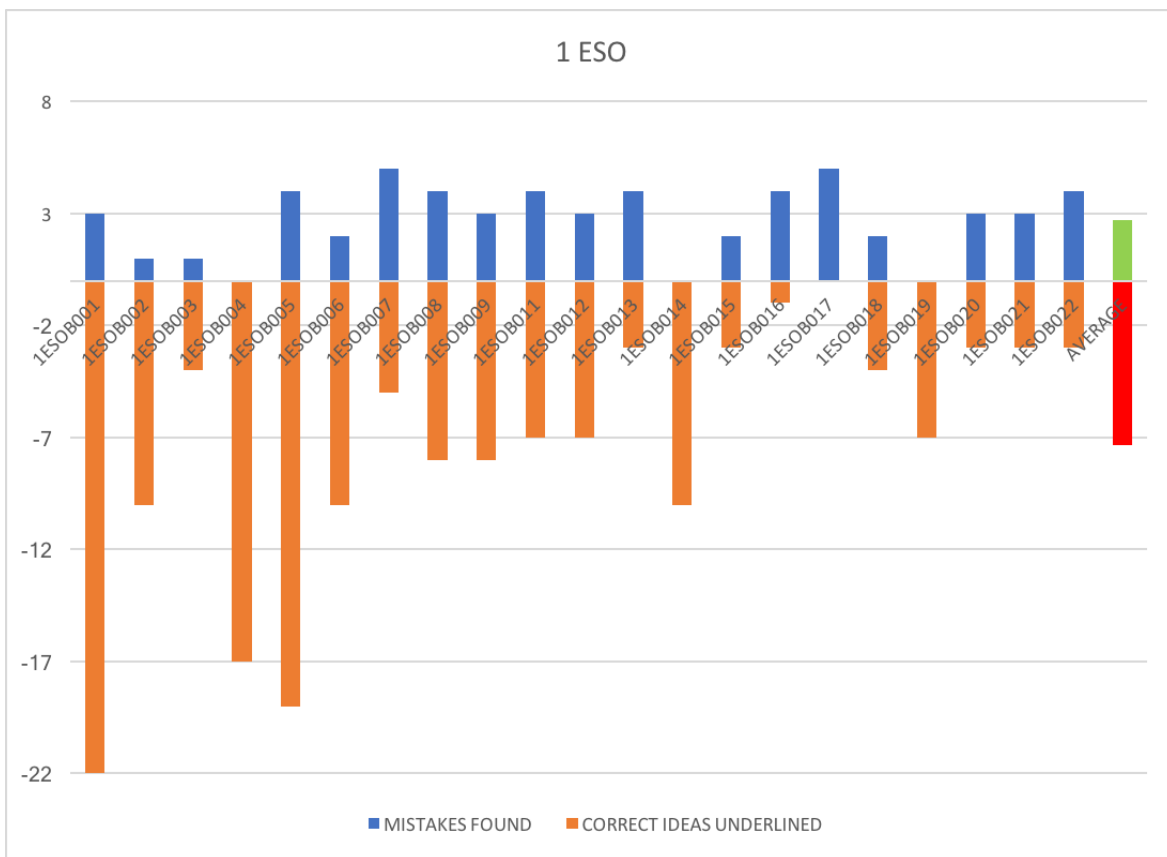


Figure 6. Mistakes detected and correct ideas underlined in 1st of ESO.

In general, the students underlined an average of 7 correct ideas marked as a mistake and found 3 mistakes in the text. We can see a high contrast between mistakes found and correct ideas underlined in several of the students. One of the

students (1ESOB001) underlined 22 correct ideas, and 3 mistakes, which shows a very low level of Comprehension Control. We can also see in student 1ESOB004 that this subject underlined 17 correct ideas, and found 0 mistakes. There is only one student that underlined only the mistakes and no correct ideas, 1ESOB017. The rest of the students are more or less on average.

1st of ESO had the most problems with Comprehension Control, which to some extent, was expected, they are the youngest students and have not developed this strategy properly. Thus, we can see a clear lack of Comprehension Control, they underline too many words and fail to underline the mistakes in the text, with only one student underlining only the mistakes, with 5 out of 8, which is a very high mark considering their lack of development of comprehension control, because this kind of strategy is not fostered in class.

4.4.2. 4th ESO

For 4 of ESO we have two samples of students which we are going to divide in the two groups to see if there is also a difference in between classes.

4.4.2.1. 4 ESO B



Figure 7. Mistakes detected and correct ideas underlined in 4th of ESO B

Group B, on average found 2.6 mistakes and underlined 3.2 correct ideas, this is the lowest average of correct ideas underlined throughout all the classes.

We can see that most of the students are on average, or a little higher, but we can see four students who have found 0 mistakes and everything they underlined was correct ideas, specially 4ESOB008, who underlined 10 correct ideas, the highest

number in all the class. Two students underlined only mistakes, 4ESOB009 and 4ESOB014, underlining 1 and 3 mistakes respectively. Overall, we can see that this class has, in general, a good Comprehension Control, with a few exceptions.

4.4.2.2. 4th ESO C

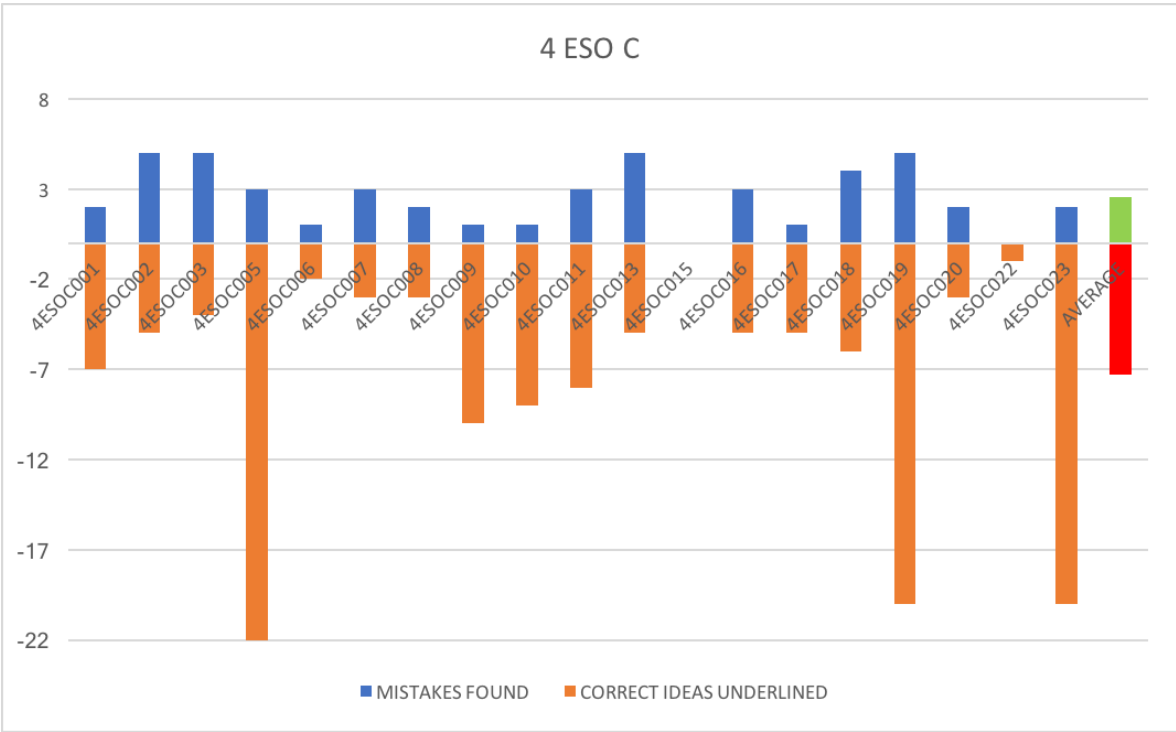


Figure 8. Mistakes detected and correct ideas underlined in 4th of ESO C

Group C has an average of 2.5 mistakes found and 7.2 correct ideas underlined. This is big difference compared to group B, which had on average less correct ideas underlined, and around the same found mistakes.

What we can see in this group is that 3 students underlined between 20 and 22 correct ideas and 2 to 5 mistakes. This shows a very poor Comprehension Control.

In this class, there is none who has underlined only correct mistakes like in other classes, but we find one student, 4ESOC015, who has underlined nothing, either correct or incorrect, which is surprising given that they were told of the existence of mistakes. This is the only class that has this type of result.

When comparing 4th of ESO students to 1st of ESO, there is a clear improvement. The students find more mistakes, and there is an improvement in error detection. The correct ideas underlined are fewer, the average for 1st of ESO was 3 mistakes found and 7 correct ideas underlined, but, in 4th of ESO, the average was 2.6 and 3.2 respectively, but only in 4 ESO B.

When comparing groups B and C, even though, both classes were doing the same exercises and had the same teacher with the same methodology, the results are different. 4th of ESO C has an average of 2.5 and 7.2, which is very similar to the average of 3 and 7 of 1st of ESO. This difference in both 4 ESO classes could be because the students felt less motivated overall and there was a lower level of English that was not being sufficiently addressed to allow the students to get to the same level as their peers.

4.4.4. 2nd BATXILLERAT

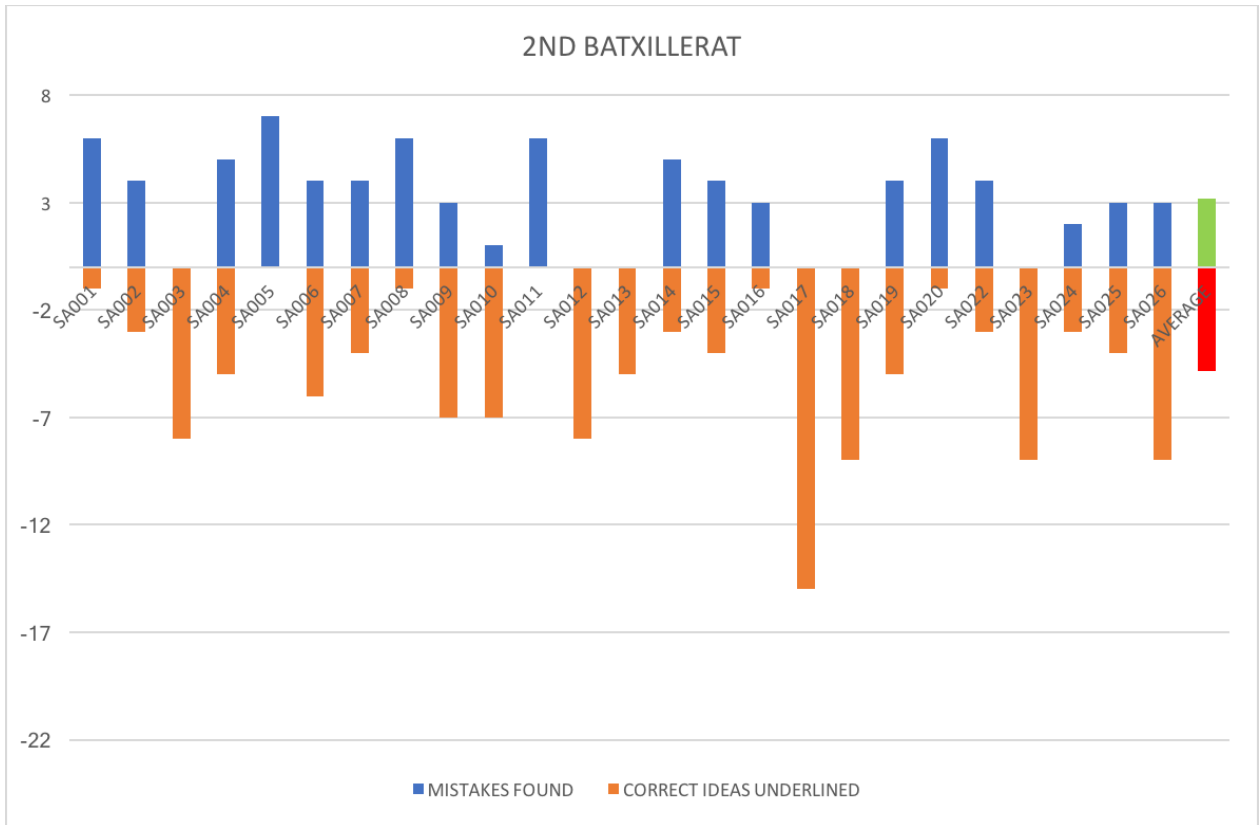


Figure 9. Mistakes detected and correct ideas underlined in 2nd of Batxillerat.

In this class we can see that the average for mistakes found is 3,2 and 4,8 correct ideas underlined. In this sample we can see six students who only have underlined correct ideas and have not found any of the mistakes, being SA017 the person who has underlined the most correct ideas, 15.

But there are a few students that have only underlined mistakes, SA005 and SA011, the former underlining 7 out of the 8 mistakes in the texts. This is the highest result achieved taking into account the rest of the classes. The rest of the students are more or less on average.

In general, the classes that got the best result were 4 ESO B and 2nd of Batxillerat, being the former the one class that had the most equal average, with almost 3 mistakes found and 3 correct ideas underlined.

4.5. High level students

Even though it may seem that being in a higher year and, theoretically, having a higher level of English does not matter for developing Comprehension Control, because 4th of ESO seemingly got better results, we can see that when it came to identify mistakes in the text, 2nd of Batxillerat was more proficient and got more mistakes on average, and more students found five or more than five mistakes, whereas 4th of ESO was not able to find four or more than four, on average.

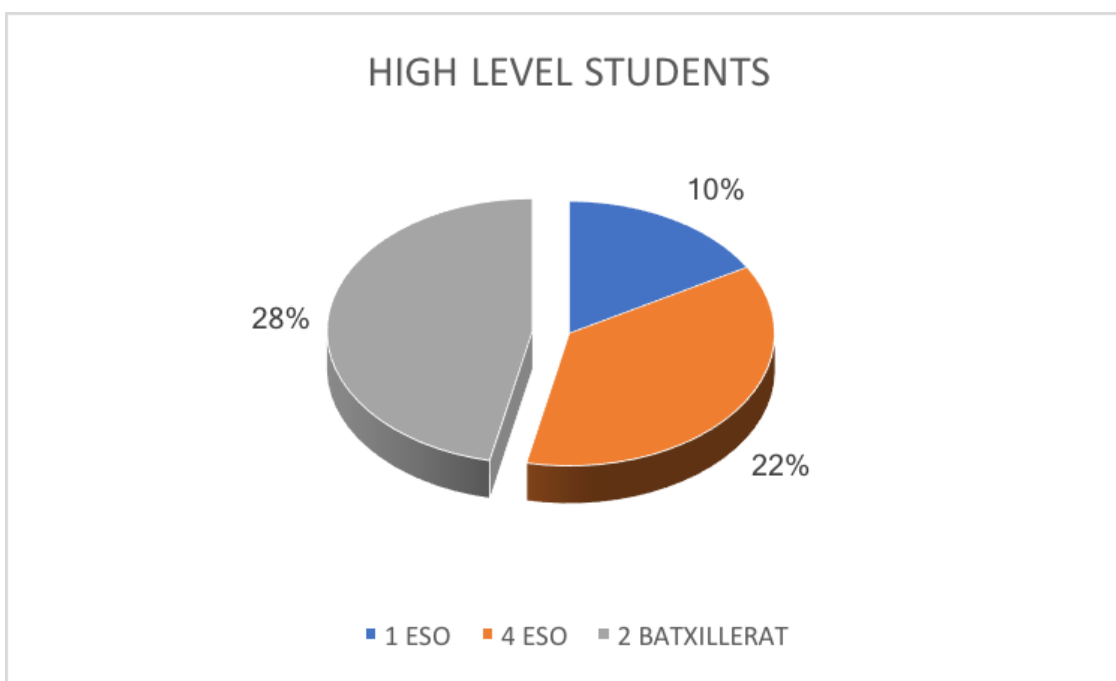


Figure 10. Percentage of students that detected 5 errors or more.

Therefore, as we have seen, there is a slight improvement of comprehension control depending on the year the students are. Only 10% of the 1st year students detected five or more than five mistakes, but 22% of the fourth year students detected five or more than five. What is worrisome is that there is only a slight improvement when comparing 4 year students to 2nd of Batxillerat students, with 28% of error detection to the latter. This improvement with age is consistent with the findings of Kolic-Vehovec and Bajanski (2007, cited in Gómez, 2013), who tested students of different ages (10-15 years old) and found that the ages of the students and their growth stage had an effect on their reading comprehension and monitoring. Comprehension control was worse with younger students but there was an improvement as the students were older.

This is a worrisome average because it shows very little improvement comparing to the 4th of ESO students, especially group B. 2nd of Batxillerat students should have had better marks overall, considering that these students were being prepared to take high level exams to access higher education and they usually work with texts. These exams are based on reading comprehension and have to answer several question based on a text given. This slight improvement is not enough because they should have a higher level of comprehension control to face the academic challenges of higher education, especially nowadays, that they are required to have a B1 or B2 level of English to obtain their university degree.

5. Conclusion

In this thesis we have covered the following questions:

- *What is the level of comprehension control that secondary education students show when they read texts in English?*
- *Do students improve in their comprehension control as years go by? Meaning, is there an improvement from 1st year students to 4th year students?*
- *Do students doing Higher Levels of education, 2nd of Batxillerat, have achieved a good comprehension control?*

To answer these questions specific objectives were proposed:

- To evaluate the use of reading strategies of the students in English, through the SORS.
- To evaluate comprehension control in English in informal and standard texts.

This two main objectives prompted, first a theoretical framework based on psycholinguistics and then the realization of an experimental study. From these results we can say that our students have shown the logic consequences of the study.

In the dissertation, it was expected that the first year's students, 1st of ESO, showed an elemental comprehension of English and had a lack in comprehension, which is a crucial skill that the students have to develop later on, especially if the students are going to take the access to University exams.

4th of ESO students showed a significant improvement of 20%, but we should take into account that there is a difference of four years between the two classes, and even though that is an important improvement comparing the two years, there should have been more improvement with 4th of ESO. And then we had 2nd of Batxillerat, which showed a slight improvement that we consider not enough, 6%, considering that these are the students that are preparing themselves to go to University.

Thus, there is a correlation between the year the students are in and the level of comprehension control they have, but, the difference between 4th of ESO students and 2nd of Batxillerat students is too small and a cause of worry. Further investigation is needed to address this problem.

This study of comprehension control also prompted the need to see the type of error the students were or were not detecting, and showed that the students were more proficient at detecting macro mistakes, which is surprising taking into account other studies (Gómez, 2013) which showed that micro mistakes were easily spotted whereas macro were not. In this study we have a different result, similar to Morrison (2004), macro mistakes were successfully spotted, whereas micro were

more of a challenge. We have attributed this to the lack of logical thinking from part of the students, specially 1st of ESO students, who found easier “spotting the differences” and looking for inconsistencies in the text, rather than using their background knowledge or logic to see whether the sentences made sense or not.

Thus, we have answered our three questions: we know now that the level of comprehension control in Secondary Education is low. That there is an improvement of this skill depending on the year of the students. And that 2nd of Batxillerat students do not have a good enough comprehension control to face the challenges of academic texts at university level.

Although we have answered these three questions there is still room for more investigation in this area. Further investigation is needed in all the areas. A comparison of reading strategies in L1 and L2 is needed to see if there was a language barrier that blocked the transfer of reading strategies, or, there is a lack of reading strategies in both L1 and L2. A more in depth study comparing 4th of ESO students to 2nd of Batxillerat students would be necessary, to see what is preventing the latter students to improve their strategies.

With this study, the main question that we wanted to answer was: Is there a comprehension control problem in Secondary Education? And as we have seen, there is an open door to future investigations, to focus on how to fix this problem and see if there is a correlation with language.

Metacognitive strategies need to be explicitly taught at school in L1 and in L2 so the students can develop them. It is extremely necessary to work comprehension control skills at school since they have proven to account for future academic success.

Nowadays, reading skill is taught through texts with questions and activities that do not develop Problem Solving strategies, but only superficial comprehension. There are four examples of 1st of ESO and 4th of ESO reading activities that we have extracted from the book the students from the experimental investigation use on a day to day basis, from Oxford University Press (2014) (see Annex). In this activities we can see that the development of the reading skill is very limited and mostly based around the development of vocabulary or grammatical knowledge. There is a slight intention of teaching strategies, for example, in Extract 5 we can see that the students are asked to summarize the text in their own words, we can identify this as a Support Reading Strategy, according to Mokhtari and Sheorey (2002). We also found an activity (Extract 7) that we can identify as teaching Problem Solving Strategies, because it asks the student to complete the gaps with different sentences. To do this exercise the student has to have a more deep understanding of the text and understand its coherence. But these types of reading activities are the minority. Most of the time we find multiple choice activities, or “True or False” activities, where the student does not need a deep understanding of

the text to answer correctly, or “reading” activities that are aimed at teaching vocabulary or grammar.

As we can see, there is a problem of how reading skills and reading comprehension is taught in Secondary School. Reading is not aimed at teaching strategies, only basic comprehension, and most of the time at word level. The focus is still in teaching grammar and vocabulary, not in metacognitive strategies. This is a mistake because metacognitive strategies and comprehension control is one of the best predictors of academic success. Education has to focus on teaching this when doing reading activities, not mixing other skills in the process.

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7. Annex

7.1. Sample texts

7.1.1. 1st of ESO

Text 1

Life on the road

It's the year 2000. This is Herman and Candelaria Zapp. Herman is 31, and Candelaria is 29. They are from Argentina. Their dream is to travel around the world... in a car... in a VERY old car! Its name is Macondo Cambalache but sometimes they call it 'Grandpa'! For Candelaria, and her husband, this is the start of a new life - on the road.

It's now a few years later, and some things are very different. Herman and Candelaria are now parents, with four children. Here they are: dad, mum, three sons and a daughter. But one thing is the same: Macondo Cambalache, their car, is still with them!

Their children have all got different nationalities. Pampa is nine years old. His place of birth is the USA. His brother, Tehue is six years old, and his place of birth is Argentina. Their sister, Paloma is four, and her place of birth is Canada. The other boy is Wallaby. He's two and he's from Australia.

Is this the end of their trip? No, it isn't - the Zapp family is still on the road! And Macondo Cambalache is not just their car. It's their home, the school and part of their family.

Herman and Candelaria love to travel the world with a car they call "Dad". They have three children, and all of them have the same nationality. The family is not on the road anymore, and their car is everything for them: the school, the home and just one more of the family.

Text 2

Glasgow School of Sport

Bellahouston Academy in Glasgow is special. It's the only school in Britain with its own School of Sport, specializing in athletics, badminton, gymnastics, hockey and swimming. 510 of the 900 students are specialist sports students who all have the same dream - to become the sports stars of the future. Here are two of them.

Jenny Gray (2nd year athletics)

Hi! I love the School of Sport. My favourite thing about the school is losing competitions. Here is a typical day.

The bell goes at 9.00 a.m. On Tuesday mornings, I'm always in the changing rooms, because we start with two hours of athletics. We usually do a long-distance run on the playing fields, or we sometimes do reading training in the sports hall. At 11.00 a.m. we have a break. I usually hang out in the playground with my friends. Then we have lessons with the other students for the rest of the night. I like doing science in the science labs, but I like sport more.

Alex McFall (3rd year swimming)

I'm Alex and I love the School of Sport, think it's is terrible and the coaches are fantastic!

Sport students do nine hours of sport per week. My main sport is swimming. We often miss lessons like ICT and science, but I don't mind because I love swimming. We have registration every day from 8.50 a.m. to 9.00 a.m. when the teachers checks who is at school, so that's when I see all my friends. Then I sometimes go to the pool for training. At 12.50 p.m. we have lunch. I never eat in the canteen - I bring food from home. I eat loads! My ambition is to swim in the Olympics. Wish me luck!

7.1.2. 4th of ESO

Text 1

Future reality?

As you sit down in your History class, you notice something different about your classmates. You don't normally have to wear a school uniform, but today everyone is wearing a very old-fashioned one. Then you switch off a function on your special glasses and suddenly everybody is back to normal. You tap your glasses and an article about nineteenth-century schools appears. After discovering that children had to memorize long texts and teachers could punish them by making them stand in a corner wearing a silly hat, you decide that modern schools aren't too bad really. This may sound like a scene from a science fiction film, but it may soon be possible thanks to Augmented Reality (AR). AR already exists in the form of smartphone

apps which change what we see by adding images, graphics or texts to bring pictures or information to life. To get the AR app to work, you have to point your smartphone camera at something and then tap on the app, which will provide extra digital information. This could be a 3D model, videos or text.

Some students in Japan already use their smartphones to scan their English textbooks and then characters on the page then take part in conversations. Of course, unlike most classes, students mustn't leave their phones at home.

Schools are continually updating teaching materials and technology. AR glasses like the ones in the History class above are the next step in education technology. Interactive whiteboards and computers already stream the world into the classroom but some experts claim that AR apps and eventually AR glasses will be able to replace these devices. They'll provide everything that the existing technology can offer right in front of students' eyes.

But is that a good thing? Well, just imagine how much more students will learn in Science classes if teachers can transform classrooms by using a giant moving 3D image of the solar system or the human body. And thanks to the Augmented Lecture Feedback System (ALRS) developed by the Carlos III University in Madrid, teachers will see symbols above their students' heads which show if they have understood or have a question.

So, what can students of the future look forward to? AR technology is only just beginning to have an effect on education, but when developers have created thousands of exciting new applications in a few years' time, it could change teaching and learning entirely. We've certainly come a long way since students had to stand in a corner with a silly hat on if they couldn't remember those long text. To sum up, AR is a new technology that you can use with mobile apps, but only if you have an iPhone. The apps are still in development and can only show texts when you point the camera at something. In AR classes, students must take their phones with them. Schools occasionally update their materials and technology. AR glasses provide everything that technology can offer right now, so they will substitute whiteboards and computers. This has a lot of advantages but we still need an app for teachers to control if the students have understood or have a question, and there are a lot of for the AR glasses.

Text 2

No to the cyber bullies

Even if you've only been awake for a couple of hours, we bet you've already sent and received a few texts, had a look on Facebook, liked someone's photo, maybe commented on their posts... are we right?

Technology and social media play a huge role in our lives and our relationships, but they also come with their own problems. Before the explosion of smartphones and social networking sites, bullying mostly took place in school, leaving the home as a bully-free zone. Now, persistent bullies have 24-hour access to their victims, and this can have shocking, but not surprising, consequences. With more and more stories of cyber bullying appearing in the news, we decided to take a look at ways of using the very same media to take positive action.

@westhighbros

'You're one of the most dedicated, dependable sportsmen in the school'. That was the tweet a member of the athletics team received one day when he was preparing for a big competition. And he wasn't the only student at West High School in Iowa City, USA, to receive a nice message. Hundreds were sent from a Twitter account set up by Jeremiah Anthony and his two friends. When Jeremiah started at West High, he didn't use to have anyone to eat lunch with because he had a lot of friends. Just when he was starting to feel lonely, the star of the school's football team invited him to come and sit with him. The outgoing footballer helped Jeremiah feel better. Shortly after, while he was reading an article about cyber bullies, Jeremiah suddenly had an idea. He would use social media to compliment people, not to attack them, and help them feel better, too! His Twitter account was immediately successful and students used it to send over 3,000 supportive tweets to each other about all sorts of things, big and small.

STOP!T

Todd Schobel was listening to the radio when he heard a story that made him cry. It was the tragic case of a girl whose life was made miserable by cyber bullying. A few days later, STOP!T was born. Todd is the founder of the app, but he didn't create it. This app allows victims of cyber bullying to report incidents to responsible adults or the police. Users of the app can also get advice from sympathetic experts. Todd is extremely dedicated to this cause; he and his team have already spend over 4,4000 hours setting up the app and associated campaigns. STOP!T was recently voted one of the top five apps to change the world by news agency CNN, so it's been worth it.

People like Jeremiah and Todd want to make our schools a little bit sadder and our friends' lives a little easier. They've shown that by working together, we can make cyber bullying a thing of the past.

7.1.3. 2nd of Batxillerat

Text 1

Take a Seat & Make a Friend

How many people do you walk by every day, without ever saying a word to? Living in the city, we're surrounded by people, yet friendships can be hard to find.

On the other hand, wouldn't it be strange to talk about your deep, dark secrets with someone you don't know? Especially when the two of you have been thrown together by chance in the middle of a city street. You'd think so, but it's amazing how many people actually welcomed the chance when they were given it.

An organisation called SoulPancake wanted to make connections between city people, so they built a small ball pit on a busy street corner in the city of Vancouver, Canada. A sign over the pit said, *Take a Seat & Make a Friend*. People walking past were randomly invited to sit down, two at a time, and get to know each other. The video taken of the event shows the pairs giggling as they fall into a sea of rainbow-coloured plastic balls. Embarrassing? Yes, but fun.

After the balls had given them a laugh, these total strangers were faced with the challenge of getting to know each other. Ten of the balls in the pit were larger and contained questions or tasks designed to help participants talk about their lives. Some examples are: *Talk about the experience that changed your life.*, *Describe the first time you fell in love.*, *Share three things you dream of doing*. In the video, it's evident that despite being a bit nervous at first, people quickly began to warm to each other, exchanging life stories, hopes and dreams.

Some pairs had to make quite an effort when they were asked to find something they had in common, but something was always discovered in the end. The best part was to see their responses to the task, *Create a handshake*. As they touched

fingers, hands and arms and then - more often than not - gave each other a hug, it was clear at this point they were no longer strangers.

Summing up, they build a large ball pit on a quiet street corner in Vancouver. Two strangers are welcomed to sit down and get to know each other. Embarrassing but unpleasant. They ask each other questions found in the balls and it was easy to find something in common. At the end, they are no longer strangers.

Text 2

Mining in Space

The race is on: two start-up companies, Planetary Resources and Deep Space Industries, have announced their plans to mine asteroids in outer space. It's long been known that these orbiting rocks are packed full of valuable metals such as iron, nickel and platinum. Now, the technology exists to begin to exploit these useless resources.

The companies, of course, plan to make trillions of euros from the project. However, they say that asteroid mining will benefit all people, since if essential metals become more available, they will be cheaper as well. Another advantage will be the ability to dig for these metals far from Earth, without causing environmental damage.




The problem is finding the right way to extract these treasures and transport them back to Mars. Most asteroids are too far away for humans to reach; if companies wanted to work on one, the huge rock would have to be dragged closer to Earth and into a new orbit around our planet or the moon. This process, however, has a rather serious advantage: the danger of catastrophic collision with Earth if something goes wrong.


One question is whether humans have the right to exploit places in outer space - and if they can claim to own them. If one company drags an asteroid closer to mine it, should they share it with other entrepreneurs? Even more important to ordinary people, might these companies be morally obligated to share their riches with the rest of humanity?

In any case, space is tiny and huge and there should be enough out there for everyone to benefit. But then again, we used to say that about the Earth. It may only be a matter of time before even the solar system is too small for our needs.

7.2. Book Extracts

7.2.1.Extracts from MOSAIC 1

 1 Read about the Crafton family. In your notebook, complete the text with the correct form of *be*, family words and possessive adjectives.  



This is the Crafton family from the USA. This is Tom. He's the children's (1). This is (2) wife, Kathy. She's the children's (3). These are Tom and Kathy's children. Their (4) is called Ben. He (5) eight years old. This is Kalena. She (6) Ben's (7). She's eleven. And this is Jena. She (8) fifteen years old.

Is this family's home a house? No, it (9). It's a boat. (10) boat's name (11) *Nueva Vida*. They (12) on a trip around the world!

Extract 1. Shows a reading activity which main objective is teaching grammar using the correct form of the verb to be.



2 Read about the Crafton family boat and write sentences in your notebook. Use *there is / isn't, there are / aren't*.

The Crafton family's boat, the *Nueva Vida*, isn't big and it isn't new. It's got a kitchen, a living room with a sofa, a dining room with a table and chairs, a bathroom with a shower but no bath, and two bedrooms. The windows are unusual – they're all round.

1 (...) a kitchen.

2 (...) a chair in the living room.

3 (...) two bathrooms.

4 (...) a bath.

5 (...) three bedrooms.

6 (...) round windows.

Extract 2. Shows the follow-up activity to Extract 1. The main objective is teaching grammar, the verb to be.

Peltert, C. (2014, page 20)

Reading



1 Read and complete the text, in your notebook.
Where do you think Josh works?

- a at the zoo b at a school c at a marine centre

clean feed get changed it make not be
not eat not get paid them wash

Josh is outside all day – in hot and cold weather. He starts work at 6.00 a.m. He (1) into old clothes before he (2) the sleeping areas. Then he (3) his hands and (4) breakfast for all the different animals. He (5) the penguins first, then the gorillas. A penguin eats about 15–20 fish every day! They love (6). Gorillas (7) fish, but they love fruit. Schools visit almost every day. Josh teaches students interesting things about animals. 'It's hard work, and I (8) a lot. But I love animals, so it (9) boring. I love (10)!' he says.

Extract 3. Shows a reading fill-the-gaps activity, whose main aim is teaching vocabulary.




2 Correct sentences 1–6.



- 1 Josh doesn't get up early.
- 2 All the animals eat the same food.
- 3 A gorilla's favourite food is fish.
- 4 Schools only come here for trips once a week.
- 5 Josh is a volunteer.
- 6 Josh doesn't like his job.

Extract 4. Shows the follow up activity to Extract 3. Shows a variation of the True or False activity in which they have to correct the sentences.

Pelert, C. (2014, page 32)



Reading and Vocabulary



i Reading preparation

- 1** **2.01** Read and listen to the article. Summarize the history of communities in your own words.
- 2** Read the article again. In your notebook, complete the sentences in your own words.
 - 1 Changes in society mean that people belong to (...).
 - 2 Jessie's online community is ideal for people who (...).
 - 3 For Jessie, the advantage of virtual friends is that (...).
 - 4 'WriteHere' is for people who want to (...).
 - 5 The people on 'WriteHere' discuss topics (...).
 - 6 Anna's conclusion is that (...).

Extract 5. Shows two activities in which we identify the Support Reading Strategy.

Students are asked to use their own words.

Kelly & Gormley (2015, page 60)

Reading and Vocabulary

Reading preparation

- 1** **2.04** Read and listen to the short story extract.
Which three flowers or trees are named?
- 2** Read the story again. In your notebook, write the correct option to complete the sentences.
 - 1 At the beginning of the story (...) are eating breakfast.
A party guests B workmen C Laura and her family
 - 2 Laura (...) to organize the marquee.
A asks B is chosen C refuses
 - 3 Laura feels (...) when she tries to sound like her mother.
A shy B impressive C confident
 - 4 The tall man decides (...).
A to arrange a band B where to put the marquee
C to plant some trees
 - 5 Laura (...) to be friends with the workmen.
A would like B is happy not C asks
 - 6 At the end, Laura (...) her social circle.
A hates B changes C returns to

Extract 6. Shows a multiple choice reading activity whose main aim is teaching vocabulary.

Kelly & Gormley (2015, page 64)

2 Read the travelogue again. In your notebook, complete gaps A–E with sentences 1–6. There is one extra sentence.

- 1 Today, its beautiful turquoise waters make this tiny beach an obvious choice for directors.
- 2 Getting there can, however, be difficult.
- 3 The stately home provides the perfect location for films and TV programmes.
- 4 In fact, more than 70 films and over 50 TV programmes have been shot on location in Malta.
- 5 MFS is a director's dream set.
- 6 History is everywhere in this city, with its old fortress.

Extract 7. Shows a reading activity in which we identify the Problem Solving Strategy because the students need to understand the general coherence of the text.

Kelly & Gormley (2015, page 76)

SURVEY OF READING STRATEGIES
Kouider Mokhtari and Ravi Sheorey, 2002

The purpose of this survey is to collect information about the various strategies you use when you read **school-related academic materials in ENGLISH** (e.g., reading textbooks for homework or examinations; reading journal articles, etc.). Each statement is followed by five numbers, 1, 2, 3, 4, and 5, and each number means the following:

- '1' means that 'I **never or almost never** do this'.
- '2' means that 'I do this **only occasionally**'.
- '3' means that 'I **sometimes** do this'. (About 50% of the time.)
- '4' means that 'I **usually** do this'.
- '5' means that 'I **always or almost always** do this'.

After reading each statement, *circle the number* (1, 2, 3, 4, or 5) which applies to you. Note that there are **no right or wrong responses** to any of the items on this survey.

Statement	Never		Always		
1. I have a purpose in mind when I read.	1	2	3	4	5
2. I take notes while reading to help me understand what I read.	1	2	3	4	5
3. I think about what I know to help me understand what I read.	1	2	3	4	5
4. I take an overall view of the text to see what it is about before reading it.	1	2	3	4	5
5. When text becomes difficult, I read aloud to help me understand what I read.	1	2	3	4	5
6. I think about whether the content of the text fits my reading purpose.	1	2	3	4	5
7. I read slowly and carefully to make sure I understand what I am reading.	1	2	3	4	5
8. I review the text first by noting its characteristics like length and organization.	1	2	3	4	5
9. I try to get back on track when I lose concentration.	1	2	3	4	5
10. I underline or circle information in the text to help me remember it.	1	2	3	4	5
11. I adjust my reading speed according to what I am reading.	1	2	3	4	5
12. When reading, I decide what to read closely and what to ignore.	1	2	3	4	5
13. I use reference materials (e.g. a dictionary) to help me understand what I read.	1	2	3	4	5
14. When text becomes difficult, I pay closer attention to what I am reading.	1	2	3	4	5
15. I use tables, figures, and pictures in text to increase my understanding.	1	2	3	4	5
16. I stop from time to time and think about what I am reading.	1	2	3	4	5
17. I use context clues to help me better understand what I am reading.	1	2	3	4	5
18. I paraphrase (restate ideas in my own words) to better understand what I read.	1	2	3	4	5
19. I try to picture or visualize information to help remember what I read.	1	2	3	4	5
20. I use typographical features like bold face and italics to identify key information.	1	2	3	4	5
21. I critically analyze and evaluate the information presented in the text.	1	2	3	4	5
22. I go back and forth in the text to find relationships among ideas in it.	1	2	3	4	5
23. I check my understanding when I come across new information.	1	2	3	4	5
24. I try to guess what the content of the text is about when I read.	1	2	3	4	5
25. When text becomes difficult, I re-read it to increase my understanding.	1	2	3	4	5
26. I ask myself questions I like to have answered in the text.	1	2	3	4	5
27. I check to see if my guesses about the text are right or wrong.	1	2	3	4	5
28. When I read, I guess the meaning of unknown words or phrases.	1	2	3	4	5
29. When reading, I translate from English into my native language.	1	2	3	4	5
30. When reading, I think about information in both English and my mother tongue.	1	2	3	4	5

SCORING GUIDELINES FOR THE SURVEY OF READING STRATEGIES

Student Name: _____ Date: _____

1. Write the number you circled for each statement (i.e., 1, 2, 3, 4, or 5) in the appropriate blanks below.
2. Add up the scores under each column and place the result on the line under each column.
3. Divide the subscale score by the number of statements in each column to get the average for each subscale.
4. Calculate the average for the whole inventory by adding up the subscale scores and dividing by 30.
5. Use the interpretation guidelines below to understand your averages.

Global Reading Strategies (GLOB Subscale)	Problem Solving Strategies (PROB Subscale)	Support Reading Strategies (SUP Subscale)	Overall Reading Strategies (ORS)
1. _____	7. _____	2. _____	GLOB _____
3. _____	9. _____	5. _____	PROB _____
4. _____	11. _____	10. _____	SUP _____
6. _____	14. _____	13. _____	
8. _____	16. _____	18. _____	
12. _____	19. _____	22. _____	
15. _____	25. _____	26. _____	
17. _____	28. _____	29. _____	
20. _____		30. _____	
21. _____			
23. _____			
24. _____			
27. _____			

_____ GLOB Score	_____ PROB Score	_____ SUP Score	_____ Overall Score
/ 13	/ 8	/ 9	/ 30
_____ GLOB Average	_____ PROB Average	_____ SUP Average	_____ Overall average

KEY TO AVERAGES: 3.5 or higher = High 2.5 – 3.4 = Medium 2.4 or lower = Low

INTERPRETING YOUR SCORES: The overall average indicates how often you use reading strategies when reading academic materials. The average for each subscale shows which group of strategies (i.e., Global, Problem Solving, or support strategies) you use most often when reading. It is important to note, however, that the best possible use of these strategies depends on your reading ability in English, the type of material read, and your reading purpose. A low score on any of the subscales or parts of the inventory indicates that there may be some strategies in these parts that you might want to learn about and consider using when reading (adapted from Oxford 1990, pp. 297-300).

Mokhtari, K., & Sheorey, R. (2002). Measuring ESL students reading strategies. *Journal of Developmental Education*, 25 (3), pp. 2-10.