



Retos de la educación online en estudiantes con sordera: ¿es suficiente dar todo escrito?

Inmaculada Fajardo; Nadina Gómez-Merino ; Antonio Ferrer
infabra@uv.es ; nadina.gomez@uv.es ; antonio.ferrer@uv.es

Reading Research Unit/ Devel & Educ. Psy., Valencia, Spain

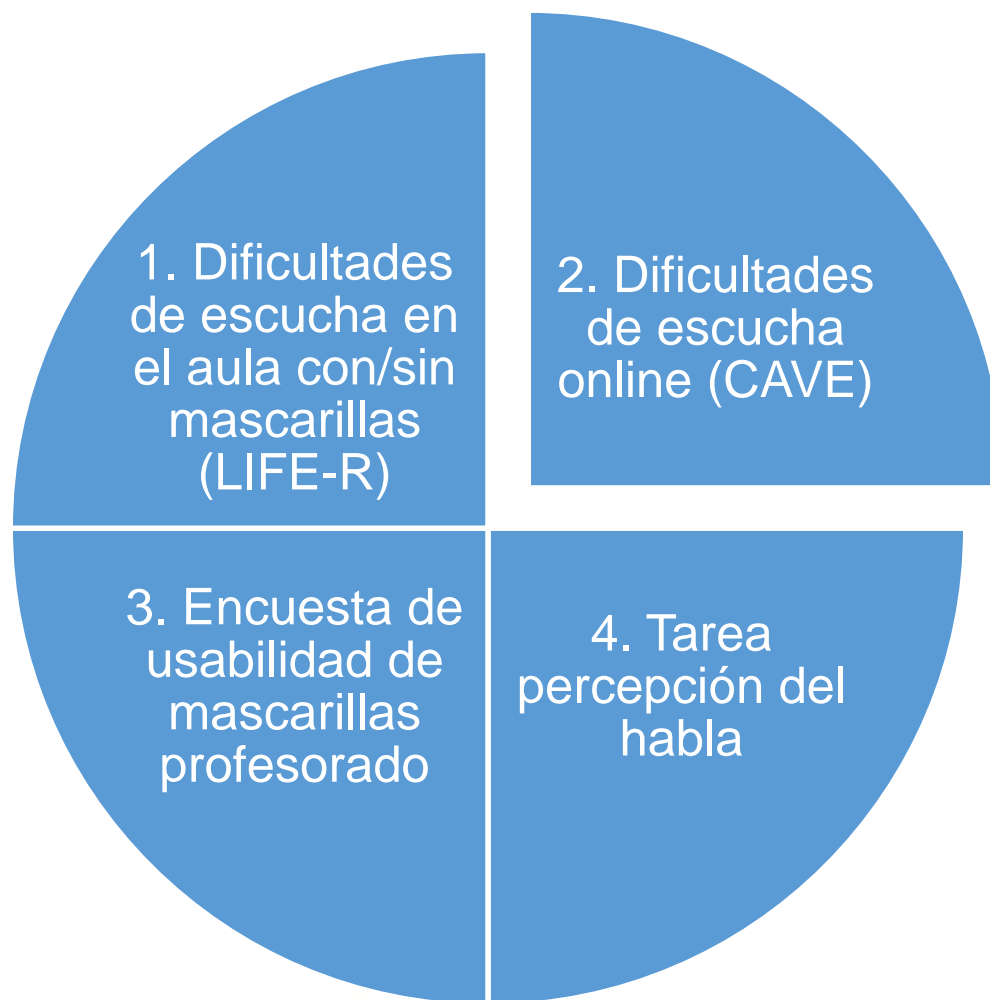


Objetivo

- Evaluar mediante un cuestionario las dificultades de escucha que afronta el alumnado universitario con pérdida auditiva cuando recibe clases virtuales.
- No sólo hablaremos de alumnado con sordera sino también con hipoacusia en los que la percepción del habla, especialmente en entornos ruidosos, se ve afectada.
- Dentro del Proyecto “Impacto de las mascarillas faciales en la percepción del habla en el aula”



Objetivo





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Listening Inventory For Education-Revised (L.I.F.E.-R.)
Student Appraisal of Listening Difficulty

By Karen L. Anderson, PhD, Joseph J. Smaldino, PhD, & Carrie Spangler, AuD

Name _____ Grade _____ Date(s) completed _____

Teacher _____ School _____

Hearing Aid CI user Type of Classroom Hearing Technology _____

Trial period No Yes Length _____ Responses consider performance with without FM system in use

Instructions: Circle the response that best describes your level of listening difficulty in each of the situations.

L.I.F.E. Classroom Listening Situations		Always Easy	Mostly Easy	Sometimes Difficult	Mostly Difficult	Always Difficult
Questions	Brief description					
1. The teacher is talking in front of the class. The kids are quiet. Everyone is watching and listening to the teacher. How well can you hear and understand the words the teacher is saying?	1. Teacher talking in front of room	10	7	5	2	0

1. Dificultades de escucha en el aula con/sin mascarillas (LIFE-R)

2. Dificultades de escucha online (CAVE)

3. Encuesta de usabilidad de mascarillas profesorado

4. Tarea percepción del habla



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CAVE Checklist

Communication Access in Virtual Education

This self-report checklist is intended to be completed by students age 9 and above who are deaf or hard of hearing to identify possible communication access issues that may occur during virtual education situations.

Name: _____ Date: _____ School/Period: _____

Read each question. Select the answer that applies in the situation most of the time.

	Always Easy	Mostly Easy	Sometimes Difficult	Mostly Difficult	Always Difficult	Doesn't Happen
1. You can see the teacher's face during the online lessons. She is using a microphone. How well can you hear and understand the words the teacher is saying?						
2. You can see the teacher's face during the online lessons. She is not using a microphone. How well can you understand the teacher's words?						
3. The teacher is showing a worksheet or other information on the screen and her face is not shown. She is using a microphone. How well can you understand the teacher's words?						
4. The teacher is showing a worksheet or other information on the screen and her face is not shown. She is not using a microphone. How well can you understand the teacher's words?						



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Antes de colocar o retirar la mascarilla hay que lavarse previamente las manos con agua y jabón o solución hidroalcohólica



Colocar la mascarilla, ajustar la pinta en la nariz y cubrir la boca



Ajustar el elástico por detrás de las orejas



No usar la mascarilla más de 4 horas ni tocarla con las manos durante su uso



Sustituir por otra en caso de que se humedezca o detenerse



Retirla sin tocar la parte frontal



Desechar tras su uso en contenedor provisto de bolsa de plástico



Durante o después del uso no debe colocarse sobre la frente ni en la barbilla

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Seeing the teacher's face during the online lesson using a microphone. How well can you hear and understand the words the teacher is saying?						
Seeing the teacher's face during the online lesson using a microphone. How well can you hear and understand the teacher's words?						
Seeing a worksheet or other document when the teacher's face is not shown. She is using a microphone. How well can you understand the teacher's words?						
Seeing information on the screen and listening to the teacher using a microphone. How well can you understand the teacher's words?						



Repetición correcta de palabras y frases
Movimientos oculares sobre la cara del hablante



Educación online y alumnado con pérdida auditiva

- Potencial de reducir las barreras de comunicación y favorecer diferentes ritmos de aprendizaje:
 - Ej.: no hay interacciones ni lecciones orales presenciales que se sustituyen por textos o elementos multimedia.
- Pero:
 - La información escrita puede sobrecargar al alumnado con sordera que generalmente presenta baja competencia lectora (Adultos: Edward et al., 2021; Niños: Gómez-Merino et al., 2020 y 2021).
 - La educación online **sincróna** sigue presentando barreras de comunicación.

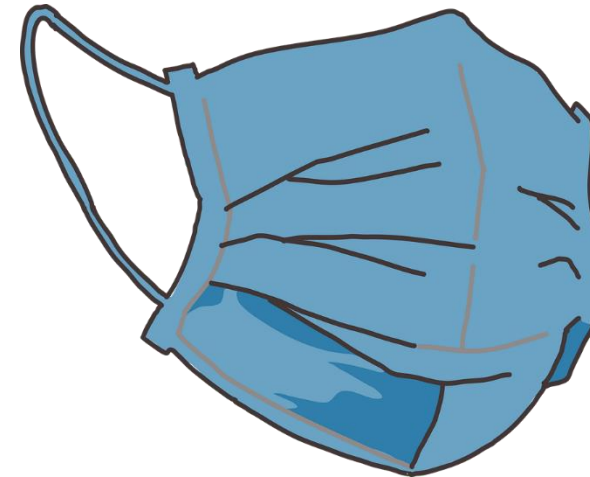


Barreras de la educación online “síncrona” para la percepción del habla

La calidad del sonido es menor



La calidad de la información visual del habla (lectura labial) es de menor calidad o desaparece



Calvo et al. (2020) ; Tye-Murray et al.(2015)



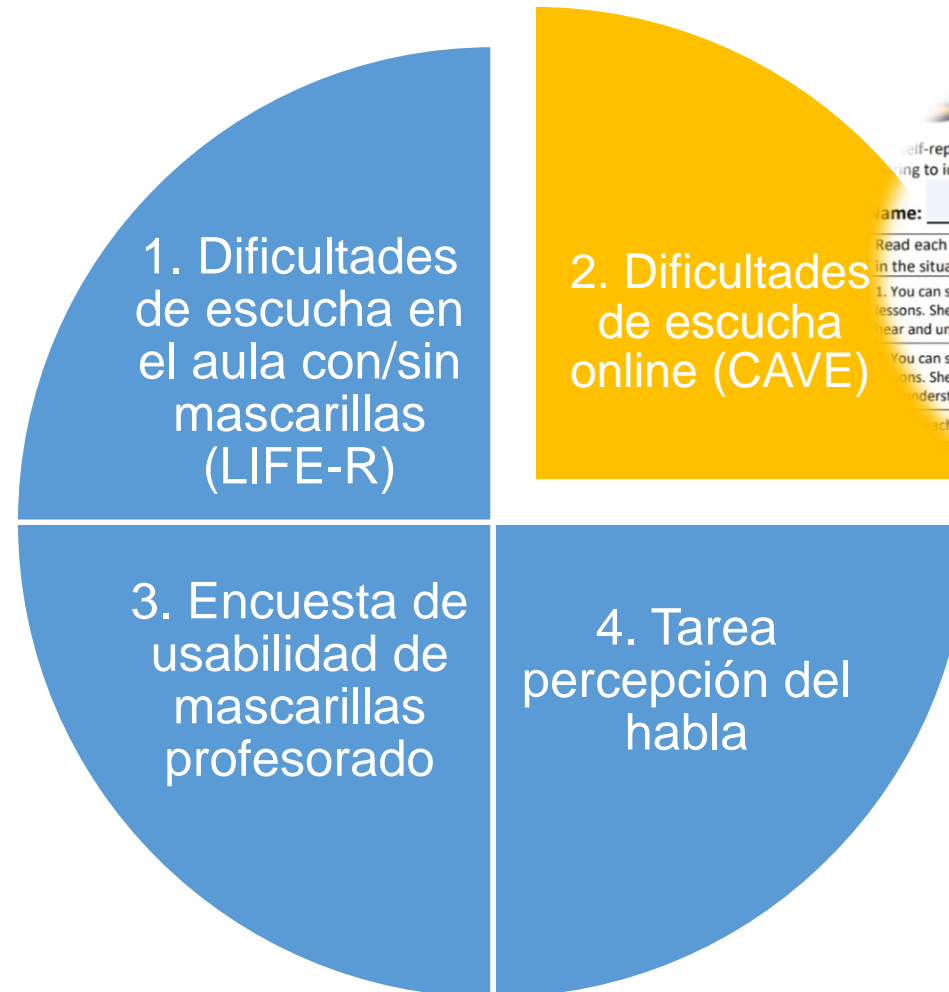
VIII JORNADAS ERI LECTURA: EDUCACIÓN Y LECTURA EN LA ERA DIGITAL

VALENCIA, 22 Y 23 DE OCTUBRE 2021





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Método: Participantes

Recrutados en diversas universidades españolas a través de los servicios de atención al alumnado con discapacidad:

- Universidad de Valencia
- Universidad de Granada
- Universidad de Sevilla

Diciembre 2020-Enero 2021

Mayo 2021

N= 15 estudiantes universitarios con pérdida auditiva
Edad media= 22 años (rango: 19-28)

Grado de pérdida auditiva


- Severa–profunda (N=11)
- Moderada (N=3)
- N/A (N=1)

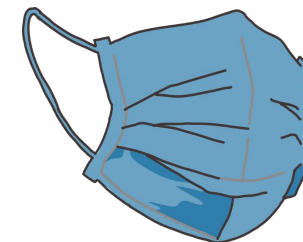
- Audífono (Bilateral n=9 ; Unilateral n=2)
- Audífono + Implante coclear (n=1)
- Sin prótesis (n=3)

- Uso de lengua de signos (N=3)



Método: Materiales

- Cuestionario de “Acceso a la Comunicación en la Educación Virtual” (CAVE, adaptado de Anderson, 2020).
- Aplicación online  LimeSurvey
- Elegir el nivel de dificultad percibida de 14 situaciones de escucha online.



Ejemplo 1

Puedes ver la cara la profesora durante las clases en línea. La profesora no usa micrófono ¿te parece difícil entender sus palabras?

Siempre fácil

Casi siempre fácil

A veces difícil


Casi siempre difícil

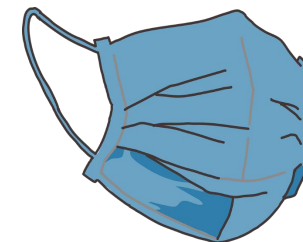
Siempre difícil

No sucede



Método: Materiales

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- Aplicación online  LimeSurvey
- Elegir el nivel de dificultad percibida de 14 situaciones de escucha online.



Ejemplo 2

El profesor muestra una hoja de trabajo y no se le ve el rostro. El profesor usa micrófono ¿te parece difícil entender sus palabras?

Siempre fácil

Casi siempre fácil

A veces difícil

Casi siempre difícil

Siempre difícil

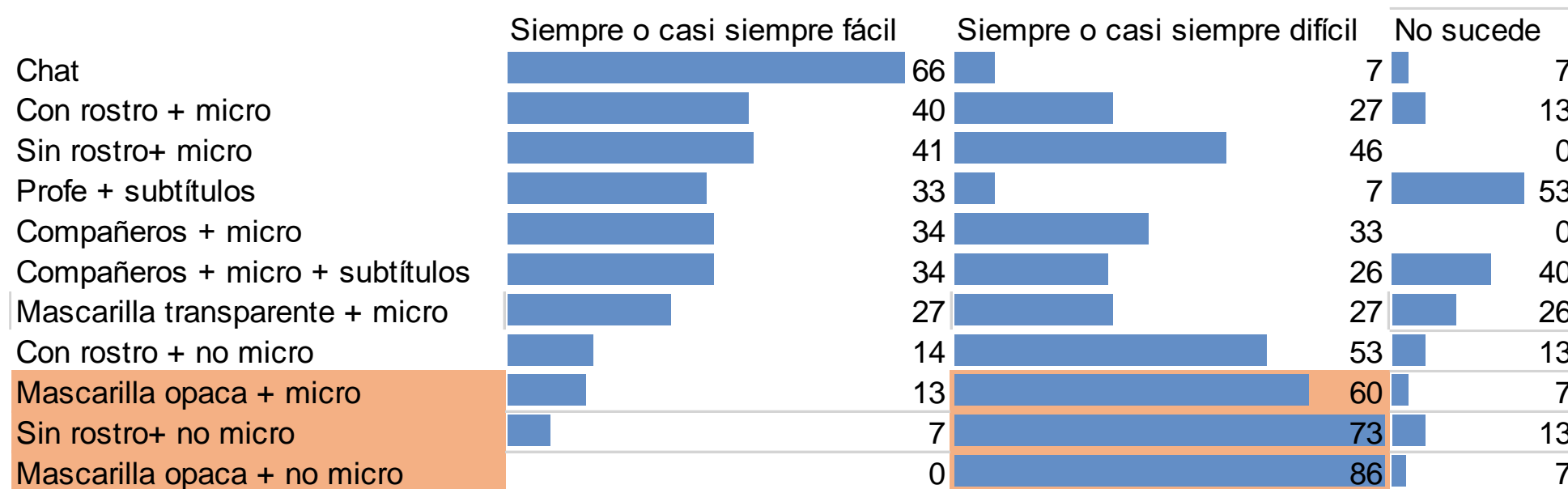
No sucede



Resultados

- Las situaciones que presentan mayor dificultad para los alumnos:
No se ve el rostro del profesor/a y éste no usa micro

Porcentaje de alumnos por nivel de dificultad





Resultados

- Las situaciones que presentan menor dificultad para los alumnos: Seguir conversaciones por chat y cuando se ve el rostro del profesor/a y éste usa micro

Porcentaje de alumnos por nivel de dificultad

	Siempre o casi siempre fácil	Siempre o casi siempre difícil	No sucede
Chat	66	7	7
Con rostro + micro	40	27	13
Sin rostro+ micro	41	46	0
Profe + subtítulos	33	7	53
Compañeros + micro	34	33	0
Compañeros + micro + subtítulos	34	26	40
Mascarilla transparente + micro	27	27	26
Con rostro + no micro	14	53	13
Mascarilla opaca + micro	13	60	7
Sin rostro+ no micro	7	73	13
Mascarilla opaca + no micro	0	86	7



Resultados

- Los subtítulos pueden ser útiles pero no se usan con frecuencia

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Con rostro + no micro	14	53	13
Mascarilla opaca + micro	13	60	7
Sin rostro+ no micro	7	73	13
Mascarilla opaca + no micro	0	86	7



Implicaciones prácticas

- En clases online síncronas, es importante usar micrófono cuando hay alumnado con pérdida auditiva.
- Asegurar que la cara del hablante se ve para hacer posible la lectura de labios: sustituir mascarilla opaca por transparente.
 - La labio-lectura está relacionada con la habilidad lectora en alumnos con pérdida auditiva (Rodríguez et al., 2018).
- Dar la información importante (Ej. Instrucciones de tareas) a través del chat.



Precauciones con respecto a la labio-lectura

- Lectura de labios no es perfecta: adultos jóvenes oyentes y con sordera reconocen alrededor de un 70% de frases por labio-lectura si no hay “audio” (Rodríguez et al., 2017; Tye-Murray, 2016).
- Que el alumnado con sordera se apoye en la labio-lectura no quiere decir que la domine o sea más habilidoso que los oyentes de la misma edad (Rodríguez, 2018; Worster et al., 2018).
 - La labio-lectura está relacionada con la habilidad lectora en alumnos con pérdida auditiva (Rodríguez et al., 2018).
- Apoyar la comunicación oral y la labio-lectura con:
 - Subtítulos en video conferencias: subtulado automático en vivo (Zoom), asistente subtulador (Blackboard Collaborate)
 - Clases pre-gabadas en video: agregar subtítulos (Ej. AegiSub 3.2.1.)
 - Instrucciones escritas en “plain language” (Lectura Fácil)
 - Lengua de signos (Blom et al., 2017): Interpretación simultánea (función de fijar de **Zoom** para mantener fija la miniatura de vídeo del intérprete)
 - Organizadores gráficos antes y durante la clase.



¡Participa!

Si eres tutor/a de un grupo de estudiantes con pérdida auditiva en infantil, primaria o secundaria escribe a:

Inmaculada.Fajardo@uv.es

Si conoces **estudiantes universitarios** con déficit auditivo interesados en participar, comparte éste enlace:

<https://encuestas.uv.es/index.php/143151?lang=es>





Gracias

- Participantes
- UV_Discacitat