

English teachers' needs and strategies for deaf and hard-of-hearing students at the "Francisco Febres Cordero" public high school.

Necesidades y Estrategias de los profesores de inglés con los estudiantes sordos y con discapacidad auditiva en el Colegio Público "Francisco Febres Cordero".

Autores:

Peralta Izquierdo, Willian Marcelo
UNIVERSIDAD CATÓLICA DE CUENCA
Docente de la Universidad Católica de Cuenca
Cuenca – Ecuador



wperalta@ucacue.edu.ec

 <https://orcid.org/0009-0000-6603-0905>

Guamán Luna, Martha Magdalena
UNIVERSIDAD CATÓLICA DE CUENCA
Docente de la Universidad Católica de Cuenca
Cuenca – Ecuador



mguamanl@ucacue.edu.ec

 <https://orcid.org/0000-0002-7385-2154>

Citación/como citar este artículo: Peralta, Willian. y Guamán, Martha. (2023). Necesidades y Estrategias de los profesores de inglés con los estudiantes sordos y con discapacidad auditiva en el Colegio Público "Francisco Febres Cordero". MQRInvestigar, 7(1), 2720-2734. <https://doi.org/10.56048/MQR20225.7.1.2023.2720-2734>

Fechas de recepción: 26-FEB-2023 aceptación: 13-MAR-2023 publicación: 15-MAR-2023



<https://orcid.org/0000-0002-8695-5005>

<http://mqrinvestigar.com/>

Resumen

El aprendizaje del inglés puede suponer un reto para los alumnos sordos o con dificultades auditivas de países donde no se habla inglés, debido al limitado acceso auditivo al lenguaje hablado. Aunque el inglés se enseña en todo el mundo, los estudiantes discapacitados pueden tener más dificultades para acceder a la educación y a las oportunidades de aprendizaje que sus compañeros sin discapacidades. (Berent & Clymer, 2007). El artículo analiza cómo se enseña el inglés a los alumnos con necesidades especiales en Ecuador, donde forma parte de las asignaturas de los colegios regulares. Sin embargo, los alumnos sordos tienen dificultades para aprender inglés debido a los retrasos en la producción oral, el vocabulario y la sintaxis derivados de sus deficiencias auditivas. En consecuencia, forman parte de los estudiantes que necesitan una educación especial. Los educadores y el personal de los centros educativos deben conocer las necesidades específicas de los estudiantes con discapacidad para garantizar que puedan cursar con éxito sus estudios y recibir la atención necesaria. El objetivo principal de este artículo es identificar las necesidades y estrategias de los docentes en la enseñanza del inglés como lengua extranjera a estudiantes sordos o con dificultades auditivas, así como la efectividad de los métodos de enseñanza y estrategias pedagógicas utilizadas de una muestra de cuatro docentes de inglés del Colegio Público "Francisco Febres Cordero" en 2021'2022. Para ello se realizó un estudio cualitativo y un cuestionario con preguntas abiertas para determinar los objetivos de esta investigación y presentar una propuesta con una ejemplo de plan de lección para tratar algunos problemas particulares.

Palabras claves: Enseñanza, sordos, audición, métodos (Palabras tomadas del Tesoro de la UNESCO).

Abstract

Due to limited access to spoken language input, English language learning may be challenging for deaf or hard-of-hearing students in non-English speaking countries. While English is widely taught around the world, disabled students may face greater difficulties accessing education and learning opportunities than their non-disabled peers. (Berent & Clymer, 2007). The article discusses how English is taught to students with special needs in Ecuador, where it is already one of the subjects in regular schools. However, deaf students face difficulties in learning English due to delays in speaking production, vocabulary, and syntax caused by hearing impairments. As a result, they fall under the category of students who need special education. To guarantee that disabled students can attend school effectively while receiving the required care, teachers and staff at educational institutions must be aware of their specific requirements. The main purpose of this article is to identify the needs and strategies of EFL teachers working with deaf and hard-of-hearing students, and the effectiveness of teaching methods and pedagogical strategies used by a sample of two English teachers at the “Francisco Febres Cordero” Public High-School in 2021-2022. For this purpose, a qualitative study was carried out and a questionnaire with open questions was to determine the objectives of this research and present a proposal with a lesson plan sample to overcome some particular problems.

Keywords: Teaching, deaf, hearing, methods (Words taken from UNESCO Thesaurus).

Introduction

The legal framework regulating the Ecuadorian education system highlights the right to education as a key issue for public policy and government investment. According to the Constitution of Ecuador, permanent education is a right of all people and a responsibility of the state, which must guarantee equality and social inclusion. The education of children with disabilities must be different and equal, and all levels of education must be supported to achieve inclusive education for persons with disabilities. The National Education Authority shall ensure that special educational needs do not restrict access to school, and the Ecuadorian government must guarantee the inclusion and integration of individuals with disabilities in educational institutions by removing learning barriers. These legal provisions promote changes in the Ecuadorian education system to ensure equal opportunities for all students.

The Organic Law of Intercultural Education Ecuador (LOEI) has brought significant changes to the education system in Ecuador, particularly in ensuring the rights of students. English is now taught as a subject in ordinary schools and for students with special needs. However, children with learning challenges or disabilities and deaf students face difficulties in accessing education and learning English. Educators and staff at educational institutions must be aware of their unique needs to provide adequate support for them.

Classification of hearing loss is based on the degree of loss, location of loss, and age of onset. “The age of hearing loss is particularly important for language learning. Whether it comes before or after language, the acquisition has a significant impact on a person's capacity for social interaction and communication” (Atar, Aslan & Babci, 2021, p.). Educational institutions and educators must comprehend and fulfill the requirements of this special group, in addition to helping contribute to the accomplishment of their equal rights in learning foreign languages, by exploring their condition, informing people of their needs, and proposing solutions to the issues they confront. It may be challenging to teach English to deaf or hard-of-hearing students. Listening and speaking, two of the four requirements for language acquisition, are useless for deaf and hard-of-hearing students. Reading and writing, the other two requirements, are likewise unsuccessful. (Bedoin, 2011). As a result, English teachers must change their teaching methods, languages, and pedagogical tools. This raises questions about special education teacher training and teaching methods for people with disabilities.

Theoretical Framework

The framework could draw on various theories related to special education and teaching methods for students with disabilities and theories related to language learning and communication for individuals with hearing impairments. Some possible theoretical frameworks could include:

Deaf and Hard-of-hearing

Deaf and hard of hearing are individuals with different degrees of deafness, which may interfere with their capacity to hear and process sound (Marschark & Spencer, 2010). It is a

commonly used term in the field of deaf education and audiology. Significant disability, deafness, and hearing loss may have a major influence on a person's capacity to communicate and learn. According to the World Health Organization (WHO), around 466 million individuals worldwide suffer from a significant hearing impairment. (WHO, 2021).

Hearing loss refers to a partial loss of hearing, while deafness refers to a whole or almost total loss of hearing. Those who are deaf or hard of hearing may have trouble comprehending spoken language and may need additional assistance and adjustments in the classroom.

To help deaf and hard-of-hearing students, teachers must have a thorough awareness of the difficulties they confront and provide the required adjustments and support. This may include the provision of sign language interpreters, closed captioning, and other special resources. (Marschark & Spencer, 2010).

Universal Design for Learning (UDL)

In the 1990s, a team of researchers from the Center for Applied Special Technologies (CAST) created this educational framework. UDL attempts to provide equal and fair possibilities to all learners, regardless of disabilities, by empowering teachers with a set of adaptable criteria for designing accessible and successful education programs. Many means of representation, multiple means of expression, and multiple ways of interaction constitute the cornerstone of the framework. Teachers may build inclusive learning environments that are accessible and successful for all students, regardless of their learning preferences or abilities, by applying the UDL framework (Rose, Meyer & Hitchcock, 2014).

UDL provides a set of rules and concepts that educators may utilize to develop accessible and successful teaching materials and settings for all students, regardless of their abilities or backgrounds. UDL's three basic concepts are:

- **Many Modes of Representation:** Delivering information in a variety of formats to accommodate different learning styles and preferences. This might involve presenting material through text, photographs, videos, or other media.
- **Many Actions and Expressions:** Give students several opportunities to interact with the content and demonstrate their knowledge. This might involve allowing them to write, talk, draw, or express themselves in various ways.
- **Many Methods of Engagement:** Offering several methods for motivating and engaging pupils in their study. This might involve giving options for the sorts of activities or tasks, as well as possibilities for collaboration and engagement.

UDL is meant to help all students, including those with disabilities, but it is more than just a special education framework.

All students benefit from UDL since it promotes accessibility and inclusion while also allowing for more individualized and engaging learning experiences.

Constructivism

This theory emphasizes the importance of active learning and the construction of knowledge through social interaction and collaboration. By stressing interactive and communicative teaching approaches, this might be applied to teaching English to deaf and hard-of-hearing students.

Dewey (1938) developed the constructivist theory of learning, it prioritizes hands-on, practical learning and the learner's involvement in developing his or her knowledge. It prioritizes active, experiential learning and the learner's responsibility in developing his or her knowledge.

It is a learning paradigm that proposes students actively generate knowledge via their experiences and interactions with their surroundings. The importance of social contact and teamwork in the learning process is emphasized in this approach. The use of constructivist principles in English teaching for deaf and hard-of-hearing students may be an effective method for enhancing learning and increasing school engagement. Vygotsky (1978) posits that learning occurs through social interaction and language use. He highlights the significance of the zone of proximal development, the gap between what a learner can achieve alone and what they can do with assistance from a more competent individual.

To apply constructivist principles to the English instruction of deaf and hard-of-hearing students, teachers may use interactive and communicative instructional strategies. Teachers, for example, might utilize activities that require students to accomplish tasks or answer issues in pairs or small groups. These exercises can enable students to communicate their ideas, points of view, and experiences with one another, which can aid in the creation of new knowledge.

Bruner (1960) emphasizes the role of active learning and problem-solving in the learning process. He suggests that learners construct new knowledge by actively engaging with the material and making connections between new information and prior knowledge. So Teachers can employ technology and visual aids to promote interactive and communicative learning. Videos, photos, and diagrams, for example, can also be utilized to assist pupils to comprehend the meaning and context of English words and phrases.

Overall, by emphasizing interactive and communicative teaching approaches, Teachers can help deaf and hard-of-hearing students acquire the knowledge and interpersonal required skills for learning English and being socially involved.

Visual Aids

Visual aids are instructional materials used to enhance the learning experience by providing visual representations of concepts, ideas, or information. They can include images, diagrams, charts, graphs, videos, and other multimedia tools.

Visual aids may be extremely helpful for deaf and hard-of-hearing students to access and comprehend content provided in a foreign language class. Visual aids may help close the gap between spoken language and sign language by allowing students to interact with and learn the material more clearly and naturally.

When using visual aids for deaf and hard-of-hearing students, it is essential to take into account their specific requirements and preferences. For example, some students may prefer videos with closed captions or sign language interpreters, while others may prefer diagrams or images that can be used in combination with lip-reading or other communication techniques (Alasim, 2018).

Literature Review

There are previous studies used as references in this research. The first one is 'English Teachers of Deaf and Hard-of-Hearing Students in French Schools: Needs, Barriers, and Strategies' by Bedoin D (2011). It might be difficult to communicate with students who are deaf or hard of hearing while teaching English. Two of the four language acquisition skills (listening and speaking) are inaccessible to deaf and hard-of-hearing students.

Teaching English to deaf children in special junior high schools in Indonesia by Adi, Unsiyah, and Fadhilah (2017) the challenges experienced by educators in teaching English to deaf or hard-of-hearing students made it particularly difficult. The first source highlights some of the challenges that arose, such as limited access to spoken language, auditory information, written materials, and hearing culture. To overcome these challenges, teachers needed to rely on visual aids, non-verbal cues, sign language interpretation, and other accommodations to ensure that their deaf students were able to succeed in the classroom. The study also revealed the various strategies used by teachers in Indonesia's special junior high schools to effectively teach English to deaf students, including alphabetic signals and shoulder tapping to get students' attention.

Similarly, the second source explored the experiences of teachers of deaf or hard-of-hearing students in a special needs high school in Eswatini in South Africa. The researchers, Kayi, and S'lungile. Thwala, Bonginkhosi, and Tfusi (2019) employed qualitative exploratory research to investigate the experiences of these teachers and obtain insight into their perspectives and teaching practices. This research exposed the significance of successful education and contact with deaf and hard-of-hearing students and emphasized the necessity for particular training and support for teachers who deal with these individuals.

Likewise, "Teaching English to Deaf Students in Brazil: Challenges and Possibilities" by Almeida and Kato (2019) focuses on the difficulties and opportunities of teaching English to deaf students in Brazil. The author examines the obstacles teachers experience while teaching English to deaf students, such as the absence of qualified teachers, poor classroom materials, and the necessity for specific teaching approaches. To gather data for her study, the author conducted interviews with English language teachers in Brazil who had experience teaching deaf students. The author proposed several solutions to these challenges, including the use of technology and visual aids in the classroom, specialized training for teachers, and the development of bilingual curricula. The study highlighted the importance of promoting bilingualism and biculturalism, as well as creating an inclusive learning environment that

values diversity and promotes equity.

Materials and methods

The most suitable method for this article is the qualitative research method, specifically a case study approach. This involves gathering in-depth information about the challenges faced by English teachers, their strategies for teaching English to deaf and hard-of-hearing students, and the effectiveness of these strategies to create a proposal and a lesson plan sample. Creswell (2014) explains how important it is to understand the situation of the case, to use multiple sources of evidence to back up conclusions, and to use strict data collection and analysis methods.

The study population consists of two English Teachers of the “Francisco Febres Cordero” Public High School who worked with deaf and hard-of-hearing students in 2020-2021. A questionnaire was adopted based on the study of Salem M., (2021) utilizing a five-point Likert scale ranging from "1" (very low) to "5" (very high) to elicit the opinions of teachers on each question. To gather pertinent background information, such as gender and years of experience, as well as issues encountered when teaching English to students with special needs.

Needs in teaching English to deaf students

Adjusting the curriculum and media to suit the requirements of deaf and hard-of-hearing students is one of the first obstacles teachers must overcome. Because these students are unable to hear any information or media presented in audio or noise form, teachers must adapt and present the materials in accessible ways using appropriate media. However, during the initial observation, no indication of adaptability to the teacher's materials and media was found. For instance, during the first observation, the teacher taught grammar rules, and students were instructed to translate sentences from Spanish to English and vice versa. The second observation indicated that the textbooks used by the students were supplied by the government and were not designed expressly for deaf students.

The students' lack of prior information was the second issue. The teacher discussed how the students' learning was impacted by their absence from prior information. The inability of deaf students to acquire any material in any manner resulted in a lack of prior knowledge. Because of this, the process of teaching and learning is more challenging since the teacher has to explain the issue more than once. According to the observations, the students had a very difficult time understanding the material, and even though they consulted their dictionaries, it took them a little bit more time to grasp meanings and contexts than it did for students who did not have a hearing impairment.

The need of using repetition several times while teaching the lesson was the second problem. Because of these challenges, the process of delivering the content was made more difficult. As a result, it was even more difficult for the teacher to explain the content to deaf students

because they were unable to access any materials in any form, and the teacher needed to write down several words on the whiteboard. The teacher had to consider the students' past knowledge, and deaf students required more time than hearing-impaired students to learn the topic.

The third issue was the students' inability to distinguish between similar terms. As a result, the teacher was required to clarify the distinctions first, before moving on to the major explanation.

Table 1. Challenges faced by teachers

Challenge	Exact quote
1. adapting activities	“Undoubtedly, listening or listening practices are an issue. Regular students have an appropriate proportion of items to read, listen to, and look at in textbooks, while Deaf students must read everything. So, you attempt to alter something to make it more exciting or distinctive.” (T1)
2. evaluating deaf student’s knowledge and abilities	<p>“I feel it is also difficult to evaluate their level of knowledge and abilities... What they comprehend, what they do not comprehend, and what must be presented differently... They may sometimes surprise you, are able to participate in class without problem, and comprehend what has been read or is being discussed extremely well. And sometimes they struggle with quite simple tasks, which shocks you since you did not expect a problem.” (T1)</p> <p>“The first obstacle I must overcome is getting to know the whole class, all of the students. I must identify the specific nature of their issues before approaching each student personally.” (T2)</p>
3. finding ways of explaining grammatical structures	“Grammar is tough to explain. For instance, you cannot link the articles or the Present Perfect with their L1 to facilitate their learning... That is of the utmost importance.” (T1)

4. creating appropriate teaching materials

“The resources are tough to acquire. I can only use a handful of topics or examples from the textbook for the introductory section. That is too challenging for them. If we can finish a textbook-based task, much more effort is expected from both me and the students. For instance, if there are five statements, I must explain the majority of them and lead them to the answer. Since the textbooks are intended for a whole different class, significantly more effort is necessary.” (T2)

Own elaboration

The responses from participants, in table 1, indicate that the deafest students enjoy learning English, but there are variations among them. T1 and T2 note that their students require more motivation and encouragement, particularly for independent production, due to not having enough exposure to English. T1 mentions that her student is not particularly motivated to learn English, despite losing his initial reluctance towards it. T2, students are very motivated and involved in studying English, demonstrating good attitudes throughout the interviews, as reported by teachers of lower primary students. The teachers' responses suggest that parental involvement and attitude toward learning English influence deaf students' attitudes. Deaf students with supportive parents tend to be more motivated and positive about their learning. In terms of promoting learner autonomy among deaf learners, the teachers have varying degrees of success. While some have positive outcomes, others find it impossible or have not attempted it.

Overall, the responses provide some understanding of the issues and techniques for teaching English to deaf students, but further research is required for more results and conclusions. Additionally, the replies from teachers show that teaching deaf students in upper elementary may need additional or different types of assistance than educating them in lower primary. It is likely that the sooner a student is incorporated into a normal school, the easier it is for them to learn and, therefore, for teachers to teach. This indicates that upper primary school teachers may need particular training and assistance to deal with the special requirements of deaf students.

Furthermore, the responses suggest that promoting learner autonomy among deaf students requires more attention and effort from teachers. While some teachers have had positive outcomes, others have faced challenges in implementing this approach. It is important to note that learner autonomy is a crucial aspect of language learning, as it helps students take ownership of their learning process and become independent learners. Therefore, teachers may need to explore different strategies to promote learner autonomy among deaf learners effectively deaf learners.

In general, the teachers' responses highlight the importance of parental involvement, motivation, and autonomy in English language learning among deaf students. Teachers must provide appropriate support and create a positive learning environment to help these students achieve their full potential. Further research and training may be required to develop effective teaching strategies for deaf learners in different age groups and contexts.

Effectiveness of teaching methods and pedagogical strategies

Effective teaching methods and pedagogical tactics for deaf students have been the topic of extensive educational research. Several factors impact the success of these strategies, including the student's level of deafness, age, and the special needs of the individual learner. In general, the most effective teaching approaches for deaf students are those that are personalized to the particular learner's requirements and skills.

The use of visual aids is an essential educational strategy for teaching deaf students (Alasim, 2018). Sign language, graphs, photos, and videos are all examples. Deaf students rely largely

on cues for communication, therefore visual aids assist to transmit information more simply and efficiently. According to a study, incorporating visual aids can improve deaf students' comprehension as well as retention of knowledge (Marschark & Hauser, 2012).

The use of technology is another successful teaching strategy for deaf students. Closed captioning, video conferencing, and real-time transcription are examples of assistive technologies that can help deaf students access information and engage in class discussions in real-time. According to research, using technology can lead to greater academic achievement and increased engagement for deaf students (Hintermair, 2013).

In addition to visual aids and technology, teachers must be taught the use of effective communication strategies. Clear speaking, the use of facial expressions, and repetition are examples of such methods. Teachers who can effectively connect with deaf students are more likely to provide a positive learning environment and promote student success. (Alasim, 2018).

Teachers must be aware of the deaf community's cultural and language distinctions. Deaf students may have their own distinct cultures and languages, which teachers must respect and comprehend. Teachers who can establish a culturally responsive classroom environment are more likely to build strong relationships with their deaf students and encourage student achievement (Marschark, 2014).

Visual aids, technology, efficient communication tactics, and cultural knowledge are all required for effective teaching methods and pedagogical strategies for deaf students. Teachers can assist deaf students in achieving academic achievement by adapting education to the particular requirements and skills of the individual learner.

Proposal

Introduction: This proposal provides a strategy for teaching English to deaf students. The purpose is to provide an effective approach to teaching English that takes into account the students' unique needs and abilities. It includes information on the teaching methods, materials, and activities that will be used to enhance the student's English language skills.

Teaching Methods: The following teaching methods will be employed to ensure effective learning:

1. **Visual aids:** Visual aids will be used extensively in the classroom, including videos, pictures, and diagrams, to ensure that the students can understand and follow the lesson.
2. **Sign language:** Sign language will be used to facilitate communication and help students understand the lesson more clearly.
3. **Written materials:** Written materials such as textbooks, handouts, and notes will be provided to the students to ensure that they have a reference point for the lesson.
4. **Group activities:** Group activities will be used to encourage interaction among the students and to reinforce the lesson material.

Materials: The following materials will be used in the classroom:



1. Textbooks: Appropriate textbooks will be selected based on the student's level of English proficiency.
2. Handouts: Handouts will be prepared to supplement the textbook material and provide additional practice exercises.
3. Whiteboard: The whiteboard will be used to display important points, vocabulary, and exercises.

Activities: The following activities will be included in the lesson plan:

1. Listening comprehension exercises: Listening comprehension exercises will be used to help the students develop their ability to understand spoken English according to their level of hearing.
2. Speaking activities: Speaking activities will be used to encourage the students to use their English language skills.
3. Reading comprehension exercises: Reading comprehension exercises will be used to help the students understand written English.
4. Writing exercises: Writing assignments will be useful for helping students improve their English writing abilities.

Conclusion: Teaching English to students with hard of hearing requires a specialized approach that takes into account their unique needs and abilities. The teaching methods, materials, and activities outlined in this proposal provide a comprehensive plan to help the students improve their English language skills. The use of visual aids, sign language, written materials, and group activities will ensure that the students are engaged and motivated to learn. By following this proposal, teachers can help their hard-of-hearing students achieve success in English language learning.

Results and Discussion

Assisting Deaf or Hard-of-Hearing students in acquiring a second language requires a varied approach. This strategy includes creating customized teacher training programs, increasing awareness about their specific requirements, giving more resources, creating an integrated curriculum, and promoting further study and collaboration among teachers, students, and organizations. Teachers who deal with Deaf or Hard-of-Hearing students must be able to effectively teach and communicate with these individuals. As a result, educational institutions should design specialized teacher training programs. These programs should offer teachers the skills they need to communicate using sign language, interpret their students' particular requirements, and change their teaching techniques accordingly. Increasing understanding of the unique needs of deaf and hard-of-hearing students is vital to establishing a more inclusive educational atmosphere. Educational institutions should make it a priority to educate their students and staff members about the difficulties that these students face. They should also update them about the many tools and resources available to

help them with their learning and communication requirements. It is critical to develop a comprehensive curriculum in teaching English that considers their special needs. Schools should have a student-centered approach and focus on teaching approaches that meet each student's unique requirements. The curriculum should contain visual aids, films, diagrams, and other materials to accommodate the learning styles of Deaf or Hard of Hearing students (Alasim, 2018).

Conclusions

In conclusion, to better support Deaf or Hard-of-Hearing students in foreign language education, it is crucial to take a multi-faceted approach. Developing specialized teacher training programs can equip educators with the knowledge and skills needed to effectively teach and communicate with these students. Raising awareness about their unique needs can help to promote a more inclusive learning environment. Providing additional resources, such as technology and materials, can support their learning and communication needs. In teaching foreign languages, it is also crucial to develop a complete curriculum that takes into account the unique requirements of deaf and hard-of-hearing students. Finally, encouraging further research and collaboration among educators, students, and organizations can help to continue improving teaching methods and strategies for this group. By taking these actions, we can work towards realizing the equal rights of Deaf or Hard-of-Hearing students in foreign language education, enabling them to achieve their full potential in language learning and social interaction.

References

- Adi, S. S., Unsiah, F., & Fadhilah, D. (2017). Teaching special students: English lessons for deaf students in Indonesian special junior high schools. *International Journal of Education and Research*, 5(12), 121-136.
- Alasim, K. N. (2018). Participation and interaction of deaf and hard-of-hearing students in an inclusion classroom. *International Journal of Special Education*, 33(2), 493-506.
- Almeida, K., & Kato, R. (2019). Teaching English to Deaf Students in Brazil: Challenges and Possibilities. *The Journal of Deaf Studies and Deaf Education*, 24(1), 91-99. doi: 10.1093/deafed/eny031
- Atar, C., Aslan Bagci, Ö., & Bagci, H. (2021). Deaf Individuals and English Language Teaching. *Turkish Online Journal of Educational Technology-TOJET*, 20(4), 23-28.
- Bedoin, D. (2011). English teachers of deaf and hard-of-hearing students in French schools: needs, barriers, and strategies. *European Journal of Special Needs Education*, 26(2), 159-175.
- Bruner, J. (1960). *The process of education*. Cambridge, MA: Harvard University Press.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approach* (4th ed.). Sage Publications.
- Csizér, K., & Kontra, E. H. (2020). Foreign language learning characteristics of deaf and

- severely hard-of-hearing students. *The Modern Language Journal*, 104(1), 233-249.
- Dewey, J. (1938). *Experience and education*. The Macmillan Company.
- Ecuador. Asamblea Nacional Constituyente. Constitución de la República. Registro Oficial N. 796. (2008). <https://www.oas.org>. Retrieved from https://www.oas.org/juridico/pdfs/mesicic4_ecu_const.pdf
- Ecuador. Asamblea Nacional. Ley Orgánica de Educación Intercultural. Registro Oficial N. 417. (2011). <https://educacion.gob.ec>. Retrieved from <https://educacion.gob.ec/wp-content/uploads/downloads/2017/05/Ley-Organica-Educacion-Intercultural-Codificado.pdf>
- Hintermair, M. (2013). Enhancing instructional accessibility for deaf and hard-of-hearing students in higher education. *Journal of Deaf Studies and Deaf Education*, 18(4), 508-523.
- Indah, R. N. (2018). The Communication Methods in English Classroom for Indonesian Deaf Students. *Theory and Practice in Language Studies*, 8(1), 9-16.
- Marschark, M. (2014). Supporting deaf students' learning in mainstream schools. *Journal of Deaf Studies and Deaf Education*, 19(3), 328-340.
- Marschark, M., & Hauser, P. C. (2012). *How deaf children learn*. Oxford University Press.
- Marschark, M., & Spencer, P. E. (2010). *The Oxford Handbook of Deaf Studies, Language, and Education*, vol.2. Second Edition. Oxford University Press.
- Rose, D. H., Meyer, A., & Gordon, D. (2014). *Universal Design for Learning: Theory and Practice*. CAST Professional Publishing.
- Rydén, S. (2015). *Learning English as a Foreign Language as a Deaf Pupil in Sweden: An Investigation of Motivation*.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- World Health Organization. (2021). Deafness and hearing loss. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>

Conflicto de intereses:

Los autores declaran que no existe conflicto de interés posible.

Financiamiento:

No existió asistencia financiera de partes externas al presente artículo.

Agradecimiento:

N/A

Nota:

El artículo no es producto de una publicación anterior, tesis, proyecto, etc.