

PROVIDING INCLUSIVE EDUCATION FOR DEAF STUDENTS IN THE POST-PANDEMIC UNIVERSITY CONTEXT*

Ioana TUFAR¹

10.52846/AUCPP.2023.2suppl.06

Abstract

Inclusive measures to ensure university education for Deaf students can be analyzed in the context of the bio-psycho-social model of disability in which we respect the particularities and value the real potential of the student. The approach that I propose for this paper is the bicultural- bilingual-bimodal way of regarding instruction, education and inclusion of Deaf Students. Taking into consideration just some theoretical aspects, I will focus more on pragmatical particularities that can interfere in the educational process of the Deaf Students from the point of view of the Sign Language Interpreter.

Key words: *Bio-psycho-social model of disability; Bicultural-bilingual-bimodal approach; Deaf students; Sign language interpreter.*

1. Introduction

Providing Inclusive Education for Deaf Students involves adaptations and strategies implemented to ensure that Deaf students have equal access in university settings. Inclusive education (Ainscow & César, 2006) is a philosophy that aims to create learning environments that accommodate the diverse needs of all students, including those with disabilities.

Manea's (2016) research highlighted the complexity of the interaction between health condition and contextual (environmental and personal) factors that generate disability and affect access to education. This research highlighted many barriers faced by people with disabilities in accessing education at all levels and underlined that there is a lack of procedures to facilitate access to education at upper secondary and tertiary levels. In their absence, students must make their needs known and negotiate the conditions of their participation in education, even though it is a fundamental right.

To clarify some contextual issues, I will briefly refer to legislation with implications in the area of hearing loss disability, which in Romania is still in the

*This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. Authors retain the copyright of this article.

¹ University Assistant PhD, " Babeş-Bolyai" University, Department of Special Education, Cluj-Napoca, Romania, e-mail address: ioana.tufar@ubbcluj.ro

process of promoting an inclusive education system at all levels, according to the approach of the UN Convention on the Rights of Persons with Disabilities ratified in 2010. Regarding people with hearing loss, in addition to the application of law 448/2006 it is necessary in practice to see the application of law 27/2020 and here are some issues with direct implications on inclusion at educational and social level:

"The present law recognizes the Romanian Sign Language, hereinafter referred to as RSL, the mother tongue specific to deaf and/or hard of hearing people; RSL is a language in its own right, composed of hand signs combined with gestures, facial expressions, words spoken without sounds and with its own structure, lexicon and grammatical rules, used by deaf communities in Romania. Deaf and/or hard of hearing people have the right to use, preserve, develop and maintain their culture, to enhance and inherit their mother tongue; Deaf and/or hard of hearing people have the right to use their SLA in their dealings with central and local authorities and institutions, public or private, in order to exercise their citizenship rights; Central and local authorities and institutions, whether public or private, are obliged to provide deaf and/or hard of hearing persons with interpreters authorized in RSL, free of charge, in accordance with the legislation in force; Access to interpreters authorized in RSL is granted on request or ex officio; The Romanian State guarantees and ensures the right of deaf and/or hard of hearing children and students to learn, to be educated and to take school examinations in RSL"(L27/2020).

Beyond the legislative, educational and social milestones of the inclusive use of Romanian Sign Language, I agree with Bauman and Murray (2014) in making a plea against existing barriers to access to education, the most common of which seems to be in people's minds: the assumption that disability equates with inability to study and perform educationally. *Deaf Gain* promotes an understanding of hearing loss as a vital aspect of human diversity, highlighting the diverse, creative and cultural benefits, recognizing physical and cognitive differences as vital to human diversity. Resonating in the same idea, Yuknis, Santini, and Appanah (2017) mention that in the context of Gallaudet University they approach Deaf students as people who are not disabled and even if they do not hear they only need to learn through non-auditory means: as ASL-American Sign Language is used by default in all classes and public events; other practical details relate to the fact that on campus, spaces are designed for open, visual communication, ASL being the language of all because it supports direct communication, and thus relationships between professors and students becoming stronger.

2. The bio-psycho-social model of disability - as a framework of approaching students

The bio-psycho-social model of disability, according to Bath, Trask, McCrosky & Lawson (2014) is a holistic approach to understanding and addressing disability that goes beyond a purely medical or physical perspective. This model recognizes that disability is not solely determined by a person's medical condition but is influenced by a complex interplay of biological, psychological, and social factors. When applied in the university context, this model informs strategies for

creating inclusive environments and supporting students with disabilities. The bio-psycho-social model might be applied in a university setting if it will be a comprehensive understanding of the biological aspects of disabilities recognizing the specific medical conditions or impairments that students may have and how these conditions impact their functioning and providing access to medical services to ensure that students receive necessary support and accommodations related to their health needs.

Recognizing and addressing the psychological aspects of disability, including mental health universities may offer counseling services, mental health resources and support groups to help students cope with the emotional and psychological aspects of their disability. Focusing on the emotional well-being of students and fostering a positive and supportive campus culture, according to Philip, Suldo, Doll (2021) this can involve promoting awareness and reducing stigma surrounding mental health issues.

Facilitating collaboration across different university departments, including health services, counseling, academic support, and disability services ensures a holistic response to the diverse needs of students with disabilities. By applying the bio-psycho-social model of disability in the university context, institutions can create a more inclusive and supportive environment that addresses the complex and interconnected aspects of disability that recognizes the importance of considering biological, psychological, and social factors in understanding and accommodating the needs of students with disabilities.

3. The bicultural- bilingual-bimodal approach in the inclusion of Deaf students

The approach that I propose for this paper is the bicultural- bilingual-bimodal way of regarding instruction, education and inclusion of the Deaf Students and I will start by explaining the meaning of the terms "bicultural," "bilingual," and "bimodal" which are often used in the context of education and inclusion for Deaf students.

Here's what, according to Grosjean (2010) each term means: *bicultural* refers to embracing and recognizing both Deaf culture and the mainstream culture, recognizing the importance of integrating Deaf culture into the educational experience, ensuring that Deaf students can connect with and appreciate both their Deaf identity and the broader cultural context; *bilingual* in the case of Deaf students, typically involves the use of two languages: sign language and the written/spoken language of the surrounding hearing community taking into consideration that Sign language is a crucial aspect of communication for many Deaf individuals and incorporating it into the educational environment aiming to support proficiency in both sign language and the predominant spoken or written language to ensure effective communication and academic success; *bimodal* refers to the use of two different modes of communication combining signed and spoken/written language using sign language along with written or spoken language to ensure that information is accessible through multiple channels.

By adopting a bicultural-bilingual-bimodal approach for Deaf students, educators and institutions aim to create an inclusive and supportive learning environment that respects and values Deaf culture, provides effective communication tools, and recognizes the diverse ways in which Deaf individuals navigate the world. This approach acknowledges the importance of linguistic and cultural diversity within the Deaf community and seeks to tailor educational practices accordingly (Jones, 2021).

4. The role of a sign language interpreter in the university context of the Deaf students

The role of a sign language interpreter at a university, particularly in the post-pandemic era, remains crucial in facilitating effective communication for Deaf or hard-of-hearing students because of the hearing loss particularities and because the pandemic have brought about changes in the mode of instruction and communication. The sign language interpreter's role may evolve to meet the current needs of the university community and I will address some key aspects concerning mainly to accessibility, adaptations and collaborations.

The primary role of a sign language interpreter, according to Marschark, Pelz, Convertino, Sapere, Arndt & Seewagen (2005) is to ensure that Deaf or hard-of-hearing students have equal access to information in the academic setting and this includes interpreting lectures, discussions, and other university-related communications.

In the post-pandemic era, universities continue to utilize technology for virtual or hybrid learning, and the interpreters need to adapt to various online platforms, video conferencing tools and other technologies to provide seamless interpretation in virtual classrooms. They need a strong collaboration with the technology specialists and with the teachers to enhance accessibility features in virtual environments. This may involve ensuring that online platforms support captioning, screen-sharing, and other features that benefit Deaf students, so they need to be adaptable to different modes of service delivery, whether in-person or remote, depending on the university's policies and the preferences of Deaf students (Tufar & Anicescu, 2022).

The sign language interpreters are acting as advocates for accessibility (De Meulder & Hilde, 2021) by working with university administrators and faculty to promote awareness of the importance of providing equal access to education for Deaf students, maintaining cultural awareness of the Deaf community's norms and ensuring that interpretations are culturally appropriate. Collaboration with Disability Support Services to address the unique needs of Deaf students and ensuring that appropriate accommodations are in place they can facilitate social inclusion by promoting communication between Deaf and hearing peers, fostering a sense of community and advocating for accessible extracurricular activities.

5. Integrated measures to ensure inclusive university education for students with hearing disabilities

The complex measures to ensure inclusive university education for students with hearing disabilities mainly address three categories of students:

a) Hearing impaired students: with hearing loss ranging from mild (above 20-40 db.), moderate hearing loss (40-70 db.) to severe hearing loss (70-90 db.). Students with these types of hearing loss usually communicate through oral language and may use hearing aids, cochlear implants and other assistive devices, with the lip-reading aspects playing an important role. Often these students need support in adapting material by summarizing or highlighting main ideas. A practical element in the organization of exams may be to print out the subjects for the hearing-impaired student who is unable to write by dictation when the exam requirements are announced.

b) Deaf students who mostly have a profound hearing loss of over 90 db which implies little or no residual hearing. They use sign language for communication and if they have been educated according to the bilingual-bicultural approach (Tufar, 2016) they will use sign language as their mother tongue and then as a second language: the state language, showing peculiarities of bilingualism. In this case in addition to the adaptation of materials and teaching methods, the presence of the sign language interpreter is of crucial importance both at lectures and seminars and at certain public university events.

c) Deafblind students are a rarer category of students who simultaneously have dual sensory impairments with varying degrees of severity. Their challenges include access to information, communication, social activities, identity, autonomy and require specific adaptations according to their psycho-individual particularities in both materials and learning environment. It often requires the involvement of sign language interpreters or other specific communication systems and the use of assistive technologies.

Integrated measures to ensure inclusive and quality university education for students with hearing disabilities must be principles guided and starting from those stated by Barnes, McCrea and Hill (2020) I will mention the main suitable to the university context in which I am involved: applying the concept of "universal design for learning" so well outlined by Istrate (2020), which involves designing and carrying out a learning activity in such a way as to offer multiple ways of representing the learning content with reference mainly to the multiplicity of formats or channels used for the teaching activity and in which the information is accessible, but also to the degree of difficulty, complexity or logical sequence, giving the learner the opportunity to choose the mode of presentation or the route that suits him best to decode, appropriate and transfer the message to his own space of knowledge and action to offer multiple modes of action and expression.

Other important aspects are to allow various types of interaction of the learner with the learning content and alternative possibilities to demonstrate that he/she has learned, to offer multiple modes of participation, to support voluntary involvement and the student's connection to the learning activities. A design made with the aim

of motivating, sustaining interest and involving as many students as possible through interactivity can be relevant because of the scenarios and the content linked to real life, gamification and dynamism. According to Yoon & Kim (2011) if closed captioning is presented or applications are used, the hearing-impaired student with good reading skills will have access to all that is spoken. We need to pay attention that errors may occur if the transcription is not accurate or if the learner has not developed the necessary vocabulary.

6. Pragmatic aspects in working with the sign language interpreter

In interacting with sign language interpreters, in my own experience I have found out the following practical issues to be particularly important:

- Speak at a normal pace because the interpreter will ask you to slow down or repeat yourself if the pace is too fast.
- Allow the interpreter to stand in the field of vision where the student will see both you and the interpreter at the same time and make sure the light is appropriate in intensity and positioning.
- Give the interpreter the materials that will be discussed in class because this allows the interpreter to study the vocabulary in detail and be prepared for the interpretation.
- Avoid covering your mouth or standing with a light source behind you when speaking and avoid speaking while writing on the board or when your back is to the student.
- Communicate directly with the student with a hearing disability, don't ask the interpreter "Tell him...", look at the student, not the interpreter. The interpreter will convey whatever is heard and orally express whatever the student communicates.
- Interpreters are not allowed to express their own personal opinions or enter in the conversation.
- The interpreter will be a few words behind the speaker due to the dynamics of the interpreting process, it is recommended that you give the interpreter time to finish so that the student can ask questions or join the discussion.
- In a group discussion, make sure one person speaks at a time and indicate who is speaking. You may need to repeat questions or comments so that the student can keep up with the discussion.
- Allow extra time when referring to written material, as the student with a hearing disability needs to look at the material and then refocus attention to the classroom to keep up with the discussion.
- Inform students of any cancellations or changes to class/seminar schedules so that details can be arranged with their interpreters.

Many of the aspects mentioned above require adaptations according to the psycho-individual particularities of the students, whether they are hearing impaired or not, but are particularly useful to ensure that students with hearing disabilities participate fully and benefit maximally from having full access to information. I reiterate the point that in addition to the adaptations mentioned there is a huge need for

training Romanian Sign language interpreters, given the currently small numbers of interpreters and their important role in making information accessible to Deaf students.

7. Considerations for providing inclusive education for Deaf students in the post-pandemic university context from the sign language interpreter's perspective

Providing inclusive education for Deaf students in the post-pandemic university context refers to the efforts implemented to ensure that Deaf students have equal access to education in university settings, especially in the aftermath of the COVID-19 pandemic and some key considerations are discussed in the following part.

Technology integration, because the increased reliance on online learning during the pandemic highlighted by Akram, Yingxiu, Al-Adwan & Alkhalifah (2021) who underlined the importance of technology and the fact that the universities need to ensure that online platforms and learning materials are accessible for all the students. This could involve using captioning for videos, providing transcripts, utilizing technology that supports communication for Deaf individuals and the involvement of the sign language interpreter.

Accessible learning materials in multiple formats are needed to accommodate different learning styles and for Deaf students, this may involve providing written materials, sign language interpretation or captioned videos. Offering communication support services, such as sign language interpreters and adapted materials are crucial for Deaf students to fully engage in lectures, seminars, discussions and other university activities.

Training the University staff on how to work with the sign language interpreter and how to interact with Deaf students effectively may include awareness training about dialog dynamics, Deaf culture, communication preferences and the use of assistive technologies. Recognizing that each Deaf student may have unique needs, universities should be flexible in providing accommodations and this could involve tailoring support services based on individual requirements. Ensuring that the physical campus environment is accessible for Deaf students is essential and this includes considerations such as visual alarms, accessible classrooms and clear signposting (Bauman, 2014).

Taking into consideration the years of experience with Deaf students at "Babeş-Bolyai" University, we wanted to find out more practical considerations from the perspective of a working sign language interpreter, so I had a discussion with M.D. and in the following part you can read the interview:

Please introduce yourself and tell us how long you have been interpreting? In what contexts and since when have you been interpreting in a university context and in which department?

My name is M.D. and sign language is my mother tongue because I am CODA (Child of Deaf Adults) so I interpreted in the familiar environments since I was a child (at the doctor, market, school). In the public environment I started interpreting

about 4 years ago at different conferences, meetings, TedX presentations. In the university context I started in 2022 as an interpreter at the Faculty of Economic Sciences-profile Economic Informatics.

Is the process of making courses accessible an issue you have encountered in your interpreting practice? If yes, at what level was the accessibility carried out?

In my interpreting practice I have encountered accessibility needs and I have adapted the way of interpreting to the requirements of the student and the course specificities.

Which interpretation was more effective: simultaneous or consecutive. In which sense?

From my point of view, consecutive interpretation is more efficient, but in the university context it is not possible due to the large amount of information transmitted by the teacher to the student, so I do simultaneous interpretation.

To what extent do factors related to the organization of the physical environment: lighting, interpreter's posture, distance influence the interpretation?

Factors relating to the organization of the interpreter's physical environment are very important because the correct lighting provides clear eye contact, clothing should be dark (preferably black) to provide the necessary and correct contrast, hands and face should be highlighted, distance should be acceptable to be able to receive the correct message without interruptions in the visual field, sound should come from the correct angle so that the interpreter can receive it clearly.

How much does the lack of specific LSR signs in the academic field affect the quality of interpreting?

The lack of specific LSR signs greatly affects the quality of the interpreting act, because each faculty has its own specialization with specific terms and it is very difficult to transmit information in signs that does not exist, and we need to fingerspell. It is a continuous adaptation of the language in signs in a very fast way, because interpreting is done according to the teacher, not the teacher teaching according to the interpreter.

What aspects should an interpreter pay attention to successfully complete an interpretation?

First, the interpreter must understand the information received, then maintain expressiveness and keep continuous contact with the deaf person for feedback.

What do you see as the interpreter's contribution to the process of accessing information and learning from your perspective as an interpreter?

The interpreter is a bridge between 2 different worlds with the same common denominator, the interpreter facilitates the understanding of the information provided in addition to the syllabus and the way of working.

Finally, please share three words that define your role as an interpreter in the university context for deaf students.

Inclusion, acceptance and awareness!

8. Conclusions

By addressing considerations above, universities can foster an inclusive and supportive learning environment for Deaf students, ensuring they have equal opportunities for academic success in the post-pandemic context. Implementing inclusive policies and practices that consider the diverse needs of students are very important and influence providing adapted learning materials, reasonable accommodations ensuring that all events are accessible and fostering a culture of inclusion. We need to establish disability support services to address the educational and the social aspects of disability, such as providing sign language interpreters and accessible communication channels. In the post-pandemic university context, the role of a sign language interpreter remains vital in creating an inclusive and accessible learning environment for Deaf students and adapting to changes in technology and educational practices. The University aims for creating educational settings and social environments that are accessible to students with disabilities include physical accessibility, as well as the availability of alternative formats for learning materials and technology that supports diverse needs.

REFERENCES

1. Ainscow, M., & César, M. (2006). Inclusive education ten years after Salamanca: Setting the agenda. *European Journal of Psychology of Education, 21*(3), 231–238. <http://www.jstor.org/stable/23421604>, accessed 23.11.2023.
2. Akram, H., Yingxiu, Y., Al-Adwan, A. S., & Alkhalifah, A. (2021). Technology Integration in Higher Education During COVID-19: An Assessment of Online Teaching Competencies Through Technological Pedagogical Content Knowledge Model. *Frontiers in psychology, 12*, 736522. <https://doi.org/10.3389/fpsyg.2021.736522>, accessed 24.11.2023.
3. Barnes, L., McCrea, K., Hill, A. (2020). *Teaching strategies to use with deaf students: advice for lecturers in higher education*. Retrieved at: <https://ifhohyp.org/wp-content/uploads/2020/09/Teaching-Deaf-Students-Lecturers-Guide.pdf>., accessed 19.04.2023.
4. Bath, B., Trask, C., McCrosky, J., & Lawson, J. (2014). A biopsychosocial profile of adult Canadians with and without chronic back disorders: a population-based analysis of the 2009-2010 Canadian Community Health Surveys. *Biomed Research International, 2014*, 1-11. doi:10.1155/2014/919621, accessed 23.11.2023.

5. Bauman, H-D. L. (2014). Deaf space: An architecture toward a more livable sustainable world. In H.- D. L. Bauman & J. J. Murray (Eds.), *Deaf gain: Raising the stakes for human diversity*, 375–401. University of Minnesota Press.
6. Bauman, H-D. L., & Murray, J. M. (2009). Reframing: From hearing loss to deaf gain. *Deaf Studies Digital Journal*, 1(1), Entry 19. Retrieved at: http://dsdj.gallaudet.edu/index.php?view=entry&issue=1&entry_id=19, accessed 20.11.2023.
7. Bauman, H-D. L., Murray, J. M. (coord.) (2014). *Deaf Gain: raising the stakes for human diversity*. Minneapolis, MN: University of Minnesota Press.
8. De Meulder, M., Hilde, H. (2021). Sign language interpreting services: A quick fix for inclusion? in *Translation and Interpreting Studies*, 16(1), 19-40. <https://doi.org/10.1075/tis.18008.dem>, accessed 24.11.2023.
9. Grosjean, F. (2010). Bilingualism, biculturalism and deafness. *International Journal of Bilingual Education and Bilingualism*, 13, 133-145. [10.1080/13670050903474051](https://doi.org/10.1080/13670050903474051), accessed 23.11.2023.
10. Istrate, O. (2020). Design universal pentru învățare în perspectiva educației digitale. *Revista profesorului*. online: <https://revistaprofesorului.ro/design-universal-pentru-invatare-in-perspectiva-educatiei-digitale/>, accessed 21.11.2023.
11. Jones, G. (2021). *Bicultural, Bilingual, and Bimodal Deaf Education*. Retrieved at: [10.1093/acrefore/9780190264093.013.457](https://doi.org/10.1093/acrefore/9780190264093.013.457), accessed 20.11.2023.
12. Manea, L (2016). *Accesul la educație a tinerilor cu dizabilități în România, cu focalizare pe învățământul secundar superior, vocațional și universitar*. RENINCO Association, Romania.
13. Marschark, M., Pelz, J. B., Convertino, C., Sapere, P., Arndt, M. E., & Seewagen, R. (2005). Classroom Interpreting and Visual Information Processing in Mainstream Education for Deaf Students: Live or Memorex? *American Educational Research Journal*, 42(4), 727-761. <https://doi.org/10.3102/00028312042004727>, accessed 24.11.2023.
14. Philip, L., Suldo, S., Doll, B. (2021). Fostering the Emotional Well-Being of our Youth: A School-Based Approach in *Oxford Academic online*, <https://doi.org/10.1093/med-psych/9780190918873.001.0001>, accessed 16.11.2023.
15. Tufar, I. (2016). Educația bilingvă și biculturală a persoanelor cu deficiențe de auz și a celor cu surdocecitate/ Bilingual and bicultural education of person with hearing impairments and deafblindness in Eds. Vali Ilie, Florentina Mogonea: *Educație și spiritualitate*. Craiova: Mitropolia Olteniei Publishing House.
16. Tufar, I., Anicescu, B. (2022). Interpretarea la distanță a limbii semnelor române în context pandemic. *Revista Română de Terapie Tulburărilor de limbaj și Comunicare*, DOI: [10.26744/rrttlc.2022.8.1.05](https://doi.org/10.26744/rrttlc.2022.8.1.05), accessed 24.11.2023.

17. Yoon, J.-O., & Kim, M. (2011). The Effects of Captions on Deaf Students' Content Comprehension, Cognitive Load, and Motivation in *Online Learning*. *American Annals of the Deaf*, 156(3), 283–289. <http://www.jstor.org/stable/2-6235157>, accessed 20.11.2023.
18. Yuknis, C., Santini, J., Appanah, T. (2017). Supporting deaf students – and all students. Retrieved at: <https://www.ascd.org/el/articles/supporting-deaf-students-and-all-students>, accessed 20.11.2023.
19. ***Legea27/03/2020-portallegislativ.(n.d.). <https://legislatie.just.ro/Public/DetaliuDocument/224473>, accessed 19.11.2023)