

Оригинални научни рад
Образовање и васпитање (Штампано изд.). –
ISSN 2956-1779. - God. 19, br. 21 (2024), str. 79-95
376-056.263-053.2
37.042-056.263-053.2
COBISS.SR-ID [147686665](#)
doi: [10.5937/obrvas19-51279](#)

Рад примљен: 28.5.2024.
Рад прихваћен: 15.6.2024.

INCLUSION IN EDUCATION AND HEARING IMPAIRMENT

Bojana Z. VUKOVIĆ¹

University of East Sarajevo, Faculty of Medicine Foča, Foča, Republic of
Srpska, Bosnia and Herzegovina


Ivana D. RISTIĆ²

Univeristy of Priština in KosovskaMitrovica, Teacher Education Faculty,
Leposavic, Serbia

Slađana V. ČALASAN³

University of East Sarajevo, Faculty of Medicine Foča, Foča, Republic of
Srpska, Bosnia and Herzegovina

¹  <https://orcid.org/0000-0002-0653-3962>. e-mail: bvukovic75@yahoo.com

²  <https://orcid.org/0000-0002-7780-4504>

³  <https://orcid.org/0009-0001-1144-0496>

INCLUSION IN EDUCATION AND HEARING IMPAIRMENT

Summary: *Throughout history, the education of those who are deaf or hard of hearing has undergone significant changes. In recent times, there is an increasing shift towards inclusive education, emphasizing equal opportunities and tailored support for deaf students. This paper provides a bibliometric analysis of the literature on inclusion in deaf education, identifying key trends and areas for further research. The Dimensions database was chosen and data were analyzed using the VOSviewer software tool. Four clusters of most co-occurring word were found. The largest is the green cluster, where the most frequently repeated words are "deaf student," "language," "bilingual education," and "perspective." In the blue cluster, the most prominent nodes are the words "deaf," "sign language," "interview," "class," and "literature." In the red cluster, the most common words are "disability," "community," and "university." The yellow cluster is the smallest and consists of only a few words, where the most common ones are "family," "professional," and "age." Researchers should conduct more studies on how technology can be incorporated into inclusive education for deaf students. It is crucial to focus on creating innovative assistive devices that can improve these students' access to information and their ability to communicate effectively. Future researchers should continue to work in collaboration with individuals with hearing impairment to ensure that their experiences, needs, and perspectives are central to research and development of inclusive practices in education.*

Key words: *inclusion, hearing impairment, VOSviewer.*

INTRODUCTION

Throughout history, there have been various movements concerning the education of individuals with hearing impairments. The decision made by the International Congress of Educators of the deaf (ICED) in 1880 to prohibit the use of signed languages and instead advocate for the oral approach marked a significant turning point in the history of deaf education (Padden & Humphries, 2005). This event is often referred to as the Milan Conference, as it took place in Milan, Italy. In the recent period, there is a prevailing tendency in the US (Hopper, 2011), and potentially in numerous other regions such as the UK (Powers, 2002), Greece (Lampropoulou & Hadjidakou, 2010), and Austria (Schwab et al., 2019), to lead deaf children from the ideas of mainstreaming or integration towards the principle of inclusion, as noted by Eriks-Brophy and Whittingham (2013).

Inclusive education represents a key aspect of modern educational policies, with a focus shifting towards creating environments that foster diversity and provide equal opportunities for all students, including those with special needs. Among these groups, children with hearing impairments hold a special place, facing unique challenges and needs in the educational context.

Given the numerous uncertainties regarding the quest for ideal circumstances in this educational context, the objective of this framework is to devise advantageous resolutions for all stakeholders involved. Equally vital is the proposition that a truly contemporary educational model should offer options for deaf students, empowering them not merely to conform passively but also to engage in supplementary activities of their choosing and anticipation (Plutecka, 2020).

Many educational administrators and policymakers hold the perspective that inclusive education encompasses various elements, including school placement, architectural design, teaching methods, curriculum modifications, environmental adaptations, and assessment strategies, among others. For students with hearing impairments, these modifications might involve using assistive technology, providing captioning and sign language interpreter services, and enhancing room acoustics (Levesque & Duncan, 2024).

By analyzing contemporary trends and accomplishments in children with hearing impairments inclusive education is of paramount importance for advancing practices and policies in this area. In the last

thirty years, there has been extensive documentation and formulation of guidelines and policies directed towards the attainment of "inclusion" for persons with disabilities. A portion of these directives has been assimilated into legislative frameworks. Yet, notwithstanding alterations in discourse and the adoption of borrowed terminology from the realm of equality and rights, there still exists a significant gap between what is advocated and what is implemented in practice (Brennan, 2003)

The aim of this paper is to conduct an extensive review of literature utilizing bibliometric analysis, with a specific focus on research related to inclusive education for children with hearing impairments. Through systematic collection, analysis, and interpretation of relevant publications, the paper will explore key themes, trends, and gaps in the existing body of literature. Special attention will be given to identifying authors, journals, key terms, and institutions that have contributed to the advancement of this discipline.

This paper will provide an overview of the existing research on inclusive education for children with hearing impairment and also pinpoint areas necessitating additional inquiry and enhancement. Through this analysis, we hope to enhance comprehension of the challenges and opportunities present in the practice of inclusive education for these students, and to empower further efforts to improve educational experiences and outcomes for children with hearing impairments.

MATERIALS AND METHODS

Research Design

This bibliometric research analysis was performed on scholarly articles concerning inclusive education and hearing impairment. The data for the research were sourced from the Dimensions database without limiting the publication period. The VOSviewer software was employed for data analysis, enabling the creation and visualization of bibliometric networks. These networks, which can map relationships among journals, researchers, or publications, are developed based on metrics like citations, bibliographic coupling, co-citations, or co-authorship links.

Procedure

The Dimensions database served as the primary source for the search. Following multiple attempts with various word combinations, the search strategy was finalized using the Boolean algorithm: (deaf OR "hard of hearing") AND "inclusive education." The data were extracted in CSV format and imported into VOSviewer, which analyzed the collaboration network, author co-citation network, country network, and word co-occurrence network. To assess the journal impact factor (IF), Journal Citation Reports (JCR) Science Edition 2020, along with SCImago Journal Rank (SJR), were utilized. The search, carried out in January 2023, yielded a total of 217 scientific publications. The criteria for inclusion were that the keywords appeared in the title or abstract, spanning all research categories, citation databases, and publication types.

RESULTS

Figure 1 illustrates the growth of scholarly publications on hearing impairment and inclusive education. Our search identified 217 works, comprising 167 journal articles, 35 book chapters, 5 monographs, 4 books, 4 conference proceedings, 2 preprints, and 9 collections, accumulating a total of 805 citations, averaging 3.71 citations per publication. The year 2022 saw the highest output with 34 publications. The earliest works on this subject were published in 1995, totaling 2 articles.

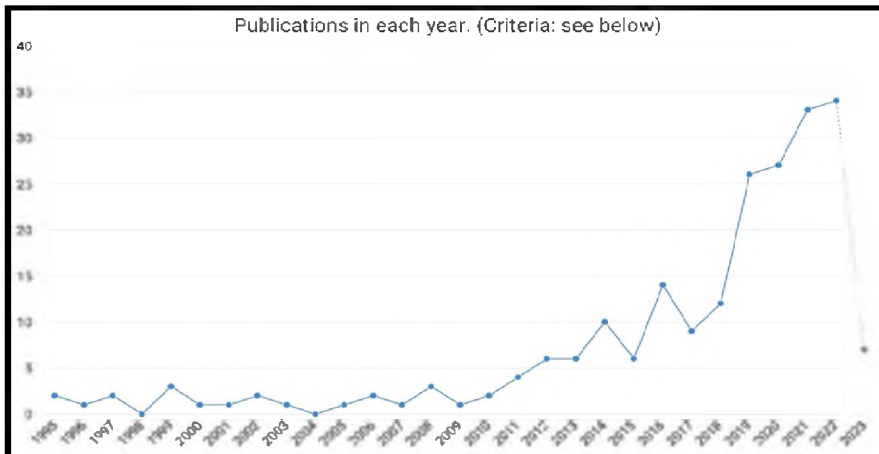


Figure 1. Dynamics of Scientific Production on the Topic of Hearing Impairment and Inclusive Education

In Figure 2, it is observed the distribution of scientific publications on the studied topic across various research categories, as classified by the Australian and New Zealand Standard Research Classification (ANZSRC, 2000). Out of a total of 14 research categories, the top five categories are education with a total of 157 publications, followed by language, communication, and culture with significantly fewer, namely 36 publications. In the category of biomedical and clinical sciences, as well as in the category of health sciences, there were 10 publications each, while in the category of information and computing sciences were 9. It's worth highlighting that a single document may be categorized under multiple research areas.

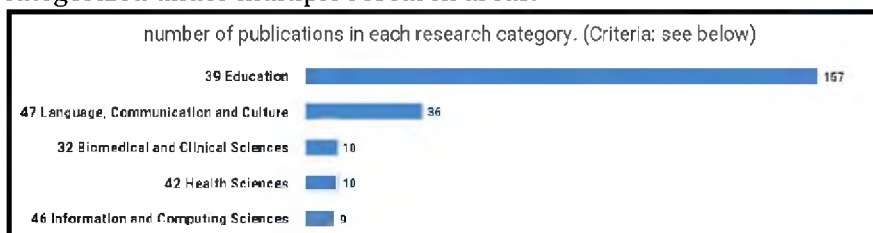


Figure 1. The predominant research classifications

The leading journals addressing this topic are the Deafness and Education International and the Revista Brasileira de Educação Especial, each with 8 published publications. The JCR database was consulted to determine the impact and quality. Both aforementioned journals are categorized in JCR Q3. The JCR database was searched for impact factors and quartiles. The Journal of Deaf Studies and Deaf Education is the most cited on this topic with a total of 233 citations. In JCR, this journal occupies quartile Q1, underscoring the excellence of its published articles (see Table 1).

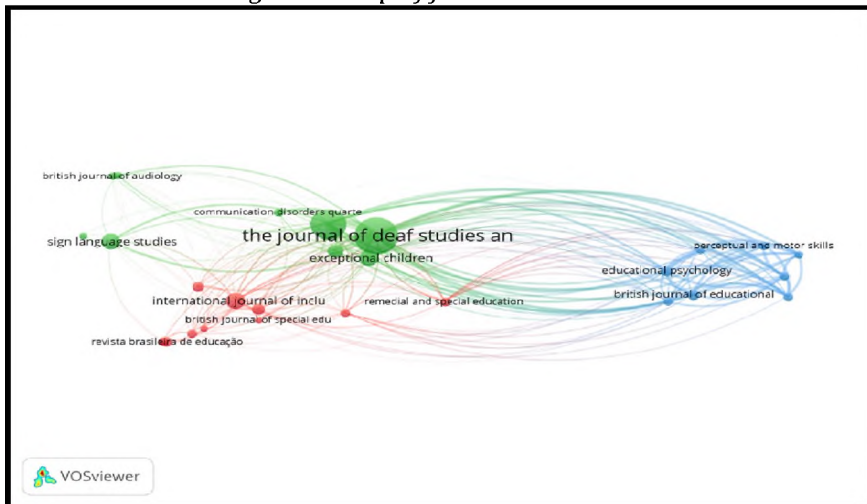
Table 1. The most eminent scholarly journals

Journals	n	Citations	IF	SJR	JCR
Deafness and education international	8	45	1.07	0.24	Q3
Revista Brasileira de Educação Especial	8	31	0.55	0.30	Q3
The journal of deaf studies and deaf education	5	233	1.76	0.86	Q1
Lecture notes in computer science	5	10	0.96	0.40	Q2
International journal of inclusive education	3	47	2.86	0.82	Q1

To determine potential partnerships among journals, a co-citation examination was undertaken, a method utilized to discern similarities between pairs of documents. Co-citation occurs when two articles are

cited in the reference list of a third document. Even if papers A and B are not explicitly referenced, their mention in paper C establishes an association between them. The strength of this connection increases if articles A and B are cited together in numerous other documents. The co-citation frequency indicates how often two articles are referenced jointly. We established a minimum threshold of 10 co-citations per journal, encompassing 28 sources from a pool of 853. Figure 3, depicting the co-citation map of journals, offers insight into the scientific community's framework. Every node symbolizes a journal, with size and line thickness denoting the strength of collaboration between them. It can be seen that the Journal of Deaf Studies and Deaf Education has a total of 247 citations, followed by the American Annals of the Deaf with 172 and Exceptional Children with 46 co-citations. Clusters of journals are discernible on the map. Proximity on the map indicates closer connections between clusters, with Figure 3 displaying three prominent clusters. Understanding the map is relatively simple. It showcases clusters distinguished by colors: green, red, and blue. The most prominent journals in the green cluster are The Journal of Deaf Studies and Deaf Education, American Annals of the Deaf, Exceptional Children, Sign Language Studies; the red cluster includes the following journals: International Journal of Inclusive Education, Disability & Society, Revista Brasileira de Educação Especial, while the blue cluster consists of journals such as Educational Psychology, British Journal of Educational Psychology, Perceptual and Motor Skills.

Figure 3. Map of journal co-citation



Within the scope of analysis, Table 2 displays the top three most referenced articles. By "unit of analysis," we refer specifically to the articles within the unit of analysis, and in whose bibliographies the article by Antia et al. from 2002 is most frequently found. Although this article has been cited 276 times according to Google Scholar records, within the unit of analysis, the number of citations is 66. The paper discussed the significance of involvement in inclusive education for individuals with hearing impairments.

Table 2. The articles with the highest number of citations within the analyzed dataset

Antia, S. D., Stinson, M. S., & Gaustad, M. G. (2002). Developing membership in the education of deaf and hard-of-hearing students in inclusive settings. <i>Journal of deaf studies and deaf education</i> , 7(3), 214-229.	66
Leigh, I. (1999). Inclusive education and personal development. <i>Journal of deaf studies and deaf education</i> , 4(3), 236-245.	59
Xie, Y. H., Potmešil, M., & Peters, B. (2014). Children who are deaf or hard of hearing in inclusive educational settings: A literature review on interactions with peers. <i>Journal of deaf studies and deaf education</i> , 19(4), 423-437.	53

The influential authors' assessment involved analyzing both the most prolific writers and their citation counts. The most productive author in this field is Kristin Snoddon with 7 publications and a total of 54 citations and an H-index of 14. She comes from Toronto Metropolitan University, and her areas of focus include sign language, deafness research, inclusive education policy, and bilingual education. Cristina BrogliaFeitosa de Lacerda is the second most influential author with five publications totaling 39 citations. She comes from the Universidade Federal de São Carlos (Table 3).

Table 3. The authors with the highest productivity

Authors	N	Citations
Snoddon, Kristin	7	54
de Lacerda, Cristina BrogliaFeitosa	5	39
Alasim, Khalid	3	23
Murray, Joseph J.	2	43

The most influential countries analysis consisted of determining the country with the greatest number of publications and constructing a bibliographic network map illustrating connections between countries. Specifically, Table 4 indicates that Brazil leads in publication numbers, totaling 45 with 103 citations, while the USA has almost three times fewer publications but twice as many citations, reaching 213. Other countries have fewer than 10 publications.

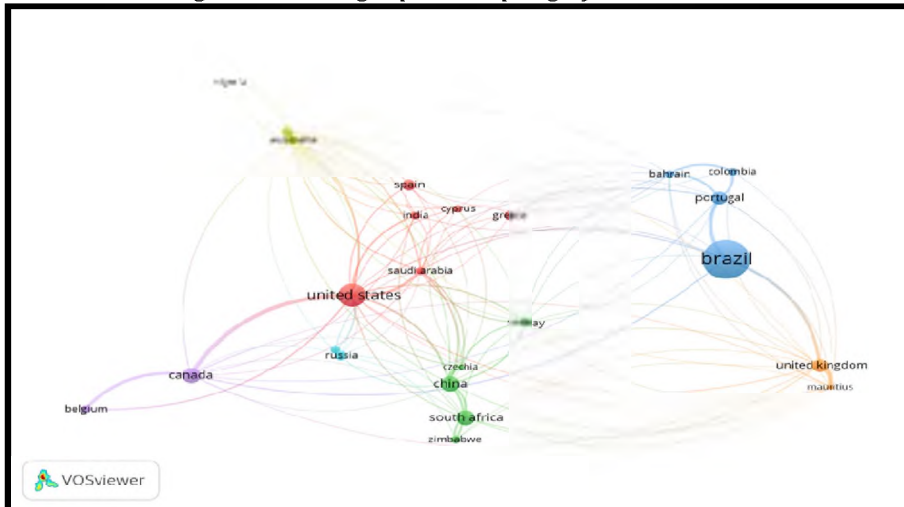
Table 4. The most prominent countries

Countries	N	Citations
Brazil	45	103
SAD	16	213
Kanada	7	66
Kina	7	53
Ujedinjeno kraljevstvo	5	26

Bibliographic coupling denotes a relationship resembling to co-citation but in a reversed sequence. This phenomenon arises when two articles cite a common third article in their reference lists. The potency of bibliographic connection intensifies with a higher count of shared references. Bibliographic coupling analysis serves to ascertain the degree of topical similarity between two research investigations.

In Figure 4, we can see a map of bibliographic coupling between countries with a criterion of a minimum of 1 document and one citation. Based on these criteria, the map shows seven clusters, three larger and four smaller ones, with the most prominent being red, blue, and green. The red cluster consists of six countries: the USA, Spain, Saudi Arabia, India, Greece, and Cyprus. The most significant node in this cluster is the USA, suggesting that other countries within this cluster frequently cite publications originating from the USA.

Figure 4. Bibliographic coupling of countries



DISCUSSION

The bibliometric analysis results offer valuable insights into the development of scholarly output on hearing impairment and inclusive education. The growing number of publications over the years, along with the diversity of publication types, demonstrates the research community's interest and involvement in this area.

One noticeable trend is a significant increase in scholarly production since 1995, when the first scientific publications on this topic emerged, peaking in 2022. This demonstrates a sustained rise in interest and scholarly research in the area of hearing impairment and inclusive education over the last several decades. The peak of 34 publications in 2022 demonstrates intensified research efforts and engagement of researchers in this field. Additionally, it is important to highlight the diversity of publication types included in the analysis, including scientific articles, book chapters, monographs, books, conference proceedings, and preprint versions. This suggests that research on hearing impairment and inclusive education is conducted at various levels, from specific research projects to comprehensive reviews and analyses. Furthermore, the mean number of citations per article stands at 3.71 indicates a certain degree of impact and relevance of publications in this field, implying that research resonates within the academic community and is considered relevant for further research and practice.

Examination of research categories provides insight into the diversity of disciplines and research areas involved in studying the topic of hearing impairment and inclusive education. This analysis enables a better understanding of the research community's priorities and focuses on key areas requiring further research and development.

The most significant research category that stands out is the field of education, with a total of 157 publications. This is not surprising considering that inclusive education is a key aspect of research on hearing impairment, aiming to provide equal opportunities and assistance for students requiring special accommodations. Highlighting education as the central focus of research underscores the critical need for devising strategies, policies, and approaches in inclusive education, alongside the imperative of bolstering the professional growth of educators and specialists in the field.

Moreover, it is crucial to emphasize the importance of language communication, and culture category, which is also represented with 36 publications. This field of study underscores the significance of language and communication within the realm of hearing impairment, encompassing investigations into sign languages, communication strategies, and cultural elements pertinent to individuals with hearing loss. Investigating the role of sign language in fostering the effectiveness of inclusive education holds particular significance, especially considering historical contexts where sign language was absent in classrooms. This absence resulted in significant communication barriers between students and teachers, often limited to interactions with sign language interpreters (Lieberman et al., 2000). Because of that students who are deaf or hard of hearing express feelings of isolation and anxiety within the classroom environment. They often report having a restricted comprehension of instructional tasks.

Biomedical and clinical sciences, alongside health ones, are each represented by 10 publications, underscoring an interdisciplinary approach to investigating hearing impairment, encompassing medical considerations such as diagnosis, treatment, and rehabilitation. Notably, one document appears across multiple research categories, highlighting the intricate and interdisciplinary nature of research on hearing impairment and inclusive education. This underscores the necessity for collaboration among diverse disciplines and experts to offer a holistic approach to addressing this multifaceted issue. In summary, examining research categories yields valuable perspectives on the scope and depth of studies regarding hearing impairment and inclusive education. This sheds light on critical domains necessitating additional investigation and enhancement.

Analyzing leading journals in the field of hearing impairment and inclusive education provides important insights into the relevance and impact of publications in this field. Leading journals such as *Deafness and Education International* and *Revista Brasileira de Educação Especial*, which have published 8 publications each, represent significant sources of research and information in this field. Their presence in JCR quartile Q3 suggests that they have a certain impact within the academic community, although their impact factor may be lower compared to other journals. However, *The Journal of Deaf Studies and Deaf Education* stands out as the most cited journal on the

topic of hearing impairment and inclusive education, with a total of 233 citations. This underscores the high level of influence and visibility of this journal in the academic world. The placement of this journal in JCR quartile Q1 serves as additional validation of the exceptional caliber of articles it presents, underscoring its substantial contribution to the realm of hearing impairment and inclusive education. The citation map of journals provides insight into the structure of the scientific community in the area of hearing impairment and inclusive education. This method of analysis allows us to visualize the network of scientific collaboration and connections among different journals, opening up possibilities for a deeper understanding of the dynamics of the research community, dominant research themes, and key players in the field. One of the notable journals on this map is "The Journal of Deaf Studies and Deaf Education," serving as a central hub with a significant number of citations. It is evidently crucial within the collaboration network, suggesting its high relevance and influence in the academic community. Additionally, journals such as "American Annals of the Deaf" and "Exceptional Children" also occupy significant positions in the network, indicating the breadth and depth of research endeavors within the domain of hearing impairment and inclusive education.

Analysis of word co-occurrences in titles and abstracts of papers on the topic of inclusion and hearing impairment provides insights into dominant themes, concepts, and perspectives being researched in this area. Through this analysis, we can identify key elements of research and emphasize important aspects of interest to researchers, practitioners, and policymakers in the area of inclusive education and assistance to individuals with hearing impairment. The largest cluster, represented in green, stands out with repeated words such as "deaf student," "language," "bilingual education," and "perspective." This grouping of words underscores the significance of communication and linguistic surroundings for deaf students, emphasizing the necessity to grasp various viewpoints and methodologies in the education of deaf individuals. The blue cluster is characterized by words such as "deaf," "sign language," "interview," "class," and "literature," indicating a focus on sign language, communication, and research methodology. This suggests the importance of research addressing language aspects, communication strategies, and experiences of deaf individuals in an educational context.

In the red cluster, words such as "disability," "community," and "university" dominate, emphasizing the importance of a broader context of inclusivity, including social, communal, and institutional factors that impact the experiences of individuals with hearing impairment in both the community and educational system. Inclusive education has often been simplified to the mere physical co-placement in classrooms comprising both disabled and non-disabled students (Nahmias et al., 2014). Moreover, the assessment of standard in inclusive settings in education has been hindered by the absence of reliable metrics, as well as the ongoing shifts in how overall program quality is conceptualized (Odom et al., 2011). Authors Love&Horn(2021) explored various contexts in which inclusive education for children with developmental disabilities takes place.

The yellow cluster, although smaller, contains words such as "family," "professional," and "age," suggesting that researchers have addressed family as a factor in inclusion, professional engagement, and age-related factors in approaching inclusion and support for individuals with hearing impairment. The fact that this cluster is smaller indicates a deficiency of these topics in the research community. That's unexpected, especially given that during the initial phases of their child's life, parents may experience confusion and a sense of being overwhelmed by the multitude of decisions they face regarding their child's mode of communication, use of technology, and education (Young et al, 2005).

CONCLUSION

Based on the conducted analysis of topic regarding data of inclusive education and deafness, several guidelines can be highlighted for future researchers. Firstly, researchers should further investigate incorporating technology into inclusive education for the deaf, with a specific emphasis on advancing the development of new assistive technologies that can enhance access to information and communication for deaf students. Secondly, future studies should explore the impact of inclusive education on long-term educational outcomes and social integration of deaf individuals, aiming to better understand the long-term effects of this approach. Furthermore, future studies should explore the factors contributing to successful inclusion of deaf students in the educational system, including political, institutional, and social factors that may support or hinder

inclusive education. Lastly, future researchers should continue to work in collaboration with individuals with hearing impairment to ensure that their experiences, needs, and perspectives are central to research and development of inclusive practices in education. This approach ensures that inclusive education for deaf individuals is directed towards the real needs of the community and contributes to building a fairer and more equitable educational system for all.

REFERENCES

- Antia, S. D., Stinson, M. S., & Gaustad, M. G. (2002). Developing membership in the education of deaf and hard-of-hearing students in inclusive settings. *Journal of deaf studies and deaf education*, 7(3), 214-229.
- Brennan, M. (2003). Deafness, disability and inclusion: The gap between rhetoric and practice. *Policy Futures in Education*, 1(4), 668-685. <https://doi.org/10.2304/pfie.2003.1.4.5>
- Elizabeth Levesque & Jill Duncan (2024) Inclusive education for deaf students: Pass or fail, *Deafness & Education International*, 26:2, 125-126. <https://doi.org/10.1080/14643154.2024.2341573>
- Eriks-Brophy, A., & Whittingham, J. (2013). Teachers' Perceptions of the Inclusion of Children With Hearing Loss in General Education Settings. *American Annals of the Deaf*, 158(1), 63-97. <http://www.istor.org/stable/26234870>
- Hopper, M. J. (2011). *Positioned as bystanders: Deaf students experiences and perceptions of informal learning phenomenon* (Unpublished doctoral dissertation). University of Rochester, Rochester New York.
- Lampropoulou, V., & Hadjidakou, K. (2010). An examination of the history of deaf education in Greece and in Cyprus: Determining factors for its development. *L1 – Educational Studies in Language and Literature*, 10(1), 41-56. <https://doi.org/10.17239/L1ESLL-2010.10.01.07>
- Leigh, I. (1999). Inclusive education and personal development. *Journal of deaf studies and deaf education*, 4(3), 236-245.
- Lieberman, L. J., Dunn, J. M., Van der Mars, H., & McCubbin, J. (2000). Peer tutors' effects on activity levels of deaf students in inclusive elementary physical education. *Adapted Physical Activity Quarterly*, 17(1), 20-39. <https://doi.org/10.1123/apaq.17.1.20>
- Love, H. R., & Horn, E. (2021). Definition, Context, Quality: Current Issues in Research Examining High-Quality Inclusive Education. *Topics in Early Childhood Special Education*, 40(4), 204-216. <https://doi.org/10.1177/0271121419846342>

- Nahmias, A. S., Kase, C., & Mandell, D. S. (2014). Comparing cognitive outcomes among children with autism spectrum disorders receiving community-based early intervention in one of three placements. *Autism, 18*, 311–320. <https://doi.org/10.1177/1362361312467865>
- Odom, S. L., Buysse, V., & Soukakou, E. (2011). Inclusion for young children with disabilities: A quarter century of research perspectives. *Journal of Early Intervention, 33*, 344–356. <https://doi.org/10.1177/1053815111430094>
- Padden, C.A., & Humphries, T. (2005). *Inside Deaf Culture*. Harvard University Press.
- Plutecka K. (2020). From special education to inclusive education: Changes in the learning process of deaf pupils, “Elementary Education in Theory and Practice,” vol. 15, no. 3(57), pp. 35-48. <https://doi.org/10.35765/eetp.2020.1557.03>
- Powers, S. (2002). From concepts to practice in Deaf Education: A United Kingdom perspective on inclusion. *Journal of Deaf Studies and Deaf Education, 7*(3), 230-243. <https://doi.org/10.1093/deafed/7.3.230>
- Schwab, S., Wimberger, T., & Mamas, C. (2019). Fostering social participation in inclusive classrooms of students who are Deaf. *International Journal of Disability, Development and Education, 66*(3), 325-342. <https://psycnet.apa.org/doi/10.1080/1034912X.2018.1562158>
- Xie, Y. H., Potmėšil, M., & Peters, B. (2014). Children who are deaf or hard of hearing in inclusive educational settings: A literature review on interactions with peers. *Journal of deaf studies and deaf education, 19*(4), 423-437.
- Young, A., Jones, D., Starmer C. & Sutherland, H. (2005). Issues and Dilemmas in the Production of Standard Information for Parents of Young Deaf Children — Parents' Views, *Deafness & Education International, 7*(2), 63-76. <https://doi.org/10.1179/146431505790560400>

Бојана З. ВУКОВИЋ

Универзитет у Источном Сарајеву, Медицински факултет Фоча, Фоча,
Република Српска, Босна и Херцеговина

Ивана Д. РИСТИЋ

Универзитет у Приштини са привременим седиштем у Косовској
Митровици, Учитељски факултет, Лепосавић, Србија

Слађана В. ЋАЛАСАН

Универзитет у Источном Сарајеву, Медицински факултет Фоча, Фоча,
Република Српска, Босна и Херцеговина

ИНКЛУЗИЈА У ОБРАЗОВАЊУ И ОШТЕЋЕЊЕ СЛУХА

Резиме: Током историје, образовање глувих или наглувих појединаца је значајно еволуирало. У последње време све је већи помак ка инклузивном образовању, наглашавајући једнаке могућности и прилагођену подршку глувим ученицима. Овај рад даје библиометријску анализу литературе о инклузији у образовању глувих, идентификујући кључне трендове и области за даља истраживања. Овом студијом спроведена је библиометријска анализа научних публикација на тему инклузивног образовања и оштећења слуха. Изабрана је база података Дименсионс и подаци су анализирани коришћењем софтверског алата VOSviewer. Резултати. Пронађене су четири групе речи које се најчешће појављују. Највећи је зелени кластер, где се најчешће понављају речи „глуви ученик“, „језик“, „двојезично образовање“ и „перспектива“. У плавом кластеру, најистакнутији чворови су речи „глув“, „знаковни језик“, „интервју“, „разред“ и „књижевност“. У црвеном кластеру најчешће су речи „инвалидитет“, „заједница“ и „универзитет“. Жути кластер је најмањи и састоји се од свега неколико речи, при чему су најчешће „породица“, „професионалац“ и „старост“. Истраживачи би требало даље да истраже интеграцију технологије у инклузивно образовање за глуве особе, посебно фокусирајући се на развој нових асистивних технологија које могу побољшати приступ информацијама и комуникацији за глуве ученике. Будући истраживачи треба да наставе да раде у сарадњи са појединцима са оштећеним слухом како би осигурали да њихова искуства, потребе и перспективе буду централни за истраживање и развој инклузивне праксе у образовању.

Кључне речи: инклузија, оштећење слуха, образовање, VOSviewer.

