IMPLEMENTING THE UNCRPD FOR DEAF OR HARD OF HEARING STUDENTS IN GREECE: BILINGUAL EDUCATION, CAREER GUIDANCE, VOCATIONAL TRAINING, VOCATIONAL REHABILITATION AND DIGITAL INCLUSION

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Abstract:
This policy analysis examines the implementation of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) in Greece, focusing on the education and vocational rehabilitation of Deaf and Hard of Hearing students. While Greece has made legislative progress in aligning with the UNCRPD, including recognizing Greek Sign Language and establishing bilingual education programs, significant gaps persist between policy and practice. The research identifies advancements in vocational training and rehabilitation services, but highlights ongoing challenges in accessibility, job market alignment, and societal awareness. Career guidance services have improved but remain hindered by resource limitations and ingrained prejudices. Digital inclusion efforts show promise but face obstacles in consistent implementation and educator training. The study also explores the National Strategy for the Rights of Persons with Disabilities 2024–2030, emphasizing its potential as a comprehensive framework to address these challenges through targeted initiatives and well-designed policy reforms.

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1. Introduction

The education of Deaf and Hard of Hearing (D/HH) students in Greece presents unique challenges, requiring specialized approaches such as bilingual education. This method aims to develop proficiency in both Greek Sign Language (GSL) and written Greek, preparing students to navigate both Deaf and hearing communities effectively (Hatzopoulou, 1999, 2000; Knoors & Marschark, 2015). However, the implementation of bilingual education faces numerous obstacles, from inadequate resources to inconsistent application across educational institutions (Kourbetis & Karipi, 2021). Furthermore, vocational training and rehabilitation for D/HH students faces unique challenges due to limited access to specialized resources and support systems in Greece. Additionally, societal awareness and acceptance of D/HH individuals in the workplace still require significant improvement, making it harder for them to fully integrate into the professional environment (Tsalis *et al.*, 2018). The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) serves as a crucial international legal framework promoting and protecting the rights of individuals with disabilities, including those with Deafness (United Nations, 2006).

In Greece, the implementation of this convention has significant implications for the education and vocational rehabilitation of D/HH students. By ensuring that the rights of these individuals are upheld, it paves the way for more inclusive educational policies and better access to vocational opportunities, ultimately promoting their full participation in society (Angelaki, 2024). A relatively new development in this context is the National Strategy for the Rights of Persons with Disabilities 2024-2030 (NSRPD 2024-2030), which provides a comprehensive framework aimed at addressing systemic barriers and promoting inclusive practices across all sectors, including education and employment, while emphasizing the importance of equal access and opportunities for persons with disabilities (Ministry of Labor and Social Security, 2024).

This policy analysis examines the alignment of Greece's educational and vocational systems with the principles and obligations of the UNCRPD. It evaluates the design and implementation of inclusive policies, focusing on their practical application and legislative compliance. A key aspect of the study is the role of technology in fostering digital inclusion and improving learning outcomes for D/HH students. The research is guided by the following questions:

1) To what extent do Greece's legal and policy frameworks uphold the rights to bilingual education, vocational training, and career guidance for D/HH students as outlined in the UNCRPD?

2) What are the primary challenges and gaps in implementing bilingual education, vocational training, and digital inclusion policies in Greece, and how do these affect the opportunities available to D/HH students?

3) What impact do existing policies have on the autonomy, inclusion, and quality of life of D/HH students in Greece, and how effective are initiatives like the NSRPD 2024-2030 in addressing their needs?

This analysis identifies the discrepancies between policy intent and practice by evaluating vocational training programs, career guidance services, and employment support mechanisms. It also considers the potential of the NSRPD 2024-2030 as a transformative framework and places Greece's efforts within the broader context of international best practices. By addressing these questions, the study provides actionable insights for policymakers, educators, and practitioners to bridge the gap between legislative goals and their implementation, ensuring the rights and opportunities of D/HH students are fully realized.

2. Literature Review

2.1 Foundations of Inclusion and Accessibility for D/HH Students
2.1.1 The Role of Bilingual Education in Empowering D/HH Students

Bilingual education encompasses the development of both sign and written language as distinct but interconnected linguistic systems, following processes that involve exploring the two languages in terms of grammar (Hatzopoulou, 2000; Knoors & Marschark, 2015). In terms of linguistic features, the autonomous development of sign language is pursued with clear boundaries, avoiding mixing it with spoken language. At the same time, a relationship of interdependence is formed between the two, as supported by Cummins' (1979) Interdependence Hypothesis, with skills learned in one language transferring to and facilitating the development of the other (Hermans *et al.*, 2008). Generally, the integration of sign language into the curriculum improves the learning pace, increases student engagement, and can enhance the learning of written language through communicative strategies such as fingerspelling or/and signed Greek. Deaf individuals often achieve high levels of reading comprehension, a skill influenced by their early exposure to the spoken language environment provided by their hearing parents, regardless of the degree to which they actively use spoken language themselves (Kourbetis *et al.*, 2007).

Apart from the development of sign language, particular emphasis is placed on developing writing and reading skills in the written language - areas where D/HH children may require additional support and practice, as these skills are approached as a second language in the context of auditory-vocal languages, to which they have limited access through the auditory channel, as a result of their reduced or absent auditory input. These challenges are not inherent to deafness but arise from the structure of the educational system, highlighting the importance of bilingual education in addressing

these needs (Svartholm, 2010). For the acquisition of reading skills, the child goes through stages of literacy development - oral stage, literacy stage, and metacognitive stage - and is influenced by their cognitive level in both languages (Marschark, 2014). Connection between the first and second language for understanding meaning and structure is also achieved through initialized signs. During sign-supported reading, students learn words more quickly, retain them longer in memory, and display stronger motivation to learn new words and their associated meanings (Kourbetis *et al.*, 2007). The importance of reading lies both in its fundamental role in the child's literacy and in the access, it provides to knowledge in general. The objective is not only for the student to learn how to read but also to read to learn, which requires fluency and a positive engagement in exercising these skills (Mounty *et al.*, 2014).

2.1.2 Career Guidance and Vocational Training for D/HH Students

Career guidance plays a crucial role in the lives of individuals with disabilities, offering them the support and direction needed to navigate the complexities of the job market and achieve their professional goals (Lindsay *et al.*, 2018). One of the primary benefits of career guidance for D/HH individuals is the opportunity to explore and identify suitable career paths that align with their abilities, interests, and aspirations (Quirke & Mc Guckin, 2024). Tailored career guidance programs can significantly enhance the self-efficacy and career decision-making skills of D/HH students (Vlachou, 2022). These programs often incorporate assessments of individual strengths and limitations, helping participants make informed choices about their future careers (Iswari, 2017).

Career guidance professionals serve a pivotal function in educating employers about the capabilities of individuals with disabilities and advocating for inclusive work environments. The importance of career counselors in promoting workplace accommodations and fostering a culture of inclusion has been emphasized (Nota *et al.*, 2014). This advocacy can lead to increased job opportunities and improved job retention rates for individuals with disabilities. Furthermore, career guidance can contribute to the psychological well-being of persons with disabilities. The positive impact of career development interventions on self-determination and quality of life for people with intellectual and developmental disabilities has been highlighted (Wehmeyer & Shogren, 2016). By fostering a sense of purpose and direction, career guidance can enhance overall life satisfaction and promote social integration.

Vocational training constitutes a fundamental element in enhancing the employability and independence of persons with disabilities. As the global community strives for more inclusive societies, the importance of equipping D/HH students with job-specific skills cannot be overstated (Clark, 2007). Vocational training for D/HH students serves multiple purposes. Primarily, it aims to develop specific job skills that align with labor market demands (Cawthon *et al.*, 2016). Moreover, vocational training can contribute to breaking down societal barriers and misconceptions about the capabilities of D/HH students. This shift in perception is crucial for creating more inclusive

workplaces and reducing discrimination in the job market (Akongyam, 2017). Furthermore, vocational training can be a powerful tool in addressing the significant employment gap between individuals with and without disabilities. The United Nations Department of Economic and Social Affairs reported that in many countries, the employment rates for persons with disabilities are less than half of those for persons without disabilities (United Nations, 2019). Effective vocational training programs can help bridge this gap by equipping D/HH students with the skills and confidence needed to compete in the job market (Musa, 2022).

As outlined by the World Health Organization (WHO) (2011), vocational rehabilitation includes a range of interventions aimed at helping persons with disabilities obtain and maintain suitable employment. This holistic approach not only addresses the functional limitations of individuals but also tackles the environmental and societal barriers present in the workplace. For D/HH students, vocational rehabilitation offers comprehensive support for employment preparation (McDonnall & Cmar, 2019), and it is instrumental in facilitating workplace accommodations and adaptations (Palmer *et al.*, 2020). Furthermore, vocational rehabilitation serves as a vital link between disability and employment, providing D/HH students with the resources needed for meaningful employment and social integration. By addressing both personal and environmental challenges, vocational rehabilitation fosters equal opportunities and full workforce participation for D/HH students (Li *et al.*, 2006).

2.1.3 Digital Inclusion as a Catalyst for Accessibility

Digital inclusion in education is crucial for ensuring that all students, regardless of their physical, cognitive, or sensory abilities, have equitable access to digital resources and technologies. This concept highlights the importance of adopting technologies that facilitate the full participation of D/HH students in educational settings (Portugal *et al.*, 2023). The role of digital inclusion extends beyond mere access to learning; it also supports social inclusion by providing technological tools that facilitate communication and interaction between students and educators, thereby enhancing social integration (Polanco & Liu, 2023).

However, despite advancements in technology, significant challenges persist in achieving comprehensive digital inclusion. One of the primary obstacles is the lack of accessibility in digital educational tools and content (Kim *et al.*, 2010). This issue is further compounded by insufficient training for educators on the effective use of accessible technologies (Peruzzo & Allan, 2022). Additionally, inadequate funding and support for digital inclusion strategies further impedes progress (Prietch *et al.*, 2015). The rapid pace of technological evolution also results in outdated solutions, complicating efforts to maintain up-to-date accessible technologies (Thompson *et al.*, 2014). Digital equity is a fundamental pillar in fostering fair and inclusive educational practices. Key initiatives aimed at promoting digital equity include programs that support the development of

digital skills, the creation of accessible educational materials, and the establishment of legislative frameworks to ensure equal access to digital resources (Tomczyk *et al.*, 2022). Digital inclusion for D/HH students requires more than the mere presence of technology, it demands intentional design that respects visual language preferences, communication diversity and equitable access. Given the visual orientation of many D/HH individuals, digital accessibility tools should prioritize visual-first strategies before supplementing with auditory-based technologies, depending on the individual's audiological status (Rohatyn-Martin, 2017). Digital tools such as live captioning (with over 90% accuracy), real-time transcription services, sign language apps, video relay services (VRS), remote interpreting, AR/VR technologies and time management apps promote active engagement, autonomy, and self-regulation in learning (Millett, 2021; David et al., 2023). These resources provide visual and multimodal access to information, aligning with the communication needs of D/HH learners and supporting inclusive digital environments (Kourbetis et al., 2016).

In educational video content, particular attention should be given to subtitles with fully descriptive information (e.g., sound descriptions, speaker identification through color), on-screen titles for names and key terms, simultaneous display of written text in a dedicated field, and voice-over by native speakers where appropriate (Chatzopoulou, 2011). The layout should follow principles of simplicity, ergonomic design, and easy navigation (Gelastopoulou & Kourbetis, 2014). Open-source licensing and compatibility with modern operating systems are also critical for equitable access. Depending on the communication preferences and linguistic background of the D/HH user, remote interpreting can be delivered in different modes (Kourbetis & Boukouras, 2014). Use of sign language interpreters through a video inset window provides natural language access and visual engagement, particularly valuable for native signers (Weaver et al., 2010). On the other hand, text-based access, such as real-time captions or chatbox communication, may be better suited for D/HH individuals who are more comfortable with written language or in settings where video-based access is technically limited (Kushalnagar et al., 2014). A flexible, user-centered approach ensures that each student can engage through their preferred channel of communication (Anindhita & Lestari, 2016).

Auditory support technologies, such as Assistive Listening Devices (ALDs) and FM systems, may also benefit students with residual hearing. These tools improve sound clarity and reduce environmental noise by transmitting speech directly from the speaker to the listener (Brody, 2020; Martin & Cox, 2023). However, their use should be considered in relation to the learner's audiological status and individual needs. Ultimately, true digital inclusion occurs when educational environments are designed to offer multiple and equitable access points, including auditory, visual, and textual formats, so that all D/HH learners can participate fully, confidently, and autonomously in the digital era (Prietch & Filgueiras, 2015).

2.2 Legal and Policy Frameworks for Disability Rights and Education in Greece

2.2.1 The United Nations Convention on the Rights of Persons with Disabilities

The UNCRPD was signed in New York on March 30, 2007, with the Optional Protocol being signed on September 27, 2010. The Convention outlines fundamental principles governing its provisions, includes definitions of key concepts, and specifies the purpose of the Convention (Nizar, 2011). It also contains articles detailing the obligations of the States Parties to safeguard every human right, including equality, accessibility, education, employment, and more (Lombardi *et al.*, 2019). According to the Convention, persons with disabilities are defined as those who have long-term physical, mental, intellectual, or sensory impairments which, in interaction with various environmental and attitudinal barriers, hinder their full participation in society. The purpose of the Convention is to promote, protect, and ensure the equal enjoyment of all human rights by all persons with disabilities (Callus & Camilleri-Zahra, 2017).

The definition provided by the Convention incorporates the principles of the social model of disability, emphasizing societal shortcomings rather than individual limitations. To achieve this goal, member states are required to take action to remove existing barriers, moving away from the medical model and respecting the uniqueness of each individual (O'Mahony & Quinlivan, 2020). The Convention prioritizes the employment rights of persons with disabilities, addressing their high poverty rates. Article 28 requires states to offer comprehensive rehabilitation services to promote social inclusion and employment, alongside access to assistive devices (Basson, 2017; Lindstrom *et al.*, 2018). It also protects against forced labor, ensures the right to inclusive and non-discriminatory employment, and promotes equal pay and access to vocational training. Additionally, it encourages self-employment and recruitment across sectors through incentives (Ferraina, 2012). The Convention further emphasizes digital inclusion, recognizing that access to assistive technologies is crucial for realizing the rights of persons with disabilities (Smith *et al.*, 2024). Moreover, it mandates reasonable workplace accommodations to support vocational and educational access (De Beco, 2014).

On April 10, 2012, Greece, as a member state of the European Union, voted to ratify the Convention and its Optional Protocol, with the plenary session of the Parliament recognizing its validity from the moment the decision was published in the Government Gazette. Within the government, a focal point and coordinating mechanism were established to facilitate actions related to the Convention and to monitor its implementation, in accordance with the conditions outlined in the Convention (Article 33, paragraphs 1-2). Additionally, according to Article 28 of the Greek Constitution, every international convention, upon its ratification, becomes an integral part of Greek domestic law and takes precedence over any conflicting provisions of national law (Hellenic Republic, 2008). Consequently, Greece is bound both nationally and at the European level to uphold the rights of persons with disabilities.

In this context, Law 4488/2017 designates the Greek Ombudsman as the independent authority responsible for serving as the Framework for the Promotion of the

Convention's implementation, in collaboration with the National Confederation of People with Disabilities (ESAMEA, in Greek), which serves as a tertiary trade union organization (Article 72, paragraph 1). Through the preparation of annual evaluation reports, these two independent mechanisms assess the compatibility of national legislation with the provisions of the Convention to ensure its effective implementation.

2.2.2 Greek Legislation on Disability Rights and Education

The concept of disability encompasses a diverse group of individuals whose characteristics span across various aspects of life, such as education, economics, and employment. It is challenging to establish a universally accepted definition of disabled persons, as it depends on the criteria set within each domain. According to the WHO, individuals with disabilities often experience significant disadvantages due to the interaction between physical, sensory, or mental impairments and environmental or societal barriers (WHO, 2023). It is estimated that 10% of the global population lives with some form of disability, amounting to approximately 650 million people worldwide, with 80 million residing in the European Union. These individuals may experience mild, moderate, or severe disabilities, constituting the largest "minority" globally, as characterized by the United Nations (United Nations, 2024). The unemployment rates for persons with disabilities are significantly higher compared to those without disabilities. Additionally, they are more likely to be victimized, experience violence, and face marginalization (Quinlivan, 2012). A report by the United Nations on the living conditions of persons with disabilities identified discriminatory practices in employment, education, communication, and other areas, leading to the widely acknowledged radical and pioneering UNCRPD (Lawson, 2006).

According to the medical, or audiocentric, model, disability - in this case, hearing impairment - is viewed as synonymous with an "illness" that requires treatment, and the difficulties faced by persons with disabilities are seen as consequences of their individual functional limitations. Consequently, individuals are expected to adapt to the prevailing norm, which is auditory-vocal communication, rather than society adopting appropriate measures to accommodate the needs of persons with disabilities for equal access to private and public life. In contrast, the social model shifts the focus from the individual's impairment to the barriers imposed by society, which perpetuates exclusionary practices in all aspects of human life (Zoniou-Sideri, 2011). The legislator typically addresses deafness and hearing loss through classifications based on the degree of hearing reduction, a perspective rooted in a medical or audiological approach rather than a linguistic or cultural one. These are considered sensory impairments, disorders, or functional losses that hinder an individual's ability to perceive and respond to auditory stimuli, thereby impeding communication. Deafness can be either prelingual—congenital or occurring very early in life - or postlingual, developing later in an individual's life (Stasinos, 2016). This approach aligns with the medical model of disability, where disability is equated with an "illness" that requires treatment, and the

difficulties faced by persons with disabilities are viewed as consequences of their individual functional limitations. In contrast, the social model shifts the focus from the individual's impairment to societal barriers, which perpetuate exclusionary practices in the workplace and social life (Zoniou-Sideri, 2011).

Within this second framework, the approach to deafness by Kourbetis *et al.* (2007) defines deaf individuals not solely by their audiometric results (25-60 dB for hard-of-hearing individuals and above 60 dB HL for deaf individuals), but as individuals who naturally receive stimuli through the visual channel. Vision shapes their worldview, thinking, and language, regardless of whether they use technical aids such as hearing aids or cochlear implants. Language is an innate human capacity, so deaf children tend to develop a language that is effective and accessible to them, leveraging the brain's visual function. Living in a visually oriented world, they acquire and use a visual-spatial language (a natural sign language) suited to their perceptual and communicative needs. Language is a fundamental component of the culture of the people who use it, while culture serves as a survival mechanism for successful adaptation to one's environment. The use of a visual language, complete with linguistic elements equivalent to spoken languages (Lampropoulou, 1997; Napier & Leeson, 2016), identifies deaf individuals as a linguistic and cultural minority, distinguishing them from other groups with disabilities and hearing individuals (Lampropoulou, 1999). Therefore, they should be treated with respect for their visual and linguistic characteristics, equally to hearing individuals, with reasonable accommodations to ensure the enjoyment of their rights.

D/HH individuals represent a multifaceted group regarding their linguistic choices, needs, and identities, including both signers (users of sign language) and oralists (users of spoken language), as well as individuals who combine both linguistic modalities (bimodal/bilingual) (Lampropoulou, 1999). Their multiple identities, which may vary depending on factors such as gender, membership in a cultural-linguistic minority, the family environment of deaf or hearing parents, attendance at deaf or mainstream schools, and whether their deafness is prelingual or postlingual, create a complex set of diverse characteristics (WFD, 2017).

The Greek state aligns legally with this European provision, as Law 4488/2017 mandates that every Legal Entity of Public Law must take all appropriate measures to ensure the equal exercise of rights for persons with disabilities. Furthermore, the Constitution of Greece (Article 22, paragraph 1) enshrines the right of persons with disabilities to work, and the state is committed to eliminating all forms of exclusion and marginalization, with the goal of ensuring their equal participation in employment, production, and consumption, as well as their moral and material upliftment (Hellenic Republic, 2008). Finally, there is a provision for an economic support allowance for D/HH individuals with a disability rate of 67% or more, applicable to those under 18 and over 65 years of age. The allowance is extended to the age group of 19-65 in cases of comorbidity (physical, intellectual, or mental impairment) or if the individual is enrolled in education (Joint Ministerial Decision 10803/527, 2013). The number of beneficiaries in

2021 was 4,753, according to the relevant oversight body (ESAMEA, 2021). Building on this framework, a recent official announcement by the Prime Minister of Greece declared that this support allowance is expected to become a lifelong benefit, regardless of age. This significant development comes after years of continuous advocacy by the Hellenic Federation of the Deaf, aiming to ensure stable and equitable financial support for deaf and hard-of-hearing individuals. (Hellenic Federation of the Deaf, 2025).

2.2.3 The National Strategy for the Rights of Persons with Disabilities 2024 - 2030

The NSRPD 2024-2030, titled "A Greece for All", represents a comprehensive initiative by the Greek government aimed at ensuring the complete inclusion and participation of individuals with disabilities across all facets of society. Presented to the cabinet of ministers on April 29, 2024, this comprehensive strategy marks a pivotal moment in Greece's disability rights efforts (Ministry of Labor and Social Security, 2024). The strategy, as outlined in the policy development section of the document, serves as a 'road map' for improving the lives of persons with disabilities across all fields and strengthening their inclusion in society, building upon initiatives dating back to 2020. This strategy builds on previous national efforts and aligns with broader European and international frameworks, particularly the UNCRPD.

Central to this strategy is the commitment to universal accessibility, which seeks to make physical, digital, and social environments fully accessible to all, regardless of disability. A significant emphasis is placed on promoting independent living through the provision of community-based services, the process of deinstitutionalization, and the enhancement of social protection measures. Health access is another critical objective, with a focus on guaranteeing equitable healthcare services tailored to the specific needs of individuals with disabilities. The strategy also prioritizes inclusive education at all levels, with particular attention to early intervention and lifelong learning opportunities. The strategy places special emphasis on education and employment. The document reports alarming statistics: the employment rate of persons with disabilities in Greece is only 24%, compared to the European average exceeding 50%. Moreover, Greece has one of the highest unemployment rates for persons with disabilities in the European Union. Employment access is addressed through initiatives aimed at improving the employment prospects of individuals with disabilities by enhancing support services, encouraging entrepreneurship, and ensuring equal opportunities in the job market. Additionally, the strategy emphasizes raising societal awareness and increasing the visibility of disability issues to cultivate an inclusive and supportive community.

The overarching vision of the strategy is to foster a society where individuals with disabilities enjoy equal rights and opportunities, free from barriers and discrimination. This vision is consistent with Greece's constitutional commitment to human dignity and equality, as well as its obligations under international human rights law. Ultimately, the strategy underscores Greece's dedication not only to improving the quality of life for

individuals with disabilities but also to ensuring their full integration into the social, economic, political, and cultural life of the nation.

3. Theoretical Framework

The theoretical framework of this study integrates the Rights-Based Approach, the Social Model of Disability, and the Inclusive Education approach, collectively providing a normative foundation, addressing structural barriers, and offering practical guidelines for effective implementation. These frameworks provide a comprehensive lens for analyzing the alignment of Greece's educational policies and practices with the UNCRPD, particularly in the context of D/HH students.

The Rights-Based Approach emphasizes the recognition of education as a fundamental human right, as enshrined in international instruments such as the UNCRPD (Lang et al., 2011). Article 24 of the Convention explicitly asserts the right to inclusive, quality, and equitable education for persons with disabilities (De Beco, 2014). This framework shifts the focus from a needs-based paradigm to one that prioritizes rights, empowerment, and accountability (Gabel, 2016). It serves as a foundation for assessing the extent to which policies uphold the principles of equality, accessibility, and non-discrimination in education for D/HH students (Gacche, 2024).

The Social Model of Disability challenges the traditional medical perspective by framing disability as a result of societal and environmental barriers rather than individual impairments (Barnes, 2019). This approach aligns with the UNCRPD's principles, which emphasize the removal of physical, attitudinal, and systemic obstacles that hinder the full participation of persons with disabilities in society (Lombardi et al., 2019). In the context of this study, the Social Model is used to evaluate whether Greece's educational and vocational systems actively dismantle barriers and create inclusive environments for D/HH students.

The Inclusive Education approach emphasizes the integration of all students, regardless of their abilities, into mainstream educational settings (Nilholm, 2021). It highlights the importance of developing individualized teaching practices, providing reasonable accommodations, and fostering supportive learning environments to ensure that every student has the opportunity to reach their full potential (Al-Shammari et al., 2019). This approach is particularly significant for evaluating the implementation of bilingual education for D/HH students in Greece, with a focus on the use of GSL as a primary language to support their educational and communicative needs (Miller et al., 2024).

4. Material and Methods

4.1 Research Design

This study employs a policy analysis methodology, focusing on the implementation of the UNCRPD within the Greek context. Policy analysis, as a research approach, seeks to evaluate the design, implementation, and outcomes of policies and legislative frameworks to identify gaps, challenges, and opportunities for improvement (Dunn, 2015). This approach prioritizes the empowerment and inclusion of individuals with disabilities, ensuring the analysis adheres to international human rights standards that emphasize equity and dignity (Guzzi, 2024). Additionally, the research employs a holistic perspective by examining policies through legal, institutional, and societal dimensions. This comprehensive approach enables the study to address the multifaceted nature of the implementation landscape, providing a nuanced and well-rounded understanding of the challenges and opportunities in promoting disability inclusion (Weimer & Vining, 2017). The findings are distinctly action-oriented, designed to guide policymakers, educators, and other stakeholders in identifying and implementing actionable steps to bridge the gap between legislative intent and practical outcomes (Wagenaar, 2014).

4.2 Data Collection

This study employs a qualitative methodology centered on document analysis and the examination of academic literature to evaluate the alignment of Greece's educational policies and practices with the principles of the UNCRPD. This methodology is chosen as the most suitable approach because it allows for an in-depth exploration of legislative and policy frameworks, providing a comprehensive understanding of their alignment with international obligations (Tierney & Clemens, 2011). Qualitative methods are particularly effective for analyzing complex and context-specific phenomena, such as the implementation of inclusive education policies within diverse socio-political and cultural environments (Walker & Brown, 2023). Document analysis enables the systematic examination of legal texts, policy reports, and strategic frameworks, offering insights into both the theoretical foundations and practical applications of these policies (Asdal & Reinertsen, 2021).

Legal document analysis serves as a primary tool for this investigation, involving a comprehensive examination of national legislation and strategic frameworks. Principal legal frameworksinclude Law 4488/2017 and Law 3699/2008, which form the foundation of Greece's special education policies. Additionally, the NSRPD 2024-2030 is examined for its emphasis on educational and vocational inclusion. Reports and evaluations from independent oversight bodies, such as the Greek Ombudsman and ESAMEA, are also analyzed to assess Greece's compliance with the UNCRPD. These documents are critically evaluated to identify legislative achievements, implementation gaps, and inconsistencies with international obligations. Specific focus is placed on bilingual

education policies, the recognition and application of GSL, and the provision of reasonable accommodations for D/HH students.

In parallel, an implementation-focused literature review is conducted to contextualize the findings of the legal analysis. This review explores studies on the implementation of inclusive education policies within Greece with a particular focus on research examining the role of GSL and the impact of bilingual education on D/HH students. The review extends to evaluations of vocational training, digital inclusion, and career guidance initiatives for individuals with disabilities in Greece. By bridging policy frameworks with academic discourse, the study critically assesses whether the theoretical commitments of the UNCRPD are translated into practical realities (Dwivedi *et al.*, 2024). This approach highlights structural barriers, discrepancies between policy and practice, and areas requiring targeted intervention to realize the full potential of inclusive education in accordance with international standards (Talbot & Talbot, 2015).

4.3 Analytical Tools

This study employs two key analytical frameworks to systematically evaluate data related to the education and inclusion of D/HH students in Greece: thematic analysis and the Policy Cycle framework. These methods were chosen for their ability to provide complementary perspectives, ensuring a thorough examination of the complex interplay between policies, practices, and challenges in this context.

4.3.1 Thematic Analysis

Thematic analysis is particularly suited to the qualitative nature of the data, which includes legal documents, policy reports, and academic literature (Hill, 2021). As a flexible and systematic approach, it allows for the identification, analysis, and interpretation of repetitive patterns or themes, facilitating the categorization of information into key areas of interest (Vaismoradi *et al.*, 2013). This method is especially effective in highlighting persistent challenges and successful practices, making it an ideal tool for uncovering nuanced insights that might otherwise remain hidden in complex qualitative datasets (Castleberry & Nolen, 2018). Based on the literature review, several fundamental thematic axes emerge, which form the basis of the thematic analysis conducted in this study. These themes provide a framework for understanding the challenges and opportunities in fostering inclusion and accessibility within the educational and vocational contexts:

1) Bilingual Education and Linguistic Identity: This theme explores the recognition and integration of GSL alongside written Greek as part of a bilingual education model. It highlights the challenges in achieving parity between the two languages, the availability of qualified educators, and the role of GSL in preserving the cultural and linguistic identity of the Deaf community.

2) Vocational Training and Career Guidance: This theme examines the provision of tailored vocational training programs and career guidance services for D/HH

students. Key issues include alignment with labor market demands, the accessibility of training programs, and the adequacy of support structures that prepare D/HH students for meaningful employment opportunities.

3) Digital Inclusion and Assistive Technologies: The theme focuses on the role of technology in bridging accessibility gaps for D/HH students. It includes the development and deployment of accessible educational materials, assistive listening devices, and digital platforms, while also addressing the barriers posed by insufficient training for educators and inconsistent implementation of these tools.

4) Policy-Practice Gap in UNCRPD Implementation: This theme reflects on the discrepancies between legislative frameworks and their practical application. It delves into the systemic barriers, resource limitations, and societal attitudes that hinder the realization of the rights guaranteed under the UNCRPD.

5) Cultural and Social Inclusion: This theme highlights the interplay between educational environments and societal acceptance. It discusses the importance of fostering inclusive communities that embrace the unique identities and contributions of D/HH students, particularly within professional and social contexts.

4.3.2 Policy Cycle Framework

The Policy Cycle framework provides a structured method for evaluating the lifecycle of public policies, from their initial conception to their practical outcomes (Jann & Wegrich, 2017). It comprises five interconnected stages that guide the analysis and evaluation of public policies. Agenda setting identifies emerging issues and relevant actors at various levels, recognizing challenges and stakeholders. Policy formulation creates detailed plans through consultations, integrating knowledge and cultural insights. Decision-making formalizes policies via institutional mechanisms, adopting reports, recommendations, and plans. Implementation turns policies into action through collaboration, resource allocation, and logistical execution. Evaluation explores policy outcomes, monitors impact, identifies successes and gaps, and recommends improvements, often forming the basis for new agenda-setting and restarting the cycle (Howlett, 2009). This methodology ensures a comprehensive examination of policy design, implementation, and evaluation, allowing for a nuanced understanding of the successes and challenges associated with the policies under review (Tamufor *et al.*, 2025). Each phase of the framework is operationalized as follows:

1) The Agenda Setting phase corresponds to the Literature Review, which identifies emerging issues and relevant actors in the field. This section draws on existing research to highlight the socio-educational barriers faced by D/HH students in Greece, such as gaps in accessibility and inclusion. These insights establish the necessity of policy interventions aimed at addressing challenges in bilingual education, vocational training, career guidance, and digital inclusion.

2) The Policy Formulation phase is reflected in the role and mandates of the UNCRPD. This stage discusses how the Convention's principles and obligations serve as a foundation for policy development in Greece. The analysis emphasizes the UNCRPD's focus on promoting inclusive education, vocational opportunities, and accessibility for persons with disabilities, framing these as essential components of effective policy formulation.

3) The Decision-Making phase examines how Greece's legal framework has adapted to align with the UNCRPD. This includes the enactment of laws such as Law 4488/2017, as well as Joint Ministerial Decision D29a/F.32/G.P.oik.10803/527/2013 and Joint Ministerial Decision 3691/7-04-2014, which expand financial support for individuals with disabilities and establish vocational training opportunities tailored to their needs.

4) The Implementation phase is analyzed through the evaluation of research and data on how these laws and policies have been applied in practice. This includes assessments of various initiatives, such as the integration of GSL in schools, vocational training programs, and efforts to enhance digital inclusion.

5) The Evaluation phase assesses the outcomes of the implemented policies, based on studies and reports from oversight bodies like the Greek Ombudsman and ESAMEA. This phase critically examines the extent to which the policies have achieved their intended goals, highlighting successes and persistent challenges. It concludes with an analysis of the remaining issues and the new goals outlined in the Strategy 2024-2030, which aims to address unresolved barriers and set a renewed agenda for progress.

By integrating thematic analysis with the Policy Cycle framework, the study offers both a detailed exploration of qualitative data and a comprehensive evaluation of policy dynamics (Kayesa & Shung-King, 2021). Thematic analysis provides depth and context by uncovering recurring patterns and themes, while the Policy Cycle Framework ensures a systematic approach to understanding how these themes are addressed across the policy lifecycle (Alrabiah & Drew, 2022). Together, these methodologies enable a nuanced analysis that bridges the gap between legislative intent and practical implementation, offering actionable insights for policymakers, educators, and other stakeholders (Carvalho *et al.*, 2023).

5. Results

5.1 Bilingual Education

The UNCRPD adopts a rights-based approach to disability, viewing deaf individuals not as objects of charity or medical treatment but as subjects with rights, capable of self-determination, self-advocacy, claiming their rights, and making decisions based on free and informed consent. This perspective informs the Convention's approach to education, language, and cultural identity for deaf individuals. Article 2 of the UNCRPD provides

essential definitions that lay the groundwork for understanding the Convention's approach to bilingual education for the deaf. It defines "language" to encompass spoken, signed, and other forms of non-spoken languages, including alternative methods of communication. This inclusive definition explicitly acknowledges sign languages as legitimate languages, thereby establishing a clear foundation for their use in educational settings. This recognition is pivotal in ensuring that sign languages are treated on par with spoken languages in the context of education, particularly for the Deaf community. The most comprehensive guidance on bilingual education for deaf individuals is provided in Article 24, which directly addresses education. Several key provisions within this article are particularly relevant. Article 24(3)(b) requires States Parties to facilitate the learning of sign language and to promote the linguistic identity of the Deaf community. This provision underscores the importance of sign language acquisition as a central component of the educational experience for deaf individuals, supporting both their linguistic development and cultural identity. Further, Article 24(3)(c) stipulates that the education of individuals, particularly those who are blind, deaf, or deafblind, should be delivered in the most appropriate languages, modes, and means of communication tailored to the individual. It emphasizes the need for educational environments that maximize both academic and social development, ensuring that education is not only accessible but also enriching and supportive of the student's overall growth. Article 24(4) addresses the critical need for qualified teachers, stating that States Parties must take appropriate measures to employ teachers, including those with disabilities, who are proficient in sign language and/or Braille. This provision also calls for the training of professionals and staff at all levels of education to ensure they are equipped to support the needs of deaf students. The presence of qualified educators is essential for the effective implementation of bilingual education, as it ensures that students receive instruction that is both linguistically and pedagogically sound.

Article 30 of the UNCRPD is indeed relevant to the discussion of bilingual education, as it directly addresses the cultural and linguistic identity of persons with disabilities. Specifically, Article 30(4) states that persons with disabilities are entitled, on an equal basis with others, to recognition and support of their specific cultural and linguistic identity, which explicitly includes sign languages and deaf culture. The recognition of deaf culture and sign languages as integral components of cultural and linguistic identity lends strong support to the rationale for bilingual education approaches. Bilingual education, which incorporates both sign language and the dominant spoken/written language, aligns with the principles outlined in Article 30 by ensuring that the linguistic identity of deaf individuals is preserved and promoted. This approach not only facilitates effective communication and learning but also fosters a sense of belonging and pride in one's cultural and linguistic heritage. By affirming the right to recognition and support of specific cultural and linguistic identities, Article 30(4) provides a strong justification for implementing bilingual education systems that respect and promote the use of sign languages alongside other forms of communication. It

underscores the importance of creating educational environments where the cultural and linguistic needs of deaf students are fully supported, thereby enhancing their educational experiences and ensuring their full inclusion in society.

However, according to the research conducted by Krausneker *et al.* (2022), data from 39 European countries indicate that combining bilingual education with inclusion presents a significant challenge due to various factors. The study found that only a few schools reported implementing a bilingual model within mainstream settings, which must be accessible and contribute to the development of all students, both Deaf and hearing. Additionally, specialized teachers for the Deaf were present in only some educational environments, a situation often incompatible with the distribution of D/HH students in mainstream education. The small size of the D/HH population, combined with the underutilization of specialist knowledge, makes the implementation of the bilingual model in every neighborhood unrealistic. In many cases, sign languages are treated primarily as tools for delivering instructions and teaching content across different educational levels (Mertzani, 2023).

In Greece, the legislative framework for the education of D/HH students is established through a combination of Law 3699/2008 and Law 2817/2000, with subsequent reinforcement in Law 4488/2017. Article 3 of Law 3699/2008 defines the categories of students with disabilities, including D/HH students, who face significant learning difficulties affecting their academic performance. This law also emphasizes the development of these students' potential to ensure their autonomous participation in professional and public life, aiming for their full integration into society.

Law 2817/2000 designates GSL as the first language of D/HH students, and certified knowledge of GSL is a required qualification for teachers and special education personnel in Special Education Schools for D/HH individuals. Under Law 3699/2008, GSL is officially recognized as the primary language of D/HH students, with Modern Greek serving as their second language, acquired and expressed in its written form. The use of spoken Greek is considered an additional social option. GSL and Modern Greek are recognized as equal languages, making bilingual education the recommended pedagogical approach for D/HH students. The recognition of GSL's equality with the Greek language was further solidified in 2017 by Law 4488/2017 (Article 65, paragraph 2), which obligates the state to implement measures that address the communication needs of D/HH individuals. This comprehensive legislative framework underscores the importance of bilingual education and ensures that D/HH students have the necessary linguistic and educational support to thrive in all aspects of life.

According to Mertzani (2007), bilingual education for Deaf students in Greece is structured around the recognition of GSL as the natural first language of Deaf children. The educational approach emphasizes the need for the linguistic and cultural development of Deaf students by providing instruction in both languages as separate and equal systems. The curriculum is designed to enable students to understand the differences and similarities between the two languages, which fosters a bilingual

environment that supports both linguistic competence and cultural identity. However, the implementation of this bilingual model faces challenges, such as the limited availability of specialized teaching materials for GSL and the need for teachers proficient in GSL to effectively deliver this curriculum.

Nevertheless, the experiences of D/HH students in the Greek educational system reveal persistent challenges that limit their academic and social development. As highlighted by Miller *et al.* (2024), these challenges include deficiencies in vocabulary, language, and literacy skills, largely stemming from insufficient support for bilingual education and limited incorporation of GSL. Additionally, concerns about the adequacy of general education classrooms are prevalent, with D/HH students often facing restricted communication access and a lack of tailored educational support. These issues are further exacerbated by the limited preparation of teachers and the absence of diverse teaching methods to meet the unique needs of D/HH learners. Socially, many students struggle to develop meaningful friendships, reflecting broader issues of social inclusion.

The NSRPD 2024-2030 underscores the importance of inclusive education, particularly for D/HH students. This is embedded within the broader goals of ensuring universal accessibility and non-discrimination, as articulated in various sections of the strategy. Specifically, Pillar IV, which focuses on "Inclusion in Education", directly addresses the need to support D/HH students through bilingual education (Section 3.4). The strategy is grounded in the principles of universal design and accessibility, as outlined in Section 2.1 (p. 14). These principles mandate that educational environments be designed to accommodate the diverse needs of all students, including those who are D/HH. This framework is consistent with the UNCRPD, which is referenced in the strategy as a guiding document for ensuring that all students, regardless of ability, can fully participate in education (p. 15).

In Section 3.4, Goal IV.2, the Strategy 2024-2030 explicitly calls for the strengthening of inclusion in primary and secondary education. It emphasizes the need for bilingual education as a critical component for D/HH students, recognizing both sign language and spoken language as essential means of communication. The strategy advocates for the recruitment and training of educators proficient in sign language and the development of accessible teaching materials. This approach is designed to ensure that D/HH students can engage fully with the curriculum, facilitating both linguistic and cognitive development. Additionally, Section 3.4, Goal IV.4 highlights the importance of inclusion in vocational education and lifelong learning, ensuring that D/HH students are not left behind at any stage of their educational journey. This section stresses the need for continuous professional development for educators and the adaptation of vocational training programs to meet the needs of D/HH students, further reinforcing the strategy's commitment to bilingual education.

5.2 Career Guidance

The UNCRPD provides a comprehensive framework that underscores the right of persons with disabilities to access quality career guidance services. Article 26 is particularly relevant to career guidance, as it focuses on enabling persons with disabilities to achieve and maintain maximum independence and full inclusion in all aspects of life. Article 26(1) calls for "comprehensive habilitation and rehabilitation services and programmes, particularly in the areas of health, employment, education and social services". This holistic approach aligns with comprehensive career guidance practices that consider multiple aspects of an individual's life and abilities.

Article 27 of the UNCRPD is particularly relevant to career guidance for individuals with disabilities, outlining several provisions that have substantial implications for the design and delivery of these services. Specifically, Article 27(1)(d) emphasizes the necessity of ensuring that persons with disabilities have effective access to general technical and vocational guidance programs, placement services, and vocational and continuing training. This provision underscores the importance of making career guidance services widely accessible and tailored to meet the diverse needs of persons with disabilities.

In addition, Article 27(1)(e) highlights the promotion of employment opportunities and career advancement for persons with disabilities within the labor market. It also calls for assistance in finding, obtaining, maintaining, and returning to employment. This provision suggests that career guidance should not only support initial job placement but also facilitate ongoing career development and stability in employment. Article 27(1)(j) focuses on the promotion of work experience acquisition in the open labor market for persons with disabilities. This emphasizes the role of career guidance services in creating pathways for individuals to gain practical work experience, which is essential for career growth and integration into the labour market. Furthermore, Article 27(1)(k) advocates for vocational and professional rehabilitation, job retention, and return-to-work programs. This provision highlights the need for career guidance services to include support for individuals who may require rehabilitation or assistance in retaining or returning to employment after experiencing a disability. Collectively, these provisions form a comprehensive framework for career guidance services that should encompass vocational guidance, placement services, career advancement support, opportunities for gaining work experience, and rehabilitation programs.

The legal framework for Career Guidance in Greece has evolved significantly, particularly in the educational sector. The introduction of more structured vocational guidance in schools began with Law 309/1976, which included career education in the curriculum of lower secondary schools, known as School Career Guidance (SEP, in Greek). In the 1990s, the career guidance system was further expanded with the establishment of the National Centre of Vocational Guidance (EKEP, in Greek) and various Counselling and Guidance Centres (KESYP, in Greek) across the country (Kassotakis, 2017). For students with disabilities, the framework for career guidance and

counseling is also aligned with broader educational policies. Laws such as 3699/2008, emphasize the inclusion of students with disabilities in all educational and vocational training programs. The law mandates that educational services, including career guidance, must be adapted to meet the needs of students with disabilities, ensuring equal opportunities for their professional development and integration into the labor market.

Career guidance programs for D/HH students include topics such as employer and colleague psychology, communication techniques, problem-solving, and financial planning, often delivered through simulations and role-playing. Employers interested in hiring D/HH individuals also participate in these programs, learning how to overcome skepticism about hiring a Deaf employee, which modifications to the workplace can be made at minimal cost, existing support measures, and how their business can benefit from a socially responsible image. Both Deaf employees and employers are trained in effective instruction methods and learn about the role of a personal mentor—counselor for each Deaf employee, whose responsibility is to provide supportive informational and socio-emotional services. Work environments must ensure direct visual contact (Viki *et al.*, 2007).

While Greece has made strides in developing a legal and institutional framework for career guidance, including provisions for students with disabilities under general education laws, there remains a gap in the specific, tailored career guidance services for these students. The broader socio-economic challenges and the centralization of policies continue to impact the effectiveness and accessibility of career guidance for all students, particularly those with disabilities (Kassotakis, 2017). In their daily work life, communication issues with colleagues and prejudices from hearing individuals, who often view them as second-class citizens, frequently arise. According to the Deaf individuals themselves, these challenges stem from a lack of specialized training and education (Sapountzaki & Haleftira, 2018). Furthermore, among various disabilities, D/HH individuals are in the middle range concerning employers' willingness to hire them (Zissi *et al.*, 2007).

Moreover, the training and qualifications of career guidance practitioners do not always include adequate preparation for addressing the unique challenges faced by students with disabilities. There is a need for specialized training programs that equip practitioners with the skills necessary to provide effective support to these students, including knowledge of disability rights, inclusive practices, and individualized career planning. Additionally, the absence of a clear regulatory framework that mandates the inclusion of disability considerations in career guidance further hinders the development of an equitable system. Another significant challenge is the lack of resources and support for the implementation of inclusive career guidance practices. Schools and career guidance centers often operate with limited budgets and staffing, which restricts their ability to offer comprehensive services to students with disabilities (Vlachaki, 2021).

The NSRPD 2024-2030 places significant emphasis on ensuring that students with disabilities have access to effective career guidance and vocational training. This

commitment is explicitly detailed within the strategy, particularly under Pillar V, which focuses on "Access to Employment" (Section 3.5). The strategy's foundation is built on the principles of universal design and non-discrimination, as articulated in Section 2.1. These principles extend to career guidance services, ensuring that they are accessible and tailored to meet the diverse needs of students with disabilities. This aligns with the broader objective of the strategy to remove barriers and create inclusive environments across all sectors, including education and employment.

In Section 3.5, Goal V.3, the Strategy 2024-2030 specifically addresses the need to enhance structures and services that support the employment of individuals with disabilities. This includes the provision of comprehensive career guidance tailored to the needs of students with disabilities. The strategy also highlights the importance of integrating career guidance within vocational education and training programs, as detailed in Section 3.4, Goal IV.4. This section stresses the need for vocational training programs that are accessible and relevant to the job market, with a particular focus on ensuring that students with disabilities receive the guidance they need to pursue meaningful careers.

5.3 Vocational Training

The UNCRPD adopts a social model of disability, which views disability as resulting from the interaction between persons with impairments and attitudinal and environmental barriers in society. This perspective informs the Convention's approach to vocational training, emphasizing the need to address societal barriers alongside individual skill development. Article 24 of the UNCRPD, while broadly focused on education, carries significant implications for vocational training for persons with disabilities. This article reinforces the right to education without discrimination and on the basis of equal opportunity, which is critical for enabling persons with disabilities to participate fully and effectively in a free society, as emphasized in Article 24(1)(c). This overarching principle ensures that education systems, including vocational training programs, are designed to be inclusive and accessible, providing all individuals with the skills and knowledge necessary to contribute meaningfully to society.

Article 24(5) specifically addresses the inclusion of vocational training within the broader framework of educational rights. It mandates that States Parties ensure persons with disabilities have access to general tertiary education, vocational training, adult education, and lifelong learning without discrimination and on an equal basis with others. This provision highlights the importance of vocational training as a critical component of the educational journey, offering individuals with disabilities the opportunity to acquire practical skills and qualifications that enhance their employability and independence. To achieve this, Article 24(5) also stresses the need for reasonable accommodation in vocational training and other educational settings. This requirement ensures that persons with disabilities receive the necessary support and adjustments to participate fully in these programs. Reasonable accommodations might include modified

curricula, accessible training materials, adaptive technologies, or tailored instructional methods that address the specific needs of learners with disabilities.

Article 26 of the UNCRPD is essential for understanding how vocational training fits within the broader framework of habilitation and rehabilitation. The article calls on States Parties to "*organize, strengthen and extend comprehensive habilitation and rehabilitation services and programmes*", explicitly highlighting key areas such as health, employment, education, and social services. This directive underscores the integration of vocational training as a critical component of a holistic approach to rehabilitation, where employment and education are recognized as vital for the full development and inclusion of persons with disabilities. The article outlines specific requirements for these programs, emphasizing that they should begin at the earliest possible stage and be based on a multidisciplinary assessment of individual needs and strengths. This early intervention is crucial in vocational training, as it allows for timely support and the development of tailored programs that align with the individual's unique abilities and aspirations. By incorporating a multidisciplinary approach, vocational training programs can address not only the technical skills required for employment but also the broader aspects of personal development, such as social integration and psychological well-being. Furthermore, Article 26 stresses that rehabilitation programs, including vocational training, should support participation and inclusion in the community and all aspects of society. These programs must be voluntary and accessible, provided as close as possible to the individual's community, including rural areas. This community-based approach ensures that vocational training is not isolated from the individual's social context but is instead integrated into their everyday life, making it more relevant and effective.

In Greece, Law 4763/2020 establishes the National System of Vocational Education and Training, within the National Organization for the Certification of Qualifications and Vocational Guidance (EOPPEP, in Greek) is responsible for certifying the graduates of education and training programs. Vocational Training Institutes (IEK, in Greek) were established under Law 2009/1992 with the primary mission of providing initial vocational training to graduates of General and Vocational High Schools, as well as to individuals with equivalent qualifications. The training provided by the IEKs was designed to help students develop specific job-related skills, ensuring their successful adaptation to the continuously evolving demands of the production process. In 2024, the IEKs underwent a significant transformation, becoming Schools of Advanced Vocational Training (SAEK, in Greek) under Law 5082/2024. According to Presidential Decree 85/2022, these schools are dedicated to preparing students for specific jobs and professions, offering short-term programs that focus on the development of targeted skills needed in the labor market. By providing both theoretical knowledge and practical training, SAEKs address the pressing need for skilled professionals in various sectors, thus playing a critical role in meeting the demands of the modern workforce.

Preparatory opportunities for gaining professional experience are provided by the Special Vocational Education and Training Workshops (EEEEK, in Greek). In the final

year, a practical internship of at least two quarters is mandated, where feasible, to strengthen skills and familiarize students with the workplace (Law 4186/2013, Article 28, paragraph 1). However, this provision applies only to a small percentage of D/HH students attending EEEEK for the D/HH, with no equivalent arrangement found for the broader population of D/HH individuals.

Under the framework of Law 4186/2013, vocational education sectors and specialties were systematically restructured to meet the evolving demands of the contemporary labor market. This reform included significant curricular revisions, particularly for students with learning difficulties and special educational needs. Moreover, the establishment of IEKs for Special Education was institutionalized by the Joint Ministerial Decision 3691/7-04-2014. These public IEKs for persons with disabilities were authorized to operate in Agia Paraskevi, Athens, and Pylaia - Chortiatis, Thessaloniki. These specialized IEKs offer targeted vocational training programs, tailored to meet the specific needs of their students. To ensure comprehensive accessibility, the necessary provision of GSL interpreters has been mandated, thereby facilitating the educational process for students with hearing impairments.

Furthermore, the Vocational Training School for Individuals with Special Needs of Municipal Employment Service offers two-year training programs in various specializations, as outlined in Law 3896/2010. The school is open to individuals aged 18 to 55 with a certified disability rate of over 50%, including D/HH individuals. The primary mission of the school is to provide both theoretical and practical vocational training tailored to the specific needs of unemployed individuals with disabilities. The goal is to facilitate their integration into the labor market or support their pursuit of self-employment (Municipal Employment Service, 2010). Additionally, the school provides a network of Accompanying Support Services, which was expanded in 2016 (to include Sign Language Interpreters, ensuring comprehensive support for all students (Municipal Employment Service, 2016).

The NSRPD 2024-2030 highlights the critical role of vocational training in empowering students with disabilities to achieve meaningful employment. The strategy integrates vocational training within its broader objectives of accessibility, inclusion, and equal opportunities, particularly under Pillar IV (Inclusion in Education) and Pillar V (Access to Employment) (Sections 3.4 and 3.5). Section 3.4, Goal IV.4 focuses specifically on the inclusion of students with disabilities in vocational education and training. The strategy stresses the need for vocational training programs to be fully accessible and tailored to the individual needs of students with disabilities, including D/HH students. This includes the adaptation of curricula, the provision of specialized training materials, and the recruitment of educators trained in working with students with disabilities. The strategy also outlines the importance of integrating vocational training with broader educational and career guidance services to ensure a seamless transition from education to employment. In Section 3.5, Goal V.3, the strategy emphasizes the need to strengthen structures and services that support the employment of people with disabilities. This

includes enhancing vocational training programs to ensure they are aligned with market demands and accessible to all students, regardless of their disability.

5.4 Vocational Rehabilitation

The UNCRPD adopts a social model of disability, which views disability as resulting from the interaction between persons with impairments and attitudinal and environmental barriers. This perspective informs the UNCRPD's approach to vocational rehabilitation, emphasizing the need to address societal barriers alongside individual needs. Article 3 of the UNCRPD outlines general principles that, while not specifically addressing vocational rehabilitation, are fundamental to the Convention's overall approach to rights for persons with disabilities. These principles provide a crucial foundation for understanding and applying provisions related to vocational rehabilitation. Respect for inherent dignity and individual autonomy underscores the importance of recognizing each person's worth and their right to make independent choices about their vocational goals and rehabilitation processes. This principle ensures that vocational rehabilitation services are designed to empower individuals, respecting their personal agency and preferences.

Non-discrimination is another core principle, emphasizing that vocational rehabilitation services must be equally accessible to all individuals with disabilities, without any bias or exclusion. This ensures that individuals are not denied opportunities for rehabilitation or career advancement based on their disability. The principle of full and effective participation and inclusion in society requires that vocational rehabilitation programs facilitate the active involvement of individuals with disabilities in all aspects of life, including employment. This inclusion is critical for ensuring that rehabilitation services do not merely prepare individuals for work but also support their meaningful integration into the workforce and society at large.

Equality of opportunity further reinforces the need for vocational rehabilitation services to provide equal chances for individuals with disabilities to achieve their career goals. This principle demands that such services be designed and implemented in a way that levels the playing field, ensuring that all individuals, regardless of their disability, have the opportunity to succeed. Lastly, accessibility is a key principle that ensures vocational rehabilitation services are available to all individuals with disabilities. This includes making services physically accessible, as well as ensuring that communication, information, and other resources are accessible to individuals with various disabilities.

Article 26 of the UNCRPD is pivotal to the Convention's approach to vocational rehabilitation, outlining a framework that emphasizes enabling persons with disabilities to achieve maximum independence and full participation in all aspects of life. This article underscores the necessity for states to implement effective and appropriate measures, including peer support, to support the physical, mental, social, and vocational abilities of individuals with disabilities. The article specifies that habilitation and rehabilitation services should begin at the earliest possible stage, highlighting the importance of early

intervention. This early start is crucial for addressing the needs of persons with disabilities promptly, allowing for better outcomes in their rehabilitation process. The services should be grounded in a multidisciplinary assessment that takes into account the unique needs and strengths of each individual. Such an approach ensures that rehabilitation programs are tailored to the specific circumstances and abilities of the person, maximizing their potential for independence and inclusion.

Accessibility is a key aspect of Article 26, which mandates that habilitation and rehabilitation services be available as close as possible to the individuals' own communities, including in rural areas. This requirement ensures that geographical location does not become a barrier to accessing essential services, thus promoting equality and inclusivity in vocational rehabilitation. Moreover, the article emphasizes that these services should support full participation and inclusion in the community and all aspects of society. This inclusion is not only essential for the social integration of individuals with disabilities but also for their vocational success. The voluntary nature of these services is also critical, respecting the autonomy of individuals and ensuring that they engage in rehabilitation on their terms.

In the context of legislative measures aimed at combating discrimination, the Greek state has implemented regulations that ensure equal treatment in employment without imposing a disproportionate burden on the employer. Any refusal to provide such accommodation constitutes discrimination based on disability (Law 4443/2016, Article 2, paragraph 6). Specifically, the reduction of working hours by one hour per day is extended to public sector employees, those employed by legal entities under public law, and local government organizations who have an indefinite private law employment relationship and a disability rate of 67% or more (Ministerial Circular DIADP/F.B.3./3569, 2009). In addition, under Law 3528/2007, Article 50, paragraph 4, individuals with a disability rate of 50% or more are entitled to six (6) additional paid leave days per calendar year. Additionally, a circular issued by the Ministry of Finance and Law 4172/2013 exempts individuals with a disability rate of at least 80% from income tax on wages, pensions, and fixed compensation.

Concerning modern employment rehabilitation, the Observatory of ESAMEA highlights worrying statistics for persons with disabilities overall. Approximately 84% of respondents reported not receiving reasonable accommodations, while 8.3% stated that these needs were only partially met. Moreover, a significant portion of individuals of working age (20-64 years) are not employed, particularly those with severe (38.8%) or moderate (29.3%) disabilities, compared to an unemployment rate of 24.6% among non-disabled individuals. Lastly, among young people aged 25-29 who have never worked, the figure is 72% for persons with disabilities and 55.4% for non-disabled individuals (ESAMEA, 2018).

Data from the Greek Ombudsman highlight the primary affirmative action measure being implemented, which is the special quota for persons with disabilities in public sector employment (The Greek Ombudsman, 2021). Under Law 4440/2016, 15% of

indefinite-term public sector hires are allocated to persons with disabilities. Specifically, blind telephone operators with the appropriate training occupy 80% of these positions. A similar provision has not been established for D/HH individuals in roles where verbal communication can be substituted. Additionally, a quota was introduced by Law 4765/2021, setting a 12% recruitment target for persons with disabilities with a disability rate of at least 50% in public administration positions.

The comparative analysis of the above highlights an improvement in the professional rehabilitation of D/HH individuals. Guided and supported in jobs with better prospects, they are moving closer to achieving autonomous living and finding satisfaction through work. However, significant gaps in the training tailored to their needs and the realities of daily work life force them to adapt to societal realities rather than the other way around. In practice, D/HH individuals are often forced to adapt to societal norms, rather than society adapting to their linguistic and communicative realities. For instance, disabling conditions arise when sign language interpreting is not provided, spoken language is not transcribed into text, or auditory signals (such as alarms or elevator indicators) are not accompanied by visual equivalents (ESAMEA, 2019). Indeed, some of the obstacles they face in their work include communication issues, which often rely solely on auditory information, and spoken communication, which is rarely accompanied by interpretation in GSL. In such cases, and following relevant training, they typically monitor their speech production and use lip-reading. Although some D/HH individuals may use lip-reading as a complementary strategy, it is not always reliable, as many speech sounds look similar or are not visible on the lips. As a result, comprehension is often partial, and the mental effort required can lead to significant visual fatigue, especially in prolonged interactions (Sapountzaki & Georgokostopoulos, 2017). For those Hard of Hearing individuals who use hearing aids, noise is not only distracting but also painful (Logaras, 2013).

No specific regulations were found about eliminate discrimination in equal pay, participation in the exercise of trade union rights, and the free choice of profession that meets an individual's livelihood needs, highlighting significant gaps in the promotion of D/HH rights. Some good practices for facilitating the employment of a D/HH individual include assigning specific hearing colleagues as assistants. Additionally, it is easier to communicate with one person at a time so that they can observe lip movements and facial expressions, while good lighting and the absence of noise are crucial. It is also recommended that traditional phone communication be replaced with more accessible alternatives such as videotelephony, text messaging, chat applications, email, and relay services, in order to ensure equal and effective communication for D/HH individuals (ESAMEA, 2019).

The NSRPD 2024-2030 places significant emphasis on vocational rehabilitation as a crucial component of promoting the independence and economic integration of persons with disabilities. This focus is particularly evident in Pillar V, which addresses "Access to Employment" and includes specific actions aimed at enhancing vocational rehabilitation

services (Section 3.5). Within Section 3.5, Goal V.3, the strategy outlines specific actions to enhance the availability and effectiveness of vocational rehabilitation services. These services are designed to support individuals with disabilities in developing the skills and abilities needed to secure and maintain employment. The strategy emphasizes the need for a holistic approach to vocational rehabilitation, which includes not only skill development but also support for psychological and social integration into the workplace. In addition, Section 3.5, Goal V.1 highlights the need to improve the institutional framework for vocational rehabilitation. This includes enhancing coordination between different agencies and service providers to create a more seamless and effective rehabilitation process. The strategy calls for the establishment of partnerships between public institutions, private sector employers, and non-governmental organizations to ensure that vocational rehabilitation services are comprehensive and responsive to the needs of persons with disabilities.

5.5 Digital Inclusion

The UNCRPD's approach to digital inclusion, Information and Communication Technologies (ICTs) and assistive technologies for persons with disabilities is comprehensive and forward-thinking. By addressing these technologies in multiple articles, the Convention recognizes their cross-cutting importance in realizing the rights of persons with disabilities. Article 2 of the UNCRPD provides essential definitions that form the foundation for understanding the Convention's approach to ICTs and assistive technologies. It defines "communication" to include "*languages, display of text, Braille, tactile communication, large print, accessible multimedia as well as written, audio, plain-language, human-reader and augmentative and alternative modes, means and formats of communication, including accessible information and communication technology*". This broad definition underscores the Convention's recognition of diverse communication needs and the role of technology in meeting these needs.

Article 4(1)(g) commits States to "*undertake or promote research and development of, and to promote the availability and use of new technologies, including information and communications technologies, mobility aids, devices and assistive technologies, suitable for persons with disabilities, giving priority to technologies at an affordable cost*". Article 4(1)(h) obliges States to "*provide accessible information to persons with disabilities about mobility aids, devices and assistive technologies, including new technologies, as well as other forms of assistance, support services and facilities*". These provisions emphasize the importance of research, development, and dissemination of ICTs and assistive technologies, as well as ensuring their affordability and accessibility. Additionally, article 9(1) specifically mentions "*information and communications technologies and systems*" as areas where accessibility must be ensured. Article 9(2)(g) calls for "*promoting access for persons with disabilities to new information and communications technologies and systems, including the Internet*". Article 9(2)(h) advocates for "*promoting the design, development, production and distribution of*

accessible information and communications technologies and systems at an early stage, so that these technologies and systems become accessible at minimum cost".

Article 21 emphasizes the right to freedom of expression and access to information, particularly concerning the needs of persons with disabilities. It outlines several important provisions related to ICTs. The article mandates that States must ensure that information intended for the general public is made available to persons with disabilities in accessible formats and technologies suited to various types of disabilities. This should be done promptly and without imposing additional costs on the individuals. Furthermore, the article calls on States to recognize and support the use of sign languages, Braille, augmentative and alternative communication (AAC) methods, as well as other accessible forms of communication chosen by persons with disabilities, particularly in official interactions. It also encourages private entities and mass media, including Internet service providers, to make their services accessible to persons with disabilities, ensuring inclusive access to information across all platforms. Additionally, article 26 addresses habilitation and rehabilitation, with Article 26(3) specifically promoting "*the availability, knowledge and use of assistive devices and technologies, designed for persons with disabilities, as they relate to habilitation and rehabilitation*". This provision underscores the importance of assistive technologies in enabling persons with disabilities to gain and sustain maximum independence and full inclusion in all aspects of life.

In Greece, efforts to enhance digital inclusion for D/HH students have primarily focused on developing accessible digital educational materials and platforms. These resources, which include multimedia digital libraries, online dictionaries, and bilingual multimedia e-books, play a crucial role in enriching the educational experience and fostering both linguistic and cultural engagement (Kourbetis *et al.*, 2020). A notable example of these initiatives is the project undertaken by the Institute of Educational Policy in 2004. This project aimed to create teaching materials for GSL as a first language and to develop a video repository with an interface that allows access to written Greek texts from school textbooks, translated into GSL. This initiative was part of the broader project titled "Design and Development of Accessible Educational Material and Software for Students with Disabilities". Initially, the program covered the curriculum for kindergarten and the first two grades of primary school, and it was later expanded to include additional grades (Boukouras *et al.*, 2014). Many other programs and applications that utilize ICTs are continually being developed, such as e-learning systems for asynchronous and autonomous learning within a user-friendly interface (Drigas *et al.*, 2005; Marinagi *et al.*, 2017). Additionally, remote learning platforms, like "Daedalus", have been developed to provide flexible, tailored educational resources for D/HH students (Drigas *et al.*, 2004; Drigas *et al.*, 2013).

It is also worth noting that the "Support Actions for Students with Disabilities" program, conducted by the Pedagogical Institute, focused on integrating accessible educational technologies in both special and general education. As part of this initiative, training programs were provided for special education teachers to enhance their ability

to use new technologies effectively (Pedagogical Institute, 2008). Educators were trained on specific software designed for D/HH students, such as "Learning with Signs" by the Institute for Language and Speech Processing (Athena Research Center) for general education, "Journey Around the World with Sign" for history, and "Mathematics with Sign" by POSTSCRIPTUM for mathematics. Additionally, other software covered subjects like language, science, and geography. These tools were developed to close educational gaps and ensure inclusivity for D/HH students across Greece's educational landscape (Efopoulos *et al.*, 2014).

During the COVID-19 pandemic, the Greek Ministry of Education integrated educational television as a key tool for distance learning. Recognizing the importance of accessibility, the Ministry invited certified GSL interpreters to participate in the recorded lessons, ensuring that D/HH students could fully benefit from the initiative (Ministerial Decision 43569/G.D.4, 2020). The recorded lessons, broadcast daily on the public broadcaster ERT2, included GSL interpretation and subtitles, providing equitable access to the educational content. This initiative was part of a broader strategy to maintain students' engagement with the educational process during school closures and reflects the Ministry's commitment to inclusive education (Ministerial Circular 43037/G.D.4, 2020).

The digital inclusion of D/HH students in vocational training in Greece, specifically regarding the use of ICTs and assistive technologies, remains an area with significant challenges despite some advancements. According to the findings presented by Saini *et al.* (2024), D/HH students in Greek vocational training institutions generally report negative experiences related to the technological infrastructure and educational policies that are supposed to support their learning needs. Although assistive technologies such as smart devices, captioning applications, and remote learning platforms are recognized as beneficial by the students, Saini *et al.* (2024) highlight several critical issues that limit their effectiveness. These issues include technical problems, a lack of Greek language support in many applications, and insufficient understanding of D/HH needs by educators. This lack of understanding often results in the underutilization or improper implementation of available technologies, leading to feelings of isolation and frustration among D/HH students.

The NSRPD 2024-2030 underscores the importance of digital inclusion as a critical element for ensuring equal access to information, communication, and services for persons with disabilities. This focus is reflected throughout the strategy, particularly within Pillar I, which addresses "Universal Accessibility", and Pillar IV, which emphasizes "Inclusion in Education" (Sections 3.1 and 3.4). Section 3.1, Goal I.3 of the strategy specifically addresses the expansion of digital accessibility. It highlights the importance of ensuring that digital services, including government websites, online education platforms, and digital communication tools, are fully accessible to persons with disabilities. The strategy sets out actions to incorporate accessibility features into all digital content and services, including alternative text for images, captions for videos,

and screen reader compatibility for websites. In Section 3.4, Goal IV.2, the strategy emphasizes the role of digital inclusion in education. It advocates for the integration of accessible digital tools in both primary and secondary education, ensuring that students with disabilities can fully participate in online learning environments. This includes providing accessible e-learning platforms, digital textbooks, and assistive technologies that address the diverse needs of students with disabilities, particularly those who are D/HH. The strategy also highlights the need for ongoing training and support for educators to effectively use these digital tools in the classroom. Section 3.4, Goal IV.4 stresses the importance of digital inclusion in vocational education and lifelong learning, ensuring that persons with disabilities have access to the skills and knowledge needed to succeed in a digital economy.

6. Discussion

The implementation of the UNCRPD in Greece, particularly concerning the education and vocational rehabilitation of D/HH students, reveals a complex landscape of progress and persistent challenges. While Greece has made significant strides in aligning its legal framework with the UNCRPD, there remains a substantial gap between legislative intent and practical implementation.

The recognition of GSL and the establishment of provisions for bilingual education represent positive steps. However, the practical implementation of these policies faces numerous obstacles, echoing challenges observed in other countries (Swanwick, 2016). The inconsistent application of bilingual education programs in Greece aligns with findings from international studies that highlight the difficulties in implementing such programs effectively (Krausneker *et al.*, 2022). This gap between policy and practice is not unique to Greece; similar challenges have been reported in various European countries (Hynds *et al.*, 2018).

While Greece has made efforts to provide specialized vocational training and career support for D/HH students, these initiatives often fall short of meeting their unique needs. This is consistent with international research highlighting the importance of tailored career guidance for D/HH students (Punch, 2016). The lack of comprehensive career guidance services incorporating sign language and other accessible communication methods mirrors challenges identified in other countries (Luft, 2014).

The use of ICTs and assistive technologies in Greece presents both opportunities and challenges, reflecting global trends in digital inclusion for D/HH students (Debevc *et al.*, 2010; Skyer, 2022). While these technologies have the potential to greatly enhance accessibility and inclusion, their implementation in Greek educational and workplace settings is often inconsistent or inadequate. This aligns with international findings on the challenges of integrating assistive technologies in educational settings for D/HH students (Lenihan, 2010; Constantinou *et al.*, 2020).

The professional rehabilitation of D/HH individuals in Greece has seen progress, with a wider range of career options becoming available. However, issues of workplace accessibility, communication barriers, employers' negative prejudices against deaf individuals, and limited advancement opportunities persist. These challenges are consistent with international literature on the employment experiences of D/HH individuals (Punch, 2016). The emphasis on subsidy-based policies in Greece, while well-intentioned, may underestimate the true potential of D/HH individuals, a concern echoed in international disability employment research (Lindsay *et al.*, 2018).

The NSRPD 2024-2030 represents a significant step forward in addressing many of these challenges. However, its success will depend on effective implementation, adequate resource allocation, and ongoing evaluation. International experiences suggest that comprehensive national strategies can lead to significant improvements in the lives of persons with disabilities, but only when accompanied by robust implementation mechanisms and sustained commitment (Vornholt *et al.*, 2018).

In addressing these challenges, Greece can benefit from international best practices, such as the successful implementation of bilingual education programs in Sweden and the United States (Svartholm, 2010; Humphries *et al.*, 2019). In Sweden, D/HH students are educated with Swedish Sign Language as their first language and Swedish as the second, promoting early sign language exposure and cognitive development, supported by a bilingual curriculum and community engagement (Dammeyer & Ohna, 2021). Similarly, Ireland's implementation of the Irish Sign Language Act of 2017, as part of its commitment to the UNCRPD, ensures the legal recognition of Irish Sign Language (ISL) and mandates its inclusion in educational and public domains. The Act specifically guarantees the provision of ISL-based educational supports, access to qualified ISL interpreters, and the promotion of ISL as a language of instruction, thereby fostering greater inclusivity and linguistic equity for D/HH students (Conama, 2024).

Expanding on these approaches, in Scotland, the British Sign Language (BSL) Act 2015 mandates measures such as the National BSL Plan, which promotes bilingual education by supporting families of D/HH students in learning BSL, providing resources for early language acquisition, and ensuring access to qualified BSL interpreters and support staff in schools (O'Neill & Wilks, 2021). In the United States, programs using American Sign Language as the primary language, with gradual introduction of English, emphasize a strong linguistic foundation alongside inclusivity and the use of assistive technologies to accommodate diverse communication needs (Scott & Henner, 2021).

Innovative approaches to career guidance and vocational training for D/HH students in countries like Spain, Denmark, Ireland and Germany could offer valuable insights for Greece. In Spain, for instance, career guidance within vocational education emphasizes experiential learning, collaboration with businesses, and developing transversal competencies (Romero-Rodríguez *et al.*, 2022). Additionally, effective strategies in Denmark and Germany, such as job shadowing and part-time work, further

highlight the importance of practical career experiences, while Ireland's focus on mentorship offers lessons in supporting smooth transitions to work (OECD, 2020).

To bridge the gap between policy and practice for D/HH students, a multifaceted approach should be ensured, involving collaboration between government, educators, employers, and the active participation of D/HH individuals and their representative organizations in policymaking and program design to reflect their needs and priorities. These efforts will help Greece fulfill its obligations under the UNCRPD and promote equal opportunities for D/HH students (ESAMEA, 2023).

7. Limitations

Several limitations may affect the generalizability of this study's findings and the interpretation of its results. Firstly, the lack of availability and use of sufficient quantitative data regarding the educational and vocational rehabilitation of D/HH individuals hinders a comprehensive assessment of the situation at a national level. Moreover, data on the implementation of disability policies remain scarce, and studies often rely on small sample sizes or fail to capture critical insights from remote areas. As a result, this may lead to the underrepresentation of the actual challenges faced by D/HH students. In addition, this review is constrained by the qualitative nature of much of the available data, as many sources are based on subjective testimonies and experiences without support from fully structured quantitative evidence. Furthermore, the absence of comparative studies at the international level limits a thorough evaluation of Greece's standing in relation to other countries. Another important limitation lies in the heterogeneity of the D/HH population itself. D/HH individuals differ significantly in terms of hearing levels, communication modes (e.g., use of sign language or spoken language), age of language acquisition and educational experiences. These differences may influence how they experience and interact with educational systems and support services, thus limiting the extent to which generalizations can be made.

8. Recommendations

The findings of this study underline the critical need for both theoretical and practical advancements in the education and vocational integration of D/HH students in Greece. These recommendations aim to bridge existing gaps between legislative frameworks and their practical application, ensuring alignment with the UNCRPD.

8.1 Policy and Legislative Frameworks
- While Greece has enacted robust policies such as the NSRPD 2024–2030, there is a pressing need for monitoring mechanisms to ensure the effective application of these policies. Regular evaluations and updates are essential to address evolving challenges.

- Adequate financial and institutional resources must be allocated to support bilingual education, vocational training, and digital inclusion for D/HH students. This includes funding for specialized teacher training, assistive technologies, and accessible infrastructure.

8.2 Educational Enhancements

- Develop a standardized framework for bilingual education that integrates GSL and written Greek across all educational levels. This includes the creation of comprehensive curricula, teaching materials, and educator training programs.
- Establish training programs for educators to ensure proficiency in GSL and the use of inclusive teaching methods. This is vital for improving the educational outcomes of D/HH students.
- Promote the development and adoption of digital tools that are tailored to the needs of D/HH students. This includes captioned multimedia resources, accessible learning platforms, and sign language-integrated educational software.

8.3 Vocational Training and Career Guidance

- Expand career counseling programs that cater specifically to the unique needs of D/HH students. This includes training counselors to provide tailored guidance and addressing employer biases through awareness campaigns.
- Design vocational training programs that align with labor market demands and are accessible to D/HH students. Incorporate internships, apprenticeships, and partnerships with businesses to facilitate practical experience.
- Implement comprehensive vocational rehabilitation services that address both individual capabilities and workplace accommodations. This holistic approach should include peer support systems and multidisciplinary interventions.

8.4 Digital and Technological Inclusion

- Prioritize the integration of digital tools and assistive technologies, such as live captioning, speech-to-text applications, and visual alarm systems. These tools can significantly enhance communication and learning experiences for D/HH students.
- Encourage research and development of affordable assistive technologies to meet the specific needs of D/HH students in both educational and professional contexts.

8.5 Cultural and Social Awareness

- Initiatives to combat stereotypes and promote understanding of D/HH individuals' potential should be prioritized. Public campaigns and educational programs can foster a more inclusive societal attitude.
- Foster collaboration between policymakers, educators, employers, and D/HH organizations to ensure that policies and programs are reflective of the needs and priorities of the Deaf community.

8.6 Recommendations for Further Research

- Conduct long-term studies to evaluate the impact of bilingual education and vocational training programs on the quality of life and employment outcomes of D/HH individuals.
- Examine international best practices in D/HH education and vocational integration to adapt successful models to the Greek context.

These findings offer valuable insights that can be leveraged by policymakers, educators, vocational training providers, and advocacy groups to enhance the inclusion and support of D/HH students in Greece. Policymakers can use these findings to design and implement more robust frameworks that address the identified gaps in bilingual education, digital inclusion, and vocational training, while aligning with international best practices. Educators and vocational trainers can adapt their methodologies and resources to better meet the unique needs of D/HH individuals, fostering environments that promote linguistic, academic, and professional growth. Advocacy groups can utilize this research to inform and shape agendas that prioritize the rights and opportunities of D/HH individuals, advocating for systemic changes that bridge policy and practice. These findings also provide a foundation for the development of new strategic agendas, where cross-sector collaboration and evidence-based initiatives can drive forward comprehensive reforms that ensure the full participation and empowerment of D/HH individuals in all aspects of society.

9. Conclusion

This policy analysis examines Greece's implementation of the UNCRPD in the education and vocational rehabilitation of D/HH individuals, highlighting both progress and persistent challenges. Notable advancements include the recognition of GSL and provisions for bilingual education, yet significant gaps remain between legislative intent and practical application. While steps have been taken toward inclusivity, consistent delivery of high-quality bilingual education remains elusive, and vocational training often falls short in accessibility and alignment with labor market needs. The integration of assistive technologies and ICTs shows promise but is hindered by inconsistent implementation. Career guidance services have improved but continue to face barriers such as societal stereotypes, limited employer awareness, and insufficient resources.

The NSRPD 2024-2030 offers a comprehensive framework to address these issues, but its success depends on effective execution, adequate funding, and continuous evaluation. A coordinated, multifaceted approach is essential, involving enhanced policy enforcement, increased resource allocation, and collaborative efforts among stakeholders, including government, educators, employers, and D/HH communities. While progress has been made, realizing the full rights of D/HH individuals under the UNCRPD requires sustained commitment and innovative solutions to ensure their inclusion in education, employment, and society.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

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