



Developing an Integrated Framework for Managing Vocational Skill Programs for Deaf Students: A Case Study in an Inclusive Junior High School in Indonesia

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Abstract: This study investigates the management of vocational skill programs for deaf students within inclusive secondary education settings in Indonesia, specifically addressing the gap between national policy mandates and practical implementation at the school level. The research aims to develop an Integrated Inclusive Vocational Management (IIVM) framework, which is operationalized through a Four-Pillar model Universal Design for Learning (UDL), Assistive Technology (AT), Work-Based Learning (WBL), and Professional Development (PD), to enhance employability and social inclusion. Utilizing a qualitative case study approach, data were collected from SMPN 2 Tanggulangin, Sidoarjo, through in-depth semi-structured interviews, participant observations, and comprehensive document analysis. Findings reveal that while a robust legal framework exists in Indonesia, implementation is hindered by structural barriers, including a critical shortage of Special Advisor Teachers (GPK), physical infrastructure challenges exacerbated by environmental instability (chronic flooding), and a lack of standardized sign language instruction (SIBI vs. BISINDO). However, the school's "Program Belajar Unggul" and emphasis on digital literacy offer a viable pathway for vocational development if properly managed. The study proposes the IIVM management model, integrating UDL, inter-agency collaboration, and psychosocial support systems. It is recommended that vocational programs prioritize digital adaptability and soft skills to meet Industry 4.0 demands, transforming the educational environment from a medical model of deficit to a social model of accommodation.

Keywords: vocational skills, deaf students, inclusive school, program management.

I. Introduction

At the global level, the relationship between disability, vocational education, and workforce participation remains a persistent structural challenge within the sustainable development agenda. Sustainable Development Goal (SDG) 8 emphasizes *decent work for all*, positioning access to relevant skills training as a prerequisite for social and economic inclusion (United Nations DESA, 2023). Nevertheless, global evidence indicates that persons with disabilities continue to experience disproportionately low labor-force participation and higher unemployment rates, largely due to unequal access to quality education and vocational training aligned with labor-market demands (International Labour Organization, 2023). Normatively, the *Convention on the Rights of Persons with Disabilities* (CRPD) affirms the right to inclusive education and skills development oriented toward economic independence; however, recent global reports demonstrate a persistent gap between these commitments and the actual implementation of vocational education systems capable of supporting effective school-to-work transitions for learners with disabilities (United Nations Committee on the Rights of Persons with Disabilities, 2022; Global Disability Inclusion Report, 2025).

In Indonesia, commitments to inclusive education and employment have been reinforced through Law No. 8 of 2016 on Persons with Disabilities, which guarantees equal rights to education, skills training, and employment opportunities. Despite this robust legal framework, empirical evidence reveals substantial implementation challenges. UNICEF reports that approximately 36% of children with disabilities in Indonesia do not attend school, and those who do are significantly less likely to access and complete education compared to their non-disabled peers (UNICEF, 2023). Recent national studies further indicate that inclusive education remains constrained by weak program governance, limited teacher preparedness, and insufficient sustainable support services, particularly at education levels oriented toward vocational skills development (Monika et al., 2024; Sutarni et al., 2022). These conditions illustrate a clear discrepancy between inclusive policy mandates and the operational realities of vocational education for students with disabilities.

The need for inclusive sexual and reproductive health education is becoming increasingly urgent, given global data indicating that children with disabilities, especially those with intellectual disabilities, are at higher risk of becoming victims of sexual violence (Jones et al., 2012; UNFPA, 2019). In Indonesia, a study by Rutgers WPF and the Ministry of Education and Culture (2017) noted that adolescents with intellectual disabilities have a very low understanding of basic reproductive concepts, healthy relationships, and self-protection. The lack of appropriate information makes them vulnerable to exploitation, sexual misconduct, and the inability to access proper health services.

Recent literature underscores the strategic role of vocational education in strengthening work readiness and facilitating school to work transitions for deaf students. International studies show that deaf and hard of hearing individuals continue to experience employment inequalities, including lower wages and limited job stability, highlighting the need for early and relevant vocational interventions (Elsendoorn et al., 2024). Research on career development further indicates that although deaf youth often possess high career aspirations, these aspirations are frequently constrained by structural barriers, such as limited access to career information, communication support, and clearly defined transition pathways (Chilton et al., 2025). At the instructional level, studies demonstrate that visual-based learning strategies, sign-language-supported media, and work-based learning approaches can enhance engagement and comprehension in vocational contexts for deaf learners (Mufidah et al., 2022; Suyitno et al., 2025). However, the literature consistently notes that instructional innovations alone are insufficient without coherent institutional support and effective program management. Recent studies also emphasize that effective vocational preparation for deaf learners requires alignment between instructional design, communication accessibility, and transition planning, as fragmented supports often limit long-term employment outcomes (Marschark et al., 2020).

Despite the expanding body of research on vocational education for deaf students, empirical studies adopting a holistic program management perspective remain limited. Most existing research concentrates on isolated pedagogical strategies, such as instructional media or classroom-level interventions, without examining how vocational programs are systematically planned, resourced, coordinated, and evaluated within inclusive school settings (Mufidah et al., 2022; Suyitno et al., 2025). International evidence suggests that successful employment transitions for persons with disabilities are shaped not only by pedagogical quality but also by institutional governance, inter-agency collaboration, and consistent transition policies (Elsendoorn et al., 2024; Chilton et al., 2025). The scarcity of studies addressing integrated vocational program management models particularly in the Indonesian inclusive school context reveals a critical research gap that warrants focused investigation.

Responding to this gap, the present study aims to analyze how vocational skills programs for deaf students are managed within an inclusive junior high school in Indonesia, identify systemic barriers affecting program effectiveness, and develop an integrated vocational management framework applicable at the school level. This objective aligns with international policy recommendations emphasizing the strengthening of institutional capacity and the mainstreaming of disability inclusion in education and training systems to improve employment outcomes (International Labour Organization, 2024). Theoretically, this study contributes to inclusive education scholarship by extending the focus from instructional practices to vocational program governance. Practically, it proposes an Integrated Inclusive Vocational Management framework operationalized through four pillars Universal Design for Learning (UDL), Assistive Technology (AT), Work-Based Learning (WBL), and Professional Development (PD) to support school leaders and policymakers in bridging the gap between inclusive policy mandates and meaningful *decent work* outcomes for deaf graduates (United Nations DESA, 2023). This emphasis on integrated management is consistent with recent evidence suggesting that vocational programs for learners with disabilities are most effective when embedded within whole-school systems rather than implemented as isolated initiatives (Wagner et al., 2023).

A critical gap remains in understanding how inclusive schools manage vocational education resources under systemic constraints. To address this gap, the present study examines the management of vocational skills programs for deaf students at SMPN 2 Tanggulangin within an inclusive educational setting. The investigation is guided by two interrelated research questions that focus on how vocational programs for deaf students are planned, implemented, and evaluated in inclusive schools, as well as on the systemic barriers that influence the effectiveness and sustainability of such programs. Moving beyond problem identification, this study also advances an evidence-based four-pillar framework encompassing Universal Design for Learning, Assistive Technology, Work-Based Learning, and Professional Development to support school administrators in transforming rigid institutional structures into more flexible, inclusive, and outcome-oriented vocational education models.

II. Method

A. Research Design

This study employed a descriptive qualitative case study design to gain a holistic understanding of the vocational program's management and the lived experiences of the participants (Satori, 2010).

B. Participants

Participants were selected using a purposive sampling technique. The inclusion criteria for educators were: (1) active involvement in vocational instruction for at least two academic years, and (2) direct experience teaching students with hearing impairments. For students, criteria included: (1) being diagnosed with hearing impairment, and (2) active enrollment in the vocational program. Based on these criteria, seven participants were recruited. The detailed demographic profile is presented in Table 1.

Table 1. Demographic Profile of Research Participants

Code	Role	Gender	Experience / Grade	Specific Responsibilities / Program Focus
P-1	School Principal	Male	5 Years (Principal)	Policy making, budgeting, and resource allocation.
T-1	Vocational Teacher	Female	12 Years	Culinary Arts: Teaching cooking skills and kitchen safety adaptations.
T-2	Vocational Teacher	Male	8 Years	Automotive: Teaching basic mechanics and workshop safety.
S-1	Student	Male	Grade 8	Automotive: Focus on engine service. Profound hearing loss.
S-2	Student	Female	Grade 8	Culinary: Focus on pastry making. Moderate hearing loss.
S-3	Student	Male	Grade 7	Automotive: Beginner level. Profound hearing loss.
S-4	Student	Female	Grade 9	Culinary: Advanced level. Uses hearing aids.

C. Data Collection and Analysis

Data collection was conducted through systematic observation in vocational workshops and classrooms, specifically Cooking, Sewing, and Gardening/Retail practice areas. Non-participant observations were carried out in the cooking and sewing workshops (totaling approximately 24 hours). The observation focus included teacher-student communication patterns and the safety accessibility of the physical environment in relation to the specific practical skills. The researcher analyzed the Lesson Plans (RPP), student assessment portfolios, and the inventory list of vocational equipment to triangulate the interview findings.

1. Semi-Structured Interviews

In-depth interviews were conducted to explore the management processes and challenges. The interview protocol was developed based on the research questions (see Table 2).

2. Participant Observation

Non-participant observations were carried out in the culinary and automotive workshops (totaling approximately 24 hours). The observation focus included teacher-student communication patterns and the safety accessibility of the physical environment.

3. Documentation

The researcher analyzed the Lesson Plans (RPP), student assessment portfolios, and the inventory list of vocational equipment to triangulate the interview findings.

Table 2. Sample Interview Items

Participant Group	Key Themes Investigated	Sample Questions
Principal	Policy & Resources	<ol style="list-style-type: none"> "How does the school allocate the budget for vocational equipment specifically for students with disabilities?" "What are the main challenges in recruiting teachers with dual competency?"
Teachers	Pedagogy & Barriers	<ol style="list-style-type: none"> "How do you modify the standard curriculum (RPP) when students with hearing impairments cannot keep up with the pacing?" "Can you describe a specific situation where a lack of assistive tools hindered a student's learning?"
Students	Accessibility & Experience	<ol style="list-style-type: none"> "Do you feel you understand the safety instructions in the workshop clearly? If not, why?" "What kind of help do you wish you had more of during the practical lessons?"

D. Data Analysis and Trustworthiness

Data analysis followed the interactive model by Miles, Huberman, and Saldana (2014): data condensation, display, and conclusion drawing. To ensure trustworthiness, the researcher applied source triangulation (comparing teacher interviews with student statements and observation notes) and member checking, where findings were presented back to key informants for validation.

III. Results and Discussion

A. Adaptations and Communication Barriers

The findings indicate that teachers (T-1 and T-2) attempted to apply a total communication approach in vocational culinary classes, particularly through the use of visual supports such as pictures and videos. Student testimony, however, reveals inconsistencies in instructional delivery. Although visual media facilitated initial understanding, rapid verbal explanations delivered while teachers focused on the whiteboard limited access to information for deaf students, especially in the absence of a shadow teacher. As expressed by Student S-2, missing translation into sign language led to reliance on peer observation and guesswork, resulting in incomplete comprehension of procedural details. These findings suggest that inclusive instructional design was present at the planning level, yet its enactment in classroom interaction remained uneven.

From an interpretative perspective, the fluctuation between multimodal support and teacher-centered verbal instruction reflects a partial implementation of total communication rather than its systematic application. Total communication requires the intentional and simultaneous integration of spoken language, sign language, visual cues, and teacher positioning to ensure continuous access to meaning. When teachers spoke rapidly without visual engagement or sign mediation, the communicative load shifted disproportionately onto students, undermining instructional clarity. In vocational settings where procedural accuracy is essential, such breakdowns are particularly consequential, as missed steps directly affect skill acquisition and learning confidence.

These findings align with recent studies emphasizing that the effectiveness of total communication depends less on the mere presence of multiple modes and more on their coordinated and intentional use. Research by Swanwick et al. (2022) highlights that inconsistent multimodal delivery can marginalize deaf learners even within inclusive classroom environments. Similarly, Antia et al (2020) report that visual instructional supports become ineffective when teachers' communicative behaviors, including pacing, gaze direction, and classroom positioning, are not aligned with the visual attention demands of deaf students. More recent evidence from vocational education contexts further indicates that teacher gaze, pacing, and visual alignment significantly influence task comprehension among deaf students engaged in procedural learning (Yusuf & Widodo, 2023). The implications of this study point to the need for sustained professional development focusing on communicative consistency, visual pedagogy, and collaborative roles between subject teachers and shadow teachers. Strengthening these competencies would not only enhance procedural understanding but also reinforce the authenticity of inclusive practices in vocational education.

B. Infrastructure and Safety Equipment Limitations

The findings demonstrate that vocational learning facilities at SMPN 2 Tanggulangin remain predominantly designed for hearing students, resulting in significant safety vulnerabilities for deaf learners, particularly in high-risk workshops such as cooking, sewing, and automotive practice. Observational data and teacher testimony revealed that auditory cues embedded in standard equipment function as primary safety signals, leaving deaf students dependent on visual observation or teacher intervention to recognize hazards. This condition indicates not merely an absence of assistive devices, but a systemic misalignment between instructional environments and the sensory needs of deaf students. From an inclusive education perspective, such infrastructure limitations reflect a structural barrier that compromises both physical safety and equitable access to vocational competencies, thereby undermining the core principle of reasonable accommodation within inclusive schooling.

These findings align with recent international literature emphasizing that vocational education environments pose heightened risks for students with hearing loss when safety systems rely predominantly on sound-based alerts. Studies have shown that deaf students are disproportionately exposed to accidents in workshop-based learning due to the lack of visual warning systems, adaptive safety signage, and multimodal alerts (Al-Attiyah & Khalifa, 2021; Hendarwati et al., 2022). Moreover, research by Pagliaro and Kritzer (2020) highlights that safety inequities in vocational settings often stem from institutional assumptions that standardized equipment is universally accessible. Budgetary prioritization, as confirmed by the principal, mirrors findings from inclusive education policy analyses indicating that assistive technology is frequently perceived as supplementary rather than essential, particularly in resource-constrained public schools (UNESCO, 2023; Nind & Strnadová, 2020).

The implications of these findings suggest that infrastructure adaptation should be recognized as a non-negotiable component of inclusive vocational education rather than an optional enhancement. Without visual safety indicators such as flashing lights, color-coded signals, or vibration-based alerts, deaf students remain exposed to preventable risks that may hinder skill acquisition, confidence, and long-term employability. Policy-wise, this underscores the need for inclusive budgeting frameworks that integrate assistive safety technologies into baseline operational planning. Practically, schools may begin with low-cost visual adaptations and collaborative safety protocols while advocating for systemic funding reform. Ensuring safe vocational environments for deaf students is not solely a matter of compliance, but a prerequisite for meaningful participation and equitable learning outcomes in inclusive secondary education.

C. The Tension: Standardized Curriculum vs Individual Needs

The findings reveal a pronounced pedagogical tension experienced by teachers when implementing the national standardized curriculum for deaf students in vocational settings. Teachers reported being constrained by rigid competency targets and fixed pacing schedules that were misaligned with students' actual learning trajectories. As articulated by Teacher T-1, the requirement to complete multiple competency standards within a predetermined timeframe conflicted sharply with the need for extensive repetition and individualized instruction. This tension resulted in an ongoing dilemma in which teachers perceived themselves as having to choose between administrative compliance and meaningful student learning, a choice that consistently placed students with hearing impairments at a disadvantage.

This situation reflects a structural mismatch between curriculum design and learner diversity, rather than a deficit in teacher capacity or commitment. The teachers' narratives suggest that the standardized curriculum operates as a controlling mechanism that prioritizes measurable outputs over pedagogical responsiveness. Within such conditions, instructional decisions become reactive rather than pedagogically grounded, reducing opportunities for differentiated instruction and deep conceptual understanding. The absence of curricular flexibility forces teachers into compensatory practices, such as superficial coverage of content or informal curriculum modification, which are often undocumented and unsupported institutionally.

These findings align with recent studies indicating that standardized curricula frequently marginalize students with disabilities when flexibility mechanisms are insufficient. Recent studies in inclusive and vocational education indicate that rigid curriculum structures substantially constrain teachers' ability to adapt instruction to diverse cognitive and sensory profiles, particularly in standards-based systems that prioritize uniform pacing and fixed competency benchmarks (Graham et al., 2023; Sharma et al., 2022). Evidence from inclusive secondary and vocational settings shows that such curricular rigidity limits the use of differentiated strategies, multimodal representations, and extended repetition, which are critical for deaf learners' access to content and conceptual understanding (Qi & Mitchell, 2024). At the same time, teachers frequently report experiencing professional and ethical tension when accountability-driven curriculum mandates conflict with inclusive pedagogical values, resulting in instructional trade-offs that favor curriculum coverage over meaningful learning (DeMatthews et al., 2022; Messiou & Ainscow, 2024). More recent scholarship further demonstrates that inflexible curriculum pacing disproportionately disadvantages students with sensory impairments, as standardized timelines fail to accommodate varied learning rhythms, language mediation needs, and extended processing time, thereby reinforcing structural inequities within ostensibly inclusive education systems (Ainscow et al., 2023).

D. Program Impact: Confidence vs Competence

The findings indicate that the vocational innovation program generated a meaningful psychosocial impact on deaf students, particularly in enhancing self-confidence and self-esteem. Students reported a growing sense of pride derived from tangible skill acquisition, such as sewing basic patterns and preparing culinary products. This sense of accomplishment was articulated through students' willingness to publicly demonstrate their work and redefine their self-perception beyond disability-related limitations. Such expressions suggest that the program succeeded in fostering affective outcomes, even when technical mastery was still developing.

From an interpretive perspective, the emergence of confidence appears to function as an initial developmental milestone rather than an indicator of full vocational competence. The students' pride was closely linked to visible progress and task completion, which provided immediate validation of their abilities. However, this confidence was not yet matched by sustained skill proficiency or job-readiness competencies. This divergence highlights a critical distinction between psychological empowerment and employability outcomes, where increased self-belief does not automatically translate into industry-level performance. Confidence, in this context, operates as a necessary but insufficient condition for vocational inclusion.

Recent literature supports this interpretation by emphasizing that vocational programs for learners with disabilities often yield stronger short-term gains in self-efficacy than in technical competence. Studies have shown that hands-on vocational activities can significantly improve self-esteem and learner motivation among deaf and hard-of-hearing students, yet limited instructional hours constrain skill consolidation and transferability to real work settings (Santoso et al., 2021; Lee & Park, 2022). Moreover, research on school-to-work transition underscores that insufficient training duration and weak industry linkage frequently result in graduates who are confident but underprepared for labor market demands (Fletcher et al., 2020; McDonnell & Crudden, 2023). The principal's concern regarding the limited allocation of vocational hours aligns with evidence suggesting that structured partnerships with external industries are essential to bridge the gap between school-based training and authentic workplace competence.

The implications of these findings point to the need for a recalibrated program design that balances psychosocial empowerment with rigorous competency development. While fostering confidence remains a valuable outcome, vocational programs must extend training duration, integrate industry-standard practices, and involve external stakeholders to ensure skill relevance and sustainability. Strengthening school industry collaboration would allow students to apply emerging skills in authentic contexts, transforming confidence into demonstrable competence. Without such structural enhancements, vocational initiatives risk producing graduates who feel capable but remain excluded from meaningful employment opportunities.

E. Integrated Framework for Program Enhancement

Building on the earlier results that highlighted instructional inconsistencies, limited vocational training time, and a mismatch between student confidence and actual job readiness, this section synthesizes those findings into a unified framework for program enhancement. At SMPN 2 Tanggulangin, the recurring challenges of pedagogical tension, resource constraints, uneven program outcomes, and gaps in teacher capacity emerged across multiple data sources. These issues were reflected in classroom practices that struggled to accommodate diverse learning needs, limited access to appropriate learning supports, and vocational activities that fostered confidence but fell short of preparing students for real workplace demands.

Interpreting these findings suggests that the main weakness of the program lies not in the absence of effort, but in the lack of coordination among existing components. Previous results showed that teachers attempted adaptive strategies, yet these efforts were often fragmented and dependent on individual initiative. Resource limitations further restricted the consistent use of visual supports and assistive tools, while short instructional hours weakened the link between skill practice and mastery. At the same time, teachers reported limited preparation to design inclusive vocational instruction systematically. The proposed integrated framework responds directly to these issues by aligning Universal Design for Learning to support flexible instruction, tiered Assistive Technology to address diverse access needs, structured Work-Based Learning to bridge school activities and employment skills, and targeted Professional Development to strengthen teacher competence in inclusive settings.

This integrated interpretation aligns with recent literature emphasizing that inclusive vocational programs are most effective when instructional design, learning supports, experiential opportunities, and teacher development operate as a single system. Studies indicate that Universal Design for Learning reduces instructional barriers and improves lesson coherence when embedded consistently in planning and assessment (Capp, 2020; Rao & Meo, 2023). Research on Assistive Technology highlights the importance of tiered implementation to maximize impact in resource-limited schools (Okolo & Diedrich, 2022). Evidence from Work-Based Learning studies shows that structured industry engagement is critical in transforming student confidence into employable competence (Luecking et al., 2021; Carter et al., 2022). In addition, sustained and targeted professional development has been shown to improve teachers' ability to implement inclusive practices beyond trial-and-error approaches (Florian & Spratt, 2021).

The implications of these findings suggest that program improvement should prioritize integration rather than expansion. For SMPN 2 Tanggulangin, aligning instructional design, learning supports, vocational practice, and teacher development within a single framework can address the gaps identified in earlier results. Such alignment allows confidence gained through classroom activities to be reinforced by meaningful skill development and real-world application. This approach not only strengthens program effectiveness at the school level but also offers a practical and transferable model for other inclusive secondary schools facing similar pedagogical and resource challenges. The relationship between these challenges and their corresponding solutions is summarized in Table 3.

Table 3. An Integrated Framework for Vocational Program Enhancement

Challenge Identified in Case Study	Proposed Solution Framework	Core Principle	Specific Actionable Strategies (Examples)
Persistent tension between standardized curricula and individualized instruction.	Universal Design for Learning (UDL)	Fix the curriculum, not the student. Design for variability from the outset.	<ol style="list-style-type: none"> 1. Representation: Provide captions and ASL embedded videos for all instructions (Cooking steps, Sewing patterns, Retail role-play). 2. Expression: Allow students to show mastery via a practical project, a prerecorded presentation, or a written report.
Limited facilities, limited specialized tools, and lack of adaptive technologies.	Tiered Assistive Technology (AT) Integration	Move from a budget based barrier to a knowledge based solution.	<ol style="list-style-type: none"> 1. No Cost: Change seating to a U shape for sightlines. 2. Low Cost: Use colored tape to mark safe distances from sewing needles or hot stoves. 3. High Tech: Pursue funding for flashing alerts or visual timers/queues for cooking or retail activities.
Training insufficient for developing comprehensive job readiness.	Structured Work Based Learning (WBL)	Move from <i>school based</i> training to <i>world based</i> experience.	<ol style="list-style-type: none"> 1. Develop formal partnerships with local employers (Restaurants, Tailors, Market Vendors) 2. Integrate pre enrollment self advocacy training. 3. Co develop adaptive <i>assessment</i> rubrics for WBL sites.
Shortage of skilled educators; inconsistent sign language support.	Dual Competency Professional Development (PD)	Build educators who are bilingual and bicultural (Vocational + Deaf Ed).	<ol style="list-style-type: none"> 1. Define the required competencies: Linguistic, Cultural, and Technical (Cooking, Sewing, Retailing). 2. Provide scalable training: Online certificates, community classes, and peer mentoring.

IV. Conclusion and Suggestion

This study concludes that although SMPN 2 Tanggulangin has successfully established an inclusive social climate, the management of its vocational skills program for deaf students has not yet been implemented in an integrated and systematic manner. The findings show that program effectiveness is constrained by interconnected barriers, including rigid curriculum requirements, limited assistive technology, inadequate adaptive infrastructure, inconsistent sign language support, and a shortage of teachers with dual competencies in vocational instruction and deaf education. Consequently, while the program contributes positively to students' self-confidence and social inclusion, it has not yet ensured sufficient vocational competence and job readiness. This directly answers the research questions by demonstrating that fragmented vocational program management remains the primary constraint in inclusive vocational education.

Based on these conclusions, three actionable recommendations are proposed. First, schools should adopt a tiered assistive technology strategy by prioritizing low-cost and immediately implementable environmental adaptations, such as visual safety markings and visual cues in vocational workshops, rather than waiting for high-cost technological funding. Second, vocational instruction should systematically apply Universal Design for Learning principles by offering flexible instructional strategies and alternative assessment methods that evaluate students' vocational skills (e.g., cooking, sewing, gardening, retailing) rather than their linguistic limitations. Third, future research is recommended to examine the longitudinal impact of the proposed Four-Pillar Framework on post-school employment outcomes of deaf graduates across diverse inclusive school contexts.

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