



Disabled Student Technology Accessibility through Personnel Management: Impact of Organizational Structures and Processes

Yang Yang ¹, Sirirat Petsangsri ^{2*}, Thanin Ratana-Olarn ³, Ampapan Tuntinakhongul ⁴

¹ PhD, School of Industrial Education and Technology, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand

^{2*} Ed.D., Associate Professor, School of Industrial Education and Technology, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand

³ PhD, School of Industrial Education and Technology, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand

⁴ PhD, School of Industrial Education and Technology, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand

* Corresponding Author: sirirat.pe@kmitl.ac.th

Citation: Yang, Y., Petsangsri, S., Ratana-Olarn, T., & Tuntinakhongul, A. (2024). Disabled student technology accessibility through personnel management: Impact of organizational structures and processes. *Educational Administration: Theory and Practice*, 30(2), 170-181. doi: 10.52152/kuey.v30i3.1093

ARTICLE INFO

Received: 10 Feb 2023

Accepted: 27 Apr 2023

ABSTRACT

In today's world of education, it's crucial to incorporate educational technology as it offers a wide range of learning opportunities. The availability of educational technology for students is heavily impacted by how teachers manage their personnel and the organizational structures in their institutions. Understanding their impact is crucial for fostering inclusive learning environments in schools. The primary objective of this qualitative study was to delve into the detailed relationship between personnel management strategies of teachers and student accessibility to educational technology, specifically to ensure inclusive education. To gather comprehensive insights, a qualitative research design was used, with in-depth interviews with 9 educators, administrators, and IT personnel as the primary data collection method. Thematic analysis was then used to discern recurring themes and patterns in the collected data. This study demonstrated the critical role of professional development and training for educators in bolstering their proficiency in utilizing accessible technology in educational institutions. The study also revealed that student feedback and learner-centered approaches had a positive influence on technology design and fostered personalized learning experiences. This study will help to understand the social model of disability in educational contexts, highlighting the key role played by organizational structures in education and personnel management strategies of teachers in ensuring accessibility for students.

Keywords: Educational Technology, Students accessibility, Inclusive Education, Personnel Management, Organizational Structures in Educational Institutions.

INTRODUCTION

In modern education, students are inspired by a variety of systematic approaches. Teachers employ positive reinforcement by acknowledging and commending their students for their positive conduct and academic achievements (Li, Zhang, Wang, & Li, 2023). Creating a supportive learning environment where students feel valued, recognized, and included is crucial. By tailoring teaching strategies to cater to the unique needs of every student, differentiated instruction considers various learning styles and skills (Muhammad, Qi, Wu, & Ahmad, 2022). Engaging in extracurricular activities allows students to explore their passions and enhance their skills in ways that go beyond what they learn in their regular classes. Struggling students can find immense support and guidance

from dedicated counselors and mentorship programs (Kodweis et al., 2023).

Technological advancements greatly affect the lives of individuals with disabilities. To enhance accessibility and simplify daily tasks, it offers assistive technologies such as screen readers, speech recognition software, and mobility aids (Sehrawat & Gupta, 2022). Using communication aids helps individuals with speech impairments express themselves more effectively. In addition, technology provides customizable features for digital devices and software that can cater to various disabilities, ultimately empowering individuals and promoting inclusivity in society (Vakulenko, Shams, Hellström, & Hjort, 2019).

Technology is incredibly helpful for people with learning disabilities. Personalised learning environments and adaptable software cater to the unique needs of every learner, enhancing comprehension and optimising learning speed (Raffaghelli, Rodríguez, Guerrero-Roldán, & Bañeres, 2022). By using different formats, multisensory learning aids help individuals with learning disabilities by engaging multiple senses. There are tools available that can assist with reading, writing, and comprehension. These tools include features like speech-to-text and text-to-speech capabilities. Interactive apps and activities make learning more engaging and enjoyable for individuals with learning disabilities, improving the accessibility of education (Pikhart & Al-Obaydi, 2023; Wisetsri et al., 2022).

Technology plays a crucial role in making accessibility and inclusivity more attainable for individuals with disabilities. Adhering to accessibility standards makes digital content more user-friendly and interactive for people with disabilities (Robillos & Bustos, 2022). Advancements in the Internet of Things (IoT) and wearable technology make life easier by providing health monitoring, navigation support, and helpful reminders. Virtual learning platforms and environments are designed with the user in mind, ensuring they are easy to navigate and accessible to individuals with disabilities. They aim to provide equal educational opportunities for all (Grodotzki, Müller, & Tekkaya, 2023).

Academic institutions utilize various management strategies to create learning-friendly environments. Through careful planning of physical arrangements and procedures, educators create classroom environments that enhance learning opportunities (Harerimana & Mtshali, 2019). By incorporating positive reinforcement, clear regulations, and appropriate consequences, behavior management strategies help maintain order and foster a positive environment. By implementing differentiated instruction, students with diverse needs and learning preferences can fully engage and succeed (Hu & Wang, 2022). Creating a supportive learning environment in schools relies on how well students, parents, and colleagues collaborate and communicate with each other (Kowitlawakul et al., 2022).

The field of education technology primarily focuses on leveraging technology to improve and simplify the teaching and learning experience in educational settings, as noted by Yazdani, Pamucar, Erdmann and Toro-Dupouy (2023). Education technology encompasses a wide range of tools, including computers, tablets, smartphones, educational software, online platforms, and digital resources. These tools have been specifically designed to support teachers in facilitating student engagement and learning. Over the past few decades, the use of education technology in classrooms has witnessed a significant surge for various reasons, as outlined by Kowitlawakul et al. (2022). Notably, advancements in technology have led to increased accessibility and affordability of devices and digital resources, empowering educational institutions to enhance their modern teaching practices.

The provision of equal access to the integration of educational technology for diverse students remains a continuous challenge, despite the growing importance of this integration and calls for inclusive education (Cohen & Calderón-Aponte, 2021). Ensuring that students have continuous access to and use of digital tools, resources, and learning platforms is paramount in educational technology. This includes creating designs that cater to the diverse needs of all students, including those with disabilities and different learning needs (Belda-Medina, 2022).

This study has two primary targets. To begin with, it looks to move forward our understanding of how teachers' workforce administration methodologies impact students' direction innovations in comprehensive instruction. By analyzing the viewpoints of teachers, chairmen, and IT staff, we found how HR hones impact the utilization of instructive innovation to back students with differing needs. Understanding the significance of this concept is vital for instructive education, innovation engineers and approach producers because it gives vital experiences.

1. Valuable insights for the improvement of personnel management strategies of teachers that put emphasis on the accessibility for students.
2. Significant insights into the obstacles encountered and accomplishments in incorporating inclusive educational technology.
3. Valuable guidance to educational institutions regarding the establishment of inclusive learning environments.

4. Offers practical recommendations for enhancing inclusivity within educational settings through an investigation into the influence of personnel management strategies of teachers on the accessibility for students of educational technology.

Institutions can utilize these insights to make informed decisions and develop targeted interventions that empower educators to effectively integrate educational technology for diverse learners. The results will make it easier to create professional development programs that help teachers acquire the skills and knowledge needed to effectively meet the specific needs of each student.

RQ-1: How do educational institution organizational structures impact student accessibility to educational technology?

RQ-2: What are the key personnel management strategies for teachers to use to enhance student accessibility of educational technology?

RQ-3: What challenges do educational institutions face in implementing educational technology, and how do these challenges affect student technology accessibility?

RQ-4: How do stakeholders (Teachers, administrators, IT personnel) perceive the influence of organizational processes?

RQ-5: What are the perspectives of students regarding the usability and effectiveness of educational technology in supporting their learning experiences?

LITERATURE REVIEW

Importance of Student Accessibility to Educational Technology

Bridging the digital divide among learners greatly depends on the importance of accessibility for students to educational technology. The concept of the digital divide is related to the inequalities in technology and internet availability, which are frequently influenced by factors such as geographic location, socioeconomic status and demographic traits (Ioana-Alexandra, Camelia, & Laura, 2021). Students who came from underprivileged backgrounds did not have the same level of technology access as their more advantaged classmates, which led to unequal opportunities for learning. The integration of educational technology has the capacity to significantly transform the manner in which students with disabilities participate in learning (Shang, Sivaparthipan, & ThanjaiVadivel, 2022).

Personnel Management Strategies of Teachers in Educational Institutions

One of the critical viewpoints of faculty administration in instructive teaching is giving instructors openings for proficient improvement and preparation. As innovation gets to be progressively coordinated into the learning preparation, it is pivotal for teachers to remain side by side with the most recent improvements in instructive innovation and create viable integration hones to improve their instructing (Peng & Chuang, 2020). Proficient improvement programs incorporate an assortment of learning openings such as workshops, courses, webinars and online courses. These programs point to the progress of educators' computerized proficiency and abilities in utilizing instructive advances. These programs center on both specialized abilities and viable educating strategies for utilizing innovation to meet the wants of assorted students (Rostoka, Locovs, & Gaile-Sarkane, 2019). For illustration, preparing may incorporate instructing strategies to improve learning through innovation, utilize online assets for personalized learning, and upgrade the learning environment with open computerized substance (Humphries et al., 2019).

Organizational Structures in Education and Their Influence on Student Accessibility

The way an educational institution is organized encompasses a critical effect on how effectively different students can get to instructive innovation. The way comprehensive innovation activities are actualized can be impacted by the nearness or need of various leveled structures and communication channels (Shamsiev, 2022). Centralized and top-down progressive structures now and then moderate the usage of accessible innovative arrangements, concurring with Sato & Kitamura, (2023). Without coordinated communication between choice producers and teachers, there may be limited understanding of the particular needs of students within the learning environment.

Processes Affecting the Implementation of Inclusive Education

Decisions about innovation adoption are pivotal for effectively executing comprehensive education. Guaranteeing availability and inclusivity ought to be the best need for teaching when joining instructive innovation,

right from the start. In arrange to form educated choices, it is basic to have a collaborative exertion from teachers, directors, IT staff, and other partners (Beutel, Tangen, & Carrington, 2023). When considering innovation instruments and assets, it's critical to keep inclusivity in intellect. This implies having a careful understanding of the diverse needs of learners and how innovation can best address those needs. Through the utilization of an intuitive approach, instructive innovation integration can viably cater to the assorted needs of learners, guaranteeing inclusivity remains a beat need. In expansion, persistent assessment permits educators to remain ahead of advancing availability needs and mechanical progressions, subsequently moving forward the learning experience for students with incapacities. In conclusion, by centering on constant advancement, we will completely utilize instructive innovation to make learning situations that are comprehensive and reasonable for all students.

METHODOLOGY

Research Approach

We utilized a qualitative research methodology to understand how teacher-faculty administration methods and organizational structures influence openness as instructive innovation is coordinated for comprehensive instruction. This approach empowers us to comprehend participants' perspectives, encounters, and discernments in their local settings. Subjective ponder was satisfactory in looking at innovation integration's social and organizational impacts on comprehensive instruction. Open-ended questions permitted members to openly share encounters and perspectives, giving us a riches of different points of view. This integrator approach permitted us to analyze all angles influencing understudy get to to guidelines innovation.

Population

The study's participants included Chinese craftsmanship teachers, artists, and students who were either right now included in or had past involvement with cross-cultural craftsmanship instruction, music, or related areas. Individuals of this bunch included educators, students, and anybody else with intrigue in intercultural creative exercises.

Sample Size

We chose a small group of six participants for this study. A smaller sample size was considered appropriate due to the qualitative nature of the study and the desire to gain a deep understanding of participants' experiences and perspectives. Six participants were selected based on the research's goals, scope, and data requirements.

Rationale for Selecting the Participants

Instructors play a pivotal part in guaranteeing the fruitful execution of comprehensive instruction by joining instructive innovation. The participants' bits of knowledge and individual encounters given a more profound understanding of how innovation can be coordinated into instruction, with a center on making beyond any doubt all students can get to and utilize its highlights successfully. By digging into the points of view of teachers, we picked up a profitable understanding of the challenges they confront, the back they get, and the thought forms behind their instructing choices when it comes to joining innovation in an assorted bunch of students.

Data Collection Methods

To begin with and first, we conducted intensive interviews with key partners. The members in this consider comprised of teachers, chairmen, and IT work force who were chosen based on their involvement with joining instructive innovation and their vital part in executing openness measures for students. Through discussions with these specialists, we learned profitable data around the impediments, accomplishments, and approaches utilized to progress innovation availability for students.

Sampling Technique

The study utilized purposive inspecting to carefully select members with particular parts and encounters in innovation integration, comprehensive instruction, and openness measures. This approach pointed to assembling a wide extend of viewpoints to cater to the wants of assorted learners. Including extraordinary instruction instructors within the consider permitted for profitable experiences into the utilization of instructive innovation in their classrooms, which is pivotal for supporting students with incapacities. Directors, like principals and other decision-makers, were chosen to speak to administration viewpoints that had a noteworthy effect on the selection of innovation and assignment of assets, especially in terms of understudy availability. Their points of view played a significant part in getting a handle on how instructive education is prioritized and put into activity comprehensive hones. We needed to include IT staff, IT directors and specialized specialists, who are dependable for managing the

integration of an instructive innovation framework. Their ability within the specialized perspectives of availability was profitable. Additionally, an assortment of learners with diverse inabilities and learning needs were chosen, impacting the consideration about their special viewpoints. This client input highlighted the significance of guardians being effectively included in pushing for availability activities and guaranteeing that their children have risen to instructive openings.

Data Analysis Technique

We opted for thematic analysis in this study to facilitate a systematic identification and analysis of patterns, themes and underlying meanings, that are appeared in the gathered data. The dataset consisted of transcripts from interviews, notes from classroom observations, and analyzed documents. This step led to a thorough comprehension of the participant's experiences and viewpoints on the integration of educational technology and measures taken to ensure student accessibility. In the next phase, data was coded so that distinct portions of the information were assigned to descriptive codes. The codes were derived from the identification of recurrent words, phrases and patterns observed in the dataset. We used a combination of deductive and inductive methods to develop these codes, incorporating some that were predetermined by the research questions, while also allowing others to emerge naturally from the data. Upon completion of the coding process, preliminary themes began to emerge. These themes led to groups of interconnected codes that effectively encapsulated distinct elements of the research questions. Then, the themes were identified iteratively. We continuously reviewed and refined the analysis to ensure accuracy and coherence. During the analysis, we established and designated distinct themes, to generate a lucid explication of their substance and significance. The aim of this step was to establish a cohesive and clearly delineated framework for organizing the knowledge acquired from the data.

RESULTS

Themes and Patterns Related to Professional Development and Training

Throughout the interviews, a number of recurring themes and patterns were identified in relation to personnel management strategies of teachers (**Table 1**) that were designed to enhance accessibility to educational technology through professional development and training; we noted that our institution:

a. Inclusive Technology Workshops

As with other institutions, our institution provided educators with regular workshops focused on inclusive technology. The primary objective of these workshops was to introduce accessible tools, techniques for modifying technology to cater to the needs of diverse learners, and the implementation of best practices in the field of inclusive education.

b. Technology-Specific Training

Educators were offered specialized training sessions aimed at improving their competence in utilizing specific educational technologies that either incorporate accessibility for students' features or are compatible with assistive technologies.

c. Pedagogical Training

The professional development initiatives encompassed training sessions focused on integrating inclusive pedagogical approaches. These sessions equipped educators with the necessary skills to establish inclusive learning environments, using technology for support.

d. Web Accessibility for Student Training

To guarantee the accessibility of digital content and online platforms for all students, educators were trained on the standards and guidelines for web accessibility.

e. Continuous Learning Opportunities

Institutions fostered continuous learning by facilitating access to online resources, webinars, and conferences pertaining to accessibility for students and educational technology.

f. Individualized Support

Similar to other institutions, our institution provided tailored training sessions or personalized assistance to cater to the unique requirements and difficulties encountered by educators when incorporating accessible technology.

Table 1. Themes and Patterns Related to Professional Development and Training

Personnel Management Strategies of Teachers	Description
Inclusive Technology Workshops	Regular workshops focus on accessible tools, modifying technology for diverse learners, and implementing best practices in inclusive education.
Technology-Specific Training	Specialized sessions to enhance competence in using specific educational technologies with Accessibility for Students features or compatibility with assistive tech.
Pedagogical Training	Training sessions focused on integrating inclusive pedagogical approaches, creating inclusive learning environments, and using technology as support.
Web Accessibility for Students Training	Training on web accessibility for student standards and guidelines to ensure digital content and online platforms are accessible to all students.
Continuous Learning Opportunities	Facilitating access to online resources, webinars, and conferences related to accessibility for students and educational technology integration for continuous learning.
Individualized Support	Tailored training or personalized assistance to address unique needs and challenges faced by educators when incorporating accessible technology.

Collaborative Practices between Educators and IT Personnel

The study showed various themes pertaining to the influence of organizational structures in educational institutions on communication channels and decision-making processes in the advancement of inclusive education.

Hierarchical Communication

In some educational establishments, the dissemination of information about student accessibility and the integration of technology was conducted in a hierarchical framework. The obligation to make choices with respect to openness and comprehensive instruction transcendentally dwelled at the most elevated echelons of specialist and was in this way dispersed to teachers and the IT workforce. A centralized decision-making approach at times was driven by a limitation of input from cutting-edge partners, who had a coordinated engagement with innovation and students.

Inclusive Decision-Making Forums

A few other institutions executed comprehensive decision-making forums that included a wide extend of partners, including teachers, directors, and IT staff. The gatherings served as a stage for cultivating collaborative dialogues almost openness for understudy activities and innovation integration, which empowered a wide extend of points of view and mastery to shape decision-making forms.

Educator Involvement

The degree of teacher cooperation in decision-making shifted broadly in instructive teaching. In a few occurrences, teachers were given confined openings to contribute, whereas in other cases, their viewpoints applied a considerable impact on the advancement of availability and the appropriation of innovation.

Transparent Communication

Institutions that set high esteem on comprehensive practices displayed a commitment to straightforward communication with respect to availability for understudy activities and technology-related choices. Visit overhauls and unequivocal rules were spread to all significant parties, developing a sense of possession and shared responsibility for advancing inclusivity.

Policies and Resource Allocation Influencing Accessibility for Students

The impact of organizational structures in instructive teaching on availability and innovation integration became clear through the improvement of approaches and the assignment of assets.

Inclusive Technology Policies

Educational institutions that had characterized and comprehensive technology policies displayed an increased devotion to ensuring accessibility. These arrangements portrayed the institution's position on comprehensive instruction, the integration of innovation, and the arrangement of back for both teachers and students.

Budgetary Support

The effective integration of comprehensive innovation was essentially affected by the allotment of assets,

counting budgetary assets, for openness measures. Educate that apportioned particular budgets for improving innovation openness had higher rates of execution.

Technology Infrastructure

The presence of a resilient and effectively accessible technological framework was formed by organizational systems that put accentuation on apportioning assets towards comprehensive mechanical arrangements. The foundation enveloped a run of versatile gadgets, assistive advances, and open learning stages.

Staff Training and Support

Institutions that apportioned resources towards staff training and support for accessibility experienced more prominent success in their endeavors to cultivate comprehensive instruction through the utilization of innovation. These organizations advertised different preparing openings, workshops, and assets aimed at improving educators' capacities to viably coordinate open innovation into their guidelines hones.

Themes Related to Ongoing Evaluation and Feedback Mechanisms

The present study identified several themes that highlighted the importance of continuous evaluation and feedback mechanisms in the achievement of success in inclusive educational technology.

Continuous Assessment of Technology Effectiveness

Institutions that systematically assessed the adequacy of comprehensive instructive innovation obtained profitable encounters concerning its impact on a wide extent of learners. Nonstop evaluations encouraged the distinguishing proof of regions requiring improvement and guided the method of refining the integration of innovation.

Data-Driven Decision Making

Institutions that actualized data-driven decision-making processes consolidated input from teachers, IT experts, and students to direct their approaches to progressing openness. The use of information investigation encouraged evidence-based alterations to guarantee that the innovation coordinated the necessities of the learners.

User Experience Feedback Loops

The implementation of feedback loops, allowing students and educators to exchange their experiences and difficulties with inclusive technology, resulted in iterative enhancements. The iterative process used in this study demonstrated improvements in the usability and effectiveness of technology in addressing a wide range of learning needs.

Flexibility and Adaptability

Organizational frameworks that facilitated the implementation of flexible and adaptable strategies for integrating technology facilitated prompt modifications in response to feedback and evaluations. The ability to adapt played a key role in effectively addressing emerging accessibility requirements.

Integration of Student Feedback and Learner-Centered Approaches

The integration of student feedback and learner-centered approaches played a significant role in shaping the success of inclusive technology.

a. Student-Centric Technology Design

Institutions that engaged students in designing and integrating educational technology implemented a learner-centric approach. The outcome of this collaboration yielded technological solutions that were more closely aligned with the preferences and needs of students.

b. Empowering Student Voice

The act of motivating students to offer feedback on the usability and accessibility for students of educational technology integration had the effect of empowering them to actively contribute to their own learning experiences. The user's input significantly influenced the decision-making process regarding technology selection.

c. Personalized Learning Experiences

Learner-centered approaches were implemented to ensure the personalization of technology to accommodate the diverse learning styles and preferences of individuals. Institutions implemented adaptive technology platforms to provide customized content delivery that catered to individualized requirements.

d. Co-creation of Learning Content

The integration of educators and students in collaborative content creation facilitated the inclusion of a wide range of perspectives and experiences, thereby fostering the development of inclusive educational materials.

DISCUSSION

Our study offered critical bits of knowledge into the relationship between workforce management procedures of instructors and the availability for students of instructive innovation integration in comprehensive instruction. The observational evidence obtained from interviews, classroom perceptions, and report examination gave bits of knowledge into the multifaceted impact of organizational structures in instruction and forms on the adequacy of comprehensive instructive innovation. To viably analyze the investigative questions, it was basic to consider the information that has been collected.

Research Question 1: How do organizational structures in educational institutions impact student accessibility to educational technology integration, especially the students in inclusive education programs?

Our findings show that the availability was essentially affected by organizational structures. The nearness of various leveled communication channels and centralized decision-making inside a few educate come about in a confined stream of input from cutting-edge partners, which hindered the effective joining of available innovation (Flórez-Aristizábal, Cano, Collazos, Solano, & Brewster, 2019). In contrast, organizations that had inclusive decision-making stages illustrated improved collaboration and responsiveness towards tending to availability prerequisites. Thus, these educations were effective in creating innovation activities that viably suited the wants of a wide run of learners (Zheng & Lu, 2021). The comes about recommended that the organizational structures in instruction had a critical effect on the degree to which openness measures were given need and actualized in instructive innovation.

Research Question 2: What are the key personnel management strategies of teachers used to enhance student accessibility of educational technology integration in inclusive education programs?

We effectively distinguished a range of personnel management strategies for instructors that viably cultivated availability. Altogether, the arrangement of comprehensive innovation workshops and focused on preparing sessions engaged teachers with the imperative information and competencies to capably utilize innovation in catering to the requirements of different learners (Peng & Chuang, 2020). The arrangement of progressing learning openings and personalized bolster furthermore improved the capacity of teachers to viably handle worthiness issues. The integration of technology that viably tended to the wants of all students was encouraged by collaborative endeavors between teachers and IT staff (Bilichenko, Tolmachev, Polozova, Aniskevych, & Mohammad, 2022). These endeavors enveloped the concurrent creation of available substance and the foundation of ceaseless communication channels. The information underscored the significance of executing successful procedures for educator administration procedures to set up a comprehensive environment that viably utilized innovation to help learners from different foundations (Salleh & Janczewski, 2019).

Research Question 3: What challenges do educational institutions face in implementing educational technology in inclusive education programs, and how do these challenges affect student accessibility to educational technology integration?

We shed light on the differing obstacles experienced by instructive education when endeavoring to coordinate comprehensive instruction utilizing innovation. Unmistakable impediments enveloped the inadequate support of teachers in decision-making forms, the lack of assignment of monetary assets, and the nonattendance of clearly depicted availability for student arrangements (Han et al., 2023). These challenges applied an impact on the viable integration of open innovation, in this manner blocking endeavors to set up an inclusive learning environment (Hughson & Duncan Bonokoski, 2023).

Research Question 4: How do stakeholders (teachers, administrators, IT personnel) perceive the influence of organizational processes?

Our study indicated that the discernments held by partners concerning organizational forms had a considerable impact on the effective integration of open innovation. Teachers profoundly respected comprehensive decision-making gatherings and transparent communication, as they have seen a more noteworthy sense of engagement and strengthening in affecting the improvement of availability measures (Wildsmith-Cromarty, Dyer, & Modipa, 2022). The directors recognized the importance of teacher engagement and the need for continuous evaluation and criticism components. The significance of collaborating with teachers to concurrently make open substance and handle specialized challenges was emphasized by IT staff (Tatarinova, Shvetsova, Vladimirova, Gruba, & Heberlein, 2022).

Research Question 5: What are the perspectives of students in inclusive education programs regarding the

usability and effectiveness of educational technology integration in supporting their learning experiences?

Our data offered critical experiences into the points of view of students concerning the ease of use and viability of instructive innovation. The input given by students played a pivotal part in coordinating iterative improvements and ensuring that innovation arrangements were centered on the requirements of the learners (Cannella-Malone, Dueker, Barczak, & Brock, 2021). The students passed on their appreciation for the personalized encounters and the chance to collaboratively produce instructive substance. The people experienced a sense of empowerment through their dynamic interest in the plan of innovation, and their profitable commitments played a noteworthy part in improving the openness and versatility for innovative headways (Lee Kim, Chang, & Kim, 2022).

CONCLUSION

This study utilized a qualitative approach to explore the relationship between the personnel management strategies of teachers and the level of availability for students in instructive innovation, particularly within the setting of comprehensive instruction. They think about giving critical bits of knowledge into the impact of organizational structures in instruction and forms on the successful consolidation of available innovation to encourage the learning needs of an assorted understudy populace. The research enlightened the significance of collaboration, constant assessment, and learner-centered approaches in advancing comprehensive learning situations through the examination of inquiry about questions. The discoveries of the ponder emphasized the significant importance of workforce administration methodologies of instructors in encouraging availability. The upgrade of educators' capability in utilizing comprehensive innovation has been distinguished as a basic angle through the execution of proficient advancement and preparing programs. The association between teachers and IT experts was instrumental in mutually creating comprehensive instructive materials and settling mechanical deterrents. We too emphasized the importance of understudy input in affecting mechanical arrangements, empowering students to effectively contribute to their learning encounters. The effect of organizational structures in instruction on openness for students' activities was significant. The development of a culture of inclusivity was encouraged by the foundation of decision-making gatherings that prioritized comprehensiveness and the usage of straightforward communication channels. In any case, the utilization of various leveled communication and centralized decision-making may force imperatives on the inclusion of partners, in this manner possibly blocking the advance of availability for students' activities. The hypothetical suggestions of the consideration were improved comprehension of the social show of incapacity inside instructive settings.

IMPLICATIONS

This study had vital suggestions for instructive hone, giving commonsense suggestions to progress openness for students in instructive innovation integration and advance inclusivity. To start with, the execution of staff administration methodologies of instructors appeared noteworthy significance in encouraging openness, in this way requiring educate to prioritize the upgrade of proficient advancement openings for teachers. Workshops, training sessions, and continuous learning opportunities were able to supply teachers with the vital information and abilities to capably join available technology into their teaching practices, subsequently catering to the wants of differing learners. Besides, the development of collaboration and straightforward communication among different partners, such as teachers, chairmen, IT staff, and students, had the potential to improve decision-making forms and innovation endeavors that viably catered to the changed learner necessities. To promote the widespread integration of educational technology that was accessible, it was crucial to establish transparent policies that clearly articulated an institution's dedication to accessibility across different organizational frameworks. The provision of explicit guidelines pertaining to the integration and support of technology for educators and students fostered a collective understanding of accountability. The successful implementation of accessibility measures relied heavily on the allocation of sufficient resources, such as dedicated budgets and technology infrastructure.

CONTRIBUTIONS

The contributions to the social model of disability in educational environments were:

- (1) The study underscored the social construct of disability, rather than perceiving it as an individual

impairment by emphasizing the impact of organizational structures in education and personnel management strategies of teachers on accessibility.

(2) The acknowledgement of disability within this conceptual framework contributed to the advancement of future research and the development of inclusive educational environments.

REFERENCES

- Belda-Medina, J. (2022). Promoting inclusiveness, creativity and critical thinking through digital storytelling among EFL teacher candidates. *International Journal of Inclusive Education*, 26(2), 109–123.
- Beutel, D., Tangen, D., & Carrington, S. (2023). Backward mapping from outcomes: Using a realist evaluation lens to evaluate an international aid program. *Evaluation and Program Planning*, 97, 102201.
- Bilichenko, O., Tolmachev, M., Polozova, T., Aniskevych, D., & Mohammad, A. L. A. K. (2022). Managing strategic changes in personnel resistance to open innovation in companies. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 151.
- Cannella-Malone, H. I., Dueker, S. A., Barczak, M. A., & Brock, M. E. (2021). Teaching academic skills to students with significant intellectual disabilities: A systematic review of the single-case design literature. *Journal of Intellectual Disabilities*, 25(3), 387–404.
- Cohen, S. L., & Calderón-Aponte, D. (2021). Powerful pedagogies in times of COVID: An online pedagogical collaboration between EFL students and ESL teacher candidates. *Ikala*, 26(3), 731–745.
- Flórez-Aristizábal, L., Cano, S., Collazos, C. A., Solano, A. F., & Brewster, S. (2019, May). Designability: Framework for the design of accessible interactive tools to support teaching to children with disabilities. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems* (pp. 1-16). New York, US: Association for Computing Machinery.
- Grodzki, J., Müller, B. T., & Tekkaya, A. E. (2023). Enhancing manufacturing education based on controller-free augmented reality learning. *Manufacturing Letters*, 35, 1246–1254.
- Han, Z., Cui, C., Kong, Y., Li, Q., Chen, Y., & Chen, X. (2023). Improving educational equity by maximizing service coverage in rural Changyuan, China: An evaluation-optimization-validation framework based on spatial accessibility to schools. *Applied Geography*, 152, 102891.
- Harerimana, A., & Mtshali, N. G. (2019). Types of ICT applications used and the skills' level of nursing students in higher education: A cross-sectional survey. *International Journal of Africa Nursing Sciences*, 11, 100163.
- Hu, J., & Wang, Y. (2022). Influence of students' perceptions of instruction quality on their digital reading performance in 29 OECD countries: A multilevel analysis. *Computers & Education*, 189, 104591.
- Hughson, E. A., & Bonokoski, A. A. D. (2023). Inclusive postsecondary education: vision, practice, higher education reimaged. In R. J. Tierney, F. Rizvi, & K. Ercikan (Eds.), *International Encyclopedia of Education (Fourth Edition)* (pp. 362–367). Oxford, US: Elsevier.
- Humphries, T., Kushalnagar, P., Mathur, G., Napoli, D. J., Rathmann, C., & Smith, S. (2019). Support for parents of deaf children: Common questions and informed, evidence-based answers. *International Journal of Pediatric Otorhinolaryngology*, 118, 134–142.
- Ioana-Alexandra, T., Camelia, Ș., & Laura, D. (2021). Towards accessibility in education through smart speakers. An ontology based approach. *Procedia Computer Science*, 192, 883–892.
- Kodweis, K. R., Allen, R. B., Deschamp, E. I., Bihl, A. T., LeVine, D. A. M., & Hall, E. A. (2023). Impact of student-run clinic participation on empathy and interprofessional skills development in medical and pharmacy students. *Exploratory Research in Clinical and Social Pharmacy*, 11, 100306.
- Kowitlawakul, Y., Tan, J. J. M., Suebnukarn, S., Nguyen, H. D., Poo, D. C. C., Chai, J., . . . Devi, K. (2022). Utilizing educational technology in enhancing undergraduate nursing students' engagement and motivation: A scoping review. *Journal of Professional Nursing*, 42, 262-275.
- Lee, Y., Kim, T. S., Chang, M., & Kim, J. (2022, May). Interactive Children's Story Rewriting Through Parent-Children Interaction. In *Proceedings of the First Workshop on Intelligent and Interactive Writing Assistants (In2Writing 2022)* (pp. 62-71). Dublin, Ireland: Association for Computational Linguistics.
- Li, S., Zhang, Y., Wang, Z., & Li, H. (2023). The influence of national policies on the evolution of industrial design education in China. *Heliyon*, 9, e17504.
- Muhammad, B. A., Qi, C., Wu, Z., & Ahmad, H. K. (2022). GRL-LS: A learning style detection in online education using graph representation learning. *Expert Systems with Applications*, 201, 117138.
- Peng, Y.-P., & Chuang, P.-H. (2020). A Competency model for volunteer storytellers in public libraries. *Libri*, 70(1), 49–64.

- Pikhart, M., & Al-Obaydi, L. H. (2023). Potential pitfalls of online foreign language teaching from the perspective of the university teachers. *Heliyon*, 9(2), e13732.
- Raffaghelli, J. E., Rodríguez, M. E., Guerrero-Roldán, A.-E., & Bañeres, D. (2022). Applying the UTAUT model to explain the students' acceptance of an early warning system in Higher Education. *Computers & Education*, 182, 104468.
- Robillos, R. J., & Bustos, I. G. (2022). Learners' listening skill and metacognitive awareness through metacognitive strategy instruction with pedagogical cycle. *International Journal of Instruction*, 15(3), 393–412.
- Rostoka, Z., Locovs, J., & Gaile-Sarkane, E. (2019). Open Innovation of New Emerging Small Economies Based on University-Construction Industry Cooperation. *Journal of Open Innovation: Technology, Market, and Complexity*, 5(1), 10.
- Salleh, K. A., & Janczewski, L. (2019). Security considerations in big data solutions adoption: Lessons from a case study on a banking institution. *Procedia Computer Science*, 164, 168–176.
- Sehrawat, A., & Gupta, A. (2022). Effectiveness of methodology of teaching in radiology imaging technology. *Journal of Medical Imaging and Radiation Sciences*, 53(4), S19.
- Shamsiev, Z. Z. (2022). Organizational factors affecting the effectiveness of the educational process of training air traffic controllers. *Heliyon*, 8(11), e11801.
- Shang, H., Sivaparthipan, C. B., & ThanjaiVadivel. (2022). Interactive teaching using human-machine interaction for higher education systems. *Computers and Electrical Engineering*, 100, 107811.
- Tatarinova, M. N., Shvetsova, M. G., Vladimirova, E. N., Gruba, N. A., & Heberlein, F. A. (2022). Emotional value technology of foreign-language education for the development of speech communication abilities. *Perspektivy Nauki i Obrazovania*, 58(4), 281–306.
- Vakulenko, Y., Shams, P., Hellström, D., & Hjort, K. (2019). Service innovation in e-commerce last mile delivery: Mapping the e-customer journey. *Journal of Business Research*, 101, 461–468.
- Wildsmith-Cromarty, R., Dyer, C., & Modipa, T. (2023). Enhancing visibility of local African languages in South Africa through learning to read. *Journal of Multilingual and Multicultural Development*, 44(9), 860-876.
- Wisetsri, W., Franklin John, S., Prasad, A. B., Garg, S., Khaja Mohiddin, M., & Bhaskar, B. (2022). Analysing the importance and impact of cloud computing on organization's performance management during economic crises. *Materials Today: Proceedings*, 56, 2217–2220.
- Yazdani, M., Pamucar, D., Erdmann, A., & Toro-Dupouy, L. (2023). Resilient sustainable investment in digital education technology: A stakeholder-centric decision support model under uncertainty. *Technological Forecasting and Social Change*, 188, 122282.
- Zheng, X., & Lu, H. (2021). Does ICT change household decision-making power of the left-behind women? A Case from China. *Technological Forecasting and Social Change*, 166, 120604.
- Sato, M., & Kitamura, Y. (2023). Current status of climate change education and suggestions for its integrative development in Japan. *IATSS Research*, 47(2), 263–269.
<https://doi.org/https://doi.org/10.1016/j.iatssr.2023.04.002>