Notification No: F.No. COE/Ph.D./(Notification)/554/2024

Notification Date: 14.02.2024

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Ph.D. Title	: Development of Assistive Technology Module for Inclusive Teaching Practices and Evaluation of its Effectiveness
Keywords	: Assistive Technology, Assistive Technology Module, Inclusive Teaching Practices, Inclusion

Abstract:

Inclusive education aims at providing equal opportunities for all students, regardless of their diverse abilities or needs. Inclusive education requires teachers to be well-versed in adapting teaching strategies to accommodate the unique needs of every student. Assistive technology plays a pivotal role in fostering inclusive teaching practices by enhancing access to education and creating more equitable learning environments for students with diverse needs. Assistive technology enables teachers to provide tailored support to students with a wide range of disabilities, such as visual or hearing impairments, learning disabilities, and mobility challenges. The National Education Policy (2020) emphasizes the importance of training and professional development for teachers to equip them with the knowledge and skills needed to implement inclusive teaching practices effectively. Earlier studies have indicated a relative dearth of specialized modules tailored to students with high-incidence disabilities. The researcher's deliberate choice to create a module focusing on students with disabilities acknowledges this gap and recognizes the unique challenges these students face within inclusive classroom environments. The Assistive Technology Module, which encompasses components on understanding assistive technology, content modification, curriculum transaction, assessment, and classroom management, presents a distinct approach to equipping pre-service teachers for inclusive classrooms.

The population for the present study consists of all pre-service teachers who are pursuing Bachelor of Education (B.Ed.) from Maulana Azad National Urdu University, Hyderabad (a central university). The researcher's decision to employ a convenient non-random sampling

method, specifically focusing on pre-service teachers enrolled at the College of Teacher Education-Bhopal (one of the constituent colleges of Maulana Azad National Urdu University, Hyderabad).

Major findings are: (i) there is a significant increase in pre-service teachers' understanding of assistive technology after the intervention; (ii) there is a significant increase in pre-service teachers' understanding of content modification after the intervention; (iii) there is a significant increase in pre-service teachers' understanding of curriculum transaction after the intervention; (iv) there is a significant increase in pre-service teachers' understanding of inclusive assessment after the intervention; (v) there is a significant increase in pre-service teachers' understanding of classroom management after the intervention. In addition; a substantial majority of participants (67.16%) agreed that the module provided practical examples and hands-on experiences of how to use assistive technology effectively in inclusive classrooms, and 76.11% of participants agreed the assistive technology module allowed them to develop a broad understanding of the applications of assistive technology in inclusive teaching.

Conclusion: In summary, the Assistive Technology Module exerted a beneficial influence on the pre-service teachers' comprehension of inclusive teaching practices. Notably, they exhibited a readiness to modify their teaching approaches to cater to the needs of students with disabilities. This positive outcome suggests that the module succeeded in instilling a fundamental understanding of inclusive teaching principles among the participants. However, the journey from theoretical understanding to the seamless and effective application of inclusive teaching strategies remains a work in progress. While the pre-service teachers have absorbed the theoretical knowledge, there is room for improvement in translating this understanding into their day-to-day classroom practices. It is at this intersection between theory and practice that further development is needed.