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Enhancing Digital Competency for Employability: A Study on Prospective Teachers at Manuu

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ABSTRACT

This study investigates the level of digital competence among prospective teachers at the Maulana Azad National Urdu University (MANUU). The study also explores the variations in digital competence based on factors such as gender, place of study, degree program, and subject specialization. The results indicate significant differences in digital competence among students based on these demographic variables, with a focus on understanding the challenges and needs of prospective Urdu teachers. Findings emphasize the necessity for tailored digital training programs to address gaps and improve digital literacy, thus ensuring prospective teachers are adequately equipped for modern educational practices.

Keywords: Digital Competency, Prospective Teachers, Training Programmes

INTRODUCTION

The world needs 69 million new teachers by 2030 to meet global education goals (UNESCO Institute for Statistics), and for Urdu medium pre-service teachers, understanding the types of teachers in demand and the required digital skills is crucial for their career growth. As the job market becomes more technology-driven, digital competence has become a key factor in securing global job opportunities. Employers prioritize candidates who can adapt to the rapidly evolving digital landscape, enabling efficient communication, access to global information, and remote work capabilities. For Urdu medium teachers, possessing strong digital skills allows them to leverage their language expertise in various roles such as language instructors, translators, or content creators in the global market. Urdu medium teachers can contribute to multilingual education programs, supporting students from Urdu-speaking backgrounds and helping them integrate into global educational systems. However, despite the growing demand for digital competencies, Urdu medium teachers face limited opportunities due to a digital divide. This gap needs to be addressed by providing tailored curricula that empower Urdu teachers with the necessary digital skills, ensuring they can compete on the global stage and meet the growing need for skilled professionals in the global workforce.

1.1: Need and Significance of the Study

The increasing use of digital technologies in education underscores the need for teachers to have strong digital competencies. However, limited research has been conducted on the digital skills of Urdu-medium teachers in India. This study aims to assess the digital competence of Urdu prospective teachers at MANUU, identifying areas for improvement and informing future training efforts. The findings will help develop strategies to enhance digital literacy and integrate digital tools into teaching. With the rise of online education, Urdu medium teachers can expand their reach globally, offering Urdu language and literature courses and creating educational content. Strong digital skills can also open doors for roles in translation, cultural exchange, and content development, broadening career opportunities. Despite these prospects, a digital divide currently limits Urdu teachers' access to global opportunities, as many lack essential digital skills. Bridging this gap through targeted curricula and training is crucial to help Urdu teachers thrive in the global job market and meet global educational standards.

1.2: Related Studies

Reviews of international studies on digital competence from 2010 to 2024 reveal diverse findings based on geography, education level, and demographics. Calvani et al. (2010) in Italy found that students' digital competence varied by age and school type, while Krumsvik and Jones (2013) in Norway noted that experience and training were more influential than gender or age. Hatlevik et al. (2015) emphasized the importance of home conditions and cultural capital in shaping digital competence. More recent studies by Gudmundsdottir and Hatlevik (2018) and Kim et al. (2018) highlighted a gap between positive attitudes toward ICT and its practical use. Similarly, Artacho et al. (2021) in Spain and Takahashi et al. (2024) in Japan stressed the need for more integrated ICT training to better align with the evolving needs of educators and students.

1.3: Statement of the Problem

With the increasing use of digital technologies in education, prospective teachers must possess high levels of digital competence. However, there is a lack of research focusing on the digital competency of prospective Urdu teachers,

particularly in the context of India. The primary aim of this study is to explore the extent to which prospective Urdu teachers at MANUU are digitally competent and to understand how various demographic factors, such as gender, place of study, degree program, and subject specialization, influence their digital skills.

1.4: Objectives of the Study

1. To assess the level of digital competency among prospective Urdu teachers at MANUU.
2. To examine the differences in digital competency among prospective teachers based on gender, place of study, degree program, methodology, and parental education.

METHODOLOGY

This study employs a mixed-methods approach combining quantitative and qualitative research methods to gain a comprehensive understanding of the digital competence levels of prospective teachers at MANUU. The study sample consists of 140 prospective teachers enrolled in the 2023-2024 academic year at MANUU, representing students from both headquarters and off-campus locations, providing a diverse sample of backgrounds and experiences. A structured questionnaire was developed to assess the digital competencies of prospective teachers. The survey included items related to the use of digital tools, knowledge of educational technologies, and attitudes towards digital learning. Data was analyzed statistically to identify significant differences and patterns in digital competence. Interviews and focus group discussions were conducted with a select group of prospective teachers to gain deeper insights into the challenges and opportunities they face in improving their digital competencies.

1.6: Analysis

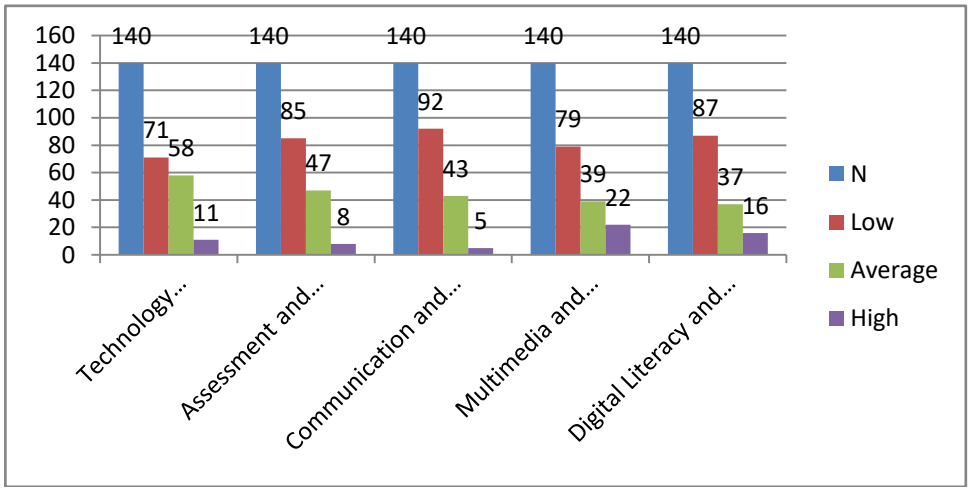
Table- 01: Digital Competency levels of prospective teachers

Prospective Teachers Digital Competence	N	LOW	AVERAGE	HIGH	CHI-SQUARE (X2)
	140	52	71	17	46.56**

From the above table majority of prospective teachers (71%) exhibited "average" digital competency, with 52 teachers falling into the "low" category and only 17 showing "high" competence. The Chi-Square value (X2 = 46.56) indicates a significant difference in digital competency levels, confirming that digital competence is not uniformly distributed.

DIMENSION-WISE ANALYSIS

Graph 0.1: Dimension-Wise Analysis of Digital Competency



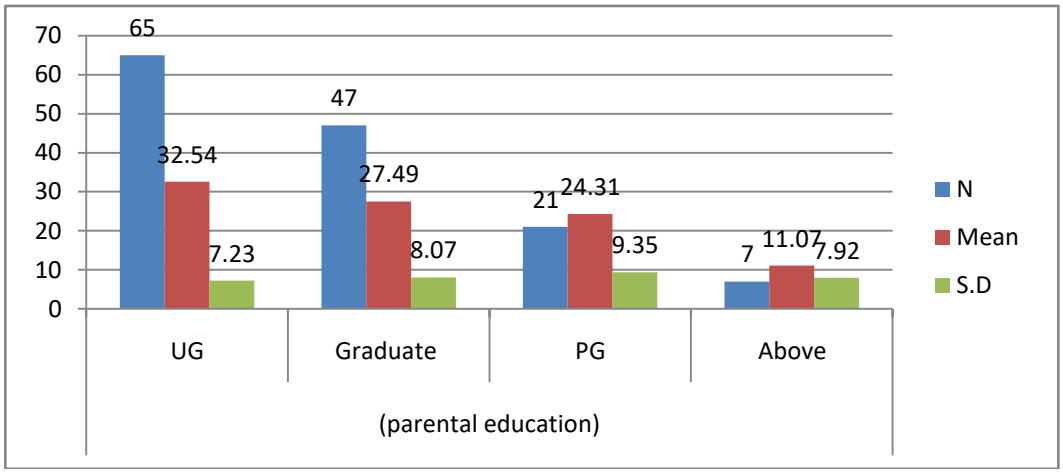
Significant deficiencies were identified across all five dimensions of digital competency among teachers, with the most prominent gaps in Communication and Collaboration Tools, Digital Literacy and Safety, and Assessment and Evaluation Tools. In terms of communication tools, 92 teachers displayed low competence, and only 5 demonstrated high proficiency. Regarding digital safety, 87 teachers lacked adequate understanding of safety practices, highlighting a major concern for responsible technology use. Additionally, 85 teachers showed low usage of assessment tools, with only 8 being highly competent in this area. These findings emphasize the urgent need for targeted interventions to improve teachers' digital skills, particularly in the safe use of technology and its integration into effective teaching practices.

DEMOGRAPHIC DIFFERENCES

Table 0.2: Demographic variable wise digital competence of prospective teachers

MANUU Prospective teachers		N	Mean	S.D	t- value	Result
(Gender)	Male	59	35.23	8.04	1.64	Not significant
	Female	81	37.75	9.52		
(Place)	Headquarter	42	33.53	8.62	2.58*	Significant
	Off-campus	98	38.04	9.81		
(Degree of study)	B. Ed	85	31.23	11.49	2.72*	Significant
	M. Ed	55	26.15	9.56		
(Methodology)	Science	82	31.92	7.52	2.31*	Significant
	Arts	58	35.27	9.56		

Graph 0.2: Digital Competency of Parental Education



The above table and graph presents the digital competence of prospective teachers at MANUU across various demographic variables, showing significant differences based on place of study, degree, and methodology, but no significant difference by gender. Male (M = 35.23, S.D. = 8.04) and female (M = 37.75, S.D. = 9.52) prospective teachers exhibited similar levels of digital competence (t-value = 1.64). However, students at the off-campus location (M = 38.04, S.D. = 9.81) demonstrated significantly higher competence compared to those at the headquarter (M = 33.53, S.D. = 8.62), with a t-value of 2.58. Additionally, B.Ed. students (M = 31.23, S.D. = 11.49) showed lower digital competence than M.Ed. students (M = 26.15, S.D. = 9.56), with a t-value of 2.72, and students in the Science methodology group M = 31.92, S.D. = 7.52) scored significantly lower than those in the Arts methodology group (M = 35.27, S.D. = 9.56), with a t-value of 2.31.

Findings of the Study:

1. There was no significant difference was found between male and female prospective teachers in digital competence

2. The study found that there were Significant differences between students at the headquarters and off-campus locations, with off-campus students exhibiting higher digital competence

3. It was observed that B.Ed. students demonstrated higher digital competence than M.Ed. students

4. Arts methodology students outperformed Science methodology students in digital competence

5. The study found that a significant difference in digital competence with regard to parental education, with students whose parents had undergraduate education performing better

1.7: Expectations of prospective teachers on development of digital skills from the institutions. Male prospective teachers considered digital skills essential for the global job market (54%), and felt more comfortable using digital tools (62%) compared to their female counterparts (39% and 55%, respectively). Female students had higher expectations for the development of digital skills and anticipated more institutional support. Additionally, off-campus students were more proactive in staying updated with new technologies than their headquarters-based peers.

M.Ed. students emphasized the importance of digital skills for global job readiness, while B.Ed. students reported higher comfort with digital tools.

1.8: Recommendations

Conduct hands-on workshops to familiarize prospective teachers with tools such as Google Classroom, Zoom, and Microsoft Teams.

Provide training on various methods of technology integration in teaching.
Establish online communities for campus and off-campus students to facilitate collaboration and resource sharing.
Develop advanced digital literacy programs tailored to M.Ed. students and subject-specific tools for science students.

CONCLUSION

This study revealed that while gender did not significantly impact digital competence, there were notable differences based on place of study, degree program, and subject specialization. Off-campus students, B.Ed. students, and Arts methodology students exhibited higher digital competence. The findings emphasize the need for tailored training programs addressing the diverse needs of prospective teachers based on gender, location, degree, and specialization. A comprehensive approach to digital skills development is essential for preparing future educators for the challenges of the digital age.

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