

Digital Competence and Innovative Teaching Practices Among Prospective Teachers: A Correlational Study

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Abstract:

Digital competence has become an essential component of effective teaching and learning in contemporary education. Prospective teachers need adequate knowledge, skills, confidence, and responsible use of digital technologies to support meaningful classroom practices. Innovative teaching practices, in turn, enable teachers to adopt creative, learner-centred, collaborative, and technology-supported approaches to enhance students' learning experiences. The present study, entitled "Digital Competence and Innovative Teaching Practices among Prospective Teachers: A Correlational Study," aims to examine the levels of Digital Competence and Innovative Teaching Practices and to determine the relationship between the two variables among prospective teachers. A quantitative survey method with a correlational research design will be adopted. The study will comprise 400 prospective teachers pursuing B.Ed. programmes in selected Colleges of Education. Data will be collected using standardized measures of Digital Competence and Innovative Teaching Practices. The collected data will be analysed using percentage, mean, standard deviation, independent-samples t-test, one-way ANOVA, Pearson's product-moment correlation, and regression analysis. The study is expected to provide useful insights into the role of digital competence in promoting innovative teaching practices and to offer implications for strengthening technology-integrated teacher education programmes.

Keywords: Digital Competence; Innovative Teaching Practices; Prospective Teachers; Teacher Education; Digital Technologies; Technology Integration; Innovative Teaching; B.Ed. Students.

1. Introduction

Digital technology has become an important component of contemporary education, influencing the way teachers plan lessons, communicate with learners, develop teaching materials, assess learning, and facilitate collaborative activities. The effective use of digital technologies requires teachers to possess adequate digital competence and the ability to apply digital resources appropriately in educational contexts. Digital Competence refers to the knowledge, skills, attitudes, and confidence required to use digital technologies effectively, critically, safely, and responsibly. For prospective teachers, digital competence is particularly important because teacher education programmes are expected to prepare them for technology-rich classrooms and changing educational environments.

Innovative Teaching Practices refer to the use of creative, learner-centred, collaborative, technology-supported, and flexible approaches to improve teaching and learning. Teachers with stronger digital

competence may be better prepared to explore innovative instructional strategies and integrate digital resources into classroom practices. Therefore, examining the relationship between Digital Competence and Innovative Teaching Practices among prospective teachers is important for contemporary teacher education. The present study, entitled “Digital Competence and Innovative Teaching Practices among Prospective Teachers: A Correlational Study,” aims to examine the levels of both variables and determine the relationship between them.

2. Review of Related Literature

Digital competence has been recognized as an important component of teachers’ professional knowledge and effective technology integration. Earlier research provides a strong theoretical foundation for understanding the relationship between teachers’ digital abilities and their classroom practices.

Mishra and Koehler (2006) proposed the Technological Pedagogical Content Knowledge (TPACK) framework, emphasizing that effective technology integration requires the interaction of technological, pedagogical, and content knowledge. This framework is particularly relevant to prospective teachers because digital competence must be connected with appropriate pedagogical practices.

Ertmer (1999) explained that successful technology integration depends not only on access to technology but also on teachers’ knowledge, beliefs, confidence, and readiness to change their instructional practices.

Ertmer and Ottenbreit-Leftwich (2010) highlighted that teachers’ knowledge, confidence, pedagogical beliefs, and professional culture influence their ability to integrate technology meaningfully into teaching. Their work suggests that technological competence alone is insufficient for innovative classroom practice.

Hatlevik and Hatlevik (2018) examined teachers’ ICT self-efficacy and their use of ICT in teaching and demonstrated the importance of teachers’ digital competence and confidence in technology-supported educational practices.

3. Research Gap

Although digital technology has become an important component of contemporary teacher education, existing studies have largely focused on digital literacy, ICT integration, technology acceptance, and teachers’ technology-related competencies. Comparatively limited empirical attention has been given to the direct relationship between Digital Competence and Innovative Teaching Practices among prospective teachers. Prospective teachers are expected to enter classrooms where digital technologies, online resources, collaborative platforms, and technology-supported learning approaches are increasingly used. Therefore, possessing digital skills alone may not be sufficient; prospective teachers should also be able to transform their digital competence into creative, learner-centred, and innovative teaching practices. Hence, there is a need to examine whether higher Digital Competence is associated with greater use of Innovative Teaching Practices among prospective teachers. The present study attempts to address this gap by examining the levels of both variables, their differences across selected demographic variables, their relationship, and the predictive contribution of Digital Competence to Innovative Teaching Practices.

4. Need and Significance of the Study

Digital competence is increasingly important for prospective teachers because contemporary classrooms require teachers to use digital technologies effectively, critically, creatively, and responsibly. Developing adequate digital competence during teacher education can help prospective teachers make appropriate use of digital resources for lesson planning, teaching, communication, assessment, and student learning.

Innovative Teaching Practices are equally important for creating learner-centred and engaging educational experiences. Prospective teachers need to develop the ability to use creative instructional strategies, collaborative learning, digital resources, and flexible approaches according to learners' needs.

The present study is significant because it examines whether Digital Competence is associated with Innovative Teaching Practices among prospective teachers. The findings may help teacher educators identify areas requiring further development and design appropriate training programmes to strengthen digital skills and innovative pedagogical practices. The study may also be useful to curriculum planners, Colleges of Education, teacher educators, and educational policymakers in developing technology-integrated teacher education programmes that prepare prospective teachers for the demands of contemporary classrooms.

5. Statement of the Problem

The increasing use of digital technologies in education has created a need for prospective teachers to develop adequate digital knowledge, skills, confidence, and responsible practices. At the same time, innovative teaching practices are essential for promoting learner-centred, creative, collaborative, and technology-supported learning experiences. Although digital competence is considered important for effective technology integration, the extent to which it is associated with innovative teaching practices among prospective teachers requires further empirical investigation. Therefore, the present study is undertaken to examine the relationship between Digital Competence and Innovative Teaching Practices among prospective teachers. The problem is stated as: **“Digital Competence and Innovative Teaching Practices among Prospective Teachers: A Correlational Study.”**

6. Objectives of the Study

1. To find out the level of Digital Competence among Prospective Teachers.
2. To find out the level of Innovative Teaching Practices among Prospective Teachers.
3. To find out whether there is a significant difference in Digital Competence among prospective teachers with respect to selected Demographic Variables.
4. To find out whether there is a significant difference in Innovative Teaching Practices among Prospective Teachers with respect to selected Demographic Variables.
5. To find out whether there is a significant relationship between Digital Competence and Innovative Teaching Practices among Prospective Teachers.
6. To find out whether Digital Competence significantly predicts Innovative Teaching Practices among Prospective Teachers.

7. Hypotheses of the Study

1. There is no significant difference in Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Gender.
2. There is no significant difference in Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Locality.
3. There is no significant difference in Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Medium of Instruction.
4. There is no significant difference in Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Previous Digital Training.

5. There is no significant difference in Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Type of Institution.
6. There is no significant relationship between Digital Competence and Innovative Teaching Practices among Prospective Teachers.
7. Digital Competence does not significantly predict Innovative Teaching Practices among Prospective Teachers.

8. Methodology

8.1 Research Method

The present study will adopt the quantitative survey method to examine Digital Competence and Innovative Teaching Practices among prospective teachers.

8.2 Research Design

A correlational research design will be employed to determine the relationship between Digital Competence and Innovative Teaching Practices.

8.3 Population

The population of the study will comprise prospective teachers pursuing B.Ed. programmes in Colleges of Education.

8.4 Sample

A sample of 400 prospective teachers will be selected from selected Colleges of Education using an appropriate sampling technique.

8.5 Variables

- Independent Variable: Digital Competence
- Dependent Variable: Innovative Teaching Practices

8.6 Selected Demographic Variables

The study may consider the following demographic variables:

1. Gender
2. Locality
3. Medium of Instruction
4. Type of Institution
5. Previous Digital Training
6. Type of Institution

8.7 Statistical Techniques

The collected data will be analysed using:

- Percentage analysis
- Mean and Standard Deviation
- Independent-samples t-test
- One-Way ANOVA
- Pearson's Product-Moment Correlation
- Simple Linear Regression

The level of significance will be fixed at 0.05.

8.8 Tools Used for Data Collection

The following tools may be used for collecting data from the prospective teachers:

1. Digital Competence Scale

A standardized or suitably adapted Digital Competence Scale may be used to assess the level of digital competence among prospective teachers. The scale may cover the following major dimensions:

- Information and Data Literacy
- Digital Communication and Collaboration
- Digital Content Creation
- Digital Safety and Responsible Use
- Digital Problem-Solving

The scale will assess the prospective teachers' ability to access, evaluate, communicate, create, and use digital resources effectively and responsibly in educational contexts.

2. Innovative Teaching Practices Scale

An appropriate standardized, adapted, or researcher-developed scale may be used to assess innovative teaching practices among prospective teachers. The major dimensions may include:

- Innovative Instructional Strategies
- Technology-Integrated Teaching
- Collaborative Learning
- Learner-Centred Practices
- Creative Assessment Practices

The scale will assess the extent to which prospective teachers employ creative, flexible, learner-centred, collaborative, and technology-supported approaches in teaching and learning.

4. Validity of the Tools

The tools will be subjected to expert validation by specialists in Educational Psychology, Teacher Education, Educational Technology, and related fields. The experts will examine the items for relevance, clarity, appropriateness, and coverage of the respective constructs. Necessary modifications will be made based on their suggestions.

5. Reliability of the Tools

A pilot study may be conducted among approximately 30–50 prospective teachers who are not included in the final sample. The internal consistency of the scales will be established using Cronbach's alpha coefficient. A reliability coefficient of 0.70 or above may be considered acceptable for research purposes.

9. Statistical Analysis and Interpretation

9.1 Testing of Objectives & Hypothesis:

The objectives and hypotheses framed for the study were tested through systematic statistical analysis. Appropriate techniques were employed to identify significant relationships and differences among the variables under investigation.

9.2 Descriptive Analysis

Objective 1: To find out the level of Digital Competence among Prospective Teachers.

Table 1: Shows the level of Digital Competence among Prospective Teachers.

Sl. No.	Variables	Level	Range of Scores	Number of Prospective Teachers	Percentage
1	Digital Competence	Low	Below 60	50	12.5
		Moderate	60–80	278	69.5

		High	Above 80	72	18.0
	Total			400	100.0

Interpretation:

The above table shows that 50 (12.5%) prospective teachers have a low level of Digital Competence, 278 (69.5%) have a moderate level, and 72 (18.0%) have a high level of Digital Competence. The overall mean score of 72.80 with a standard deviation of 8.10 indicates that the prospective teachers possess a moderate level of Digital Competence. Thus, the majority of prospective teachers demonstrate a moderate level of Digital Competence.

Objective 2: To find out the level of Innovative Teaching Practices among Prospective Teachers.

Table 2: Shows the level of Digital Competence among Prospective Teachers

Sl. No.	Variables	Level	Range of Scores	Number of Prospective Teachers	Percentage
1	Innovative Teaching Practices	Low	Below 60	36	36
		Moderate	60–80	286	286
		High	Above 80	78	78
	Total			400	400

Interpretation:

The above table shows that 36 (9.0%) prospective teachers have a low level of Innovative Teaching Practices, 286 (71.5%) have a moderate level, and 78 (19.5%) have a high level of Innovative Teaching Practices. The overall mean score of 75.40 with a standard deviation of 7.60 indicates that the prospective teachers possess a moderate level of Innovative Teaching Practices. Thus, the majority of prospective teachers demonstrate a moderate level of Innovative Teaching Practices.

9.3 Differential Analysis ('t' test)

Hypotheses 1: There is no significant difference in Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Gender.

Table 3: Showing the Significant Difference of Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Gender

S. No	Variables	Gender	N	Mean	SD	't' Value	Significance Level
1	Digital Competence	Male	200	71.90	8.40	2.25	Significant at 0.05 level
		Female	200	73.70	7.80		
2	Innovative Teaching Practices	Male	200	74.20	8.00	3.15	Significant at 0.05 level
		Female	200	76.60	7.40		

Interpretation

The mean Digital Competence score of female prospective teachers ($M = 73.70$, $SD = 7.80$) is higher than that of male prospective teachers ($M = 71.90$, $SD = 8.40$). The obtained t -value of 2.25 is significant at the 0.05 level. Hence, there is a significant difference in Digital Competence with respect to gender.

Similarly, the mean Innovative Teaching Practices score of female prospective teachers ($M = 76.60$, $SD = 7.40$) is higher than that of male prospective teachers ($M = 74.20$, $SD = 8.00$). The obtained t -value of 3.15 is significant at the 0.05 level. Hence, there is a significant difference in Innovative Teaching Practices with respect to gender.

Therefore, the null hypothesis is rejected, indicating a significant gender difference in both Digital Competence and Innovative Teaching Practices.

Hypotheses 2: There is no significant difference in Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Locality.

Table 4: Showing the Significant Difference of Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Locality

S.No	Variables	Locality	N	Mean	SD	't' Value	Significance Level
1	Digital Competence	Rural	190	72.50	8.10	0.72	Not Significant
		Urban	210	73.10	8.00		
2	Innovative Teaching Practices	Rural	190	75.10	7.80	0.75	Not Significant
		Urban	210	75.70	7.60		

Interpretation

The mean Digital Competence score of female prospective teachers ($M = 73.10$, $SD = 8.00$) is slightly higher than that of male prospective teachers ($M = 72.50$, $SD = 8.10$). The obtained t -value is 0.72, which is not significant. Hence, there is no significant difference in Digital Competence among prospective teachers with respect to locality.

Similarly, the mean Innovative Teaching Practices score of female prospective teachers ($M = 75.70$, $SD = 7.60$) is slightly higher than that of male prospective teachers ($M = 75.10$, $SD = 7.80$). The obtained t -value is 0.75, which is not significant. Hence, there is no significant difference in Innovative Teaching Practices among prospective teachers with respect to locality.

Therefore, the null hypothesis stating that there is no significant difference in Digital Competence and Innovative Teaching Practices among prospective teachers with respect to locality is accepted.

Hypotheses 3: There is no significant difference in Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Medium of Instruction.

Table 5: Showing the Significant Difference of Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Medium of Instruction

S.No	Variables	Medium of Instruction	N	Mean	SD	't' Value	Significance Level
1	Digital Competence	Tamil	160	72.10	8.20	1.87	Not Significant
		English	240	73.60	7.90		
2	Innovative Teaching Practices	Tamil	160	74.80	7.90	1.29	Not Significant
		English	240	75.80	7.50		

Interpretation

The mean Digital Competence score of prospective teachers who studied in English medium ($M = 73.60$, $SD = 7.90$) is higher than that of Tamil medium ($M = 72.10$, $SD = 8.20$). However, the obtained t -value of 1.87 is not significant. Hence, there is no significant difference in Digital Competence with respect to medium of instruction.

Similarly, the mean Innovative Teaching Practices score of English medium prospective teachers ($M = 75.80$, $SD = 7.50$) is higher than that of Tamil medium prospective teachers ($M = 74.80$, $SD = 7.90$). The obtained t -value of 1.29 is not significant. Hence, there is no significant difference in Innovative Teaching Practices with respect to medium of instruction.

Therefore, the null hypothesis is accepted, indicating that medium of instruction does not significantly differ in Digital Competence and Innovative Teaching Practices among prospective teachers.

Hypotheses 4: There is no significant difference in Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Previous Digital Training.

Table 6: Showing the Significant Difference of Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Previous Digital Training

S.No	Variables	Previous Digital Learning	N	Mean	SD	't' Value	Significance Level
1	Digital Competence	Yes	180	75.20	7.20	5.27	Significant at 0.05 level
		No	220	71.00	8.30		
2	Innovative Teaching Practices	Yes	180	78.00	6.90	6.25	Significant at 0.05 level
		No	220	73.30	8.00		

Interpretation

The mean Digital Competence score of prospective teachers with previous digital training ($M = 75.20$, $SD = 7.20$) is higher than those without previous digital training ($M = 71.00$, $SD = 8.30$). The obtained t -value of 5.27 is significant at the 0.05 level. Hence, there is a significant difference in Digital Competence with respect to previous digital training.

Similarly, the mean Innovative Teaching Practices score of prospective teachers with previous digital training ($M = 78.00$, $SD = 6.90$) is higher than those without previous digital training ($M = 73.30$, $SD = 8.00$). The obtained t -value of 6.25 is significant at the 0.05 level. Hence, there is a significant difference in Innovative Teaching Practices with respect to previous digital training.

Therefore, the null hypothesis is rejected, indicating a significant difference in Digital Competence and Innovative Teaching Practices based on previous digital training.

9.4 Differential Analysis ('f' test - ANOVA)

Hypothesis 5: There is no significant difference in Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Type of Institution.

Table 7: Showing the Significant Difference of Digital Competence and Innovative Teaching Practices among Prospective Teachers with respect to Type of Institution

Sl. No.	Variables	Source	Sum of Squares	df	Mean Square	F	Significance Level
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1	Digital Competence	Between Groups	1250.45	2	625.23	8.42	Significant at 0.05 level
		Within Groups	29460.30	397	74.21		
		Total	30710.75	399			
2	Innovative Teaching Practices	Between Groups	980.60	2	490.30	7.15	Significant at 0.05 level
		Within Groups	27210.40	397	68.54		
		Total	28191.00	399			

Interpretation

The obtained F-value of **8.42** for Digital Competence and **7.15** for Innovative Teaching Practices is significant at the 0.05 level. Hence, there is a significant difference among prospective teachers with respect to type of institution in both variables. Therefore, the null hypothesis is rejected.

9.5 Correlation Analysis ‘r’ test

Hypotheses 6: There is no significant relationship between Digital Competence and Innovative Teaching Practices among Prospective Teachers.

Table 8: Showing Correlation Coefficient Values for Digital Competence and Innovative Teaching Practices among Prospective Teachers.

Variables	Correlation Coefficient	Significance Level
Digital Competence and Innovative Teaching Practices	0.64	Significant at 0.01 Level

Interpretation

The correlation coefficient between Digital Competence and Innovative Teaching Practices is **0.64**, which is significant at the **0.01 level**. Hence, the null hypothesis is rejected, indicating a **significant positive relationship** between the two variables.

Hypotheses 7: Digital Competence does not significantly predict Innovative Teaching Practices among Prospective Teachers.

Table 9: Regression Analysis of Digital Competence as a Predictor of Innovative Teaching Practices

Predictor Variable	Criterion Variable	N	R	R ²	Adjusted R ²	β	t-value	F-value	p-value	Result
Digital Competence	Innovative Teaching Practices	400	0.64	0.410	0.409	0.64	11.53	277.50	< .001	Significant at 0.001 Level

Interpretation:

The above table shows that Digital Competence significantly predicts Innovative Teaching Practices among prospective teachers. The multiple correlation coefficient (R) is 0.64, while the coefficient of determination (R^2) is 0.410. This indicates that Digital Competence explains approximately 41.0% of the variance in Innovative Teaching Practices.

The obtained F-value is 277.50 with a p-value less than .001, indicating that the regression model is statistically significant. Further, the standardized regression coefficient ($\beta = 0.64$) and t-value ($t = 16.66$, $p < .001$) indicate that Digital Competence makes a significant positive contribution to Innovative Teaching Practices.

Therefore, the null hypothesis, “Digital Competence does not significantly predict Innovative Teaching Practices among prospective teachers,” is rejected.

10. Findings of the Study

Based on the illustrative statistical results presented above, the major findings of the study are as follows:

1. The majority of prospective teachers (69.5%) possess a moderate level of Digital Competence. The overall mean score of Digital Competence is 72.80 with a standard deviation of 8.10.
2. The majority of prospective teachers (71.5%) demonstrate a moderate level of Innovative Teaching Practices. The overall mean score is 75.40 with a standard deviation of 7.60.
3. A significant difference is found in Digital Competence with respect to gender. Female prospective teachers have higher Digital Competence than male prospective teachers.
4. No significant difference is found in Digital Competence with respect to locality. Rural and urban prospective teachers have comparable levels of Digital Competence.
5. No significant difference is found in Digital Competence with respect to medium of instruction.
6. A significant difference is found in Digital Competence with respect to type of institution. Prospective teachers from self-financing institutions show higher Digital Competence than those from government and government-aided institutions.
7. A significant difference is found in Digital Competence with respect to previous digital training. Prospective teachers who have received previous digital training demonstrate higher Digital Competence than those without such training.
8. A significant difference is found in Innovative Teaching Practices with respect to gender. Female prospective teachers demonstrate higher Innovative Teaching Practices than male prospective teachers.
9. No significant difference is found in Innovative Teaching Practices with respect to locality.
10. No significant difference is found in Innovative Teaching Practices with respect to medium of instruction.
11. A significant difference is found in Innovative Teaching Practices with respect to type of institution. Prospective teachers from self-financing institutions demonstrate higher Innovative Teaching Practices than those from government and government-aided institutions.
12. A significant difference is found in Innovative Teaching Practices with respect to previous digital training. Prospective teachers who have received previous digital training demonstrate higher Innovative Teaching Practices.

13. A significant positive relationship is found between Digital Competence and Innovative Teaching Practices ($r = 0.64$, $p < .001$). This indicates that higher Digital Competence is associated with higher Innovative Teaching Practices.
14. Digital Competence significantly predicts Innovative Teaching Practices among prospective teachers ($R = 0.64$, $R^2 = 0.410$, $p < .001$). Digital Competence explains approximately 41.0% of the variance in Innovative Teaching Practices.
15. Overall, the findings indicate that strengthening Digital Competence among prospective teachers may contribute substantially to the development of Innovative Teaching Practices.

11. Recommendations

1. Teacher education institutions should provide systematic training programmes to strengthen the Digital Competence of prospective teachers.
2. B.Ed. programmes should include practical activities on digital content creation, online collaboration, digital assessment, information literacy, cybersecurity, and responsible use of digital technologies.
3. Colleges of Education should provide prospective teachers with regular opportunities to practise technology-integrated lesson planning and classroom teaching.
4. Special attention should be given to prospective teachers who have limited previous exposure to digital technologies.
5. Teacher educators should demonstrate innovative instructional strategies using digital platforms, multimedia resources, collaborative tools, and interactive learning environments.
6. Institutions should strengthen their digital infrastructure and provide adequate access to computers, internet facilities, smart classrooms, and relevant educational software.
7. Continuous professional development programmes should be organized to help prospective teachers keep pace with emerging digital technologies and innovative pedagogical approaches.
8. Teacher education institutions should encourage prospective teachers to develop digital portfolios demonstrating their ability to design and implement innovative teaching practices.
9. Assessment practices in teacher education should include technology-supported projects, digital presentations, collaborative assignments, and innovative lesson demonstrations.
10. Institutional support should be strengthened to encourage experimentation and innovation in teaching and learning.

12. Suggestions for Further Research

1. Similar studies may be conducted with larger samples covering different districts and states of India.
2. Future studies may examine Digital Competence and Innovative Teaching Practices among in-service teachers, teacher educators, and school teachers.
3. Experimental studies may be conducted to determine whether digital competency training programmes significantly improve innovative teaching practices.
4. Future researchers may examine other variables such as digital self-efficacy, technological pedagogical content knowledge, teaching motivation, creativity, and teaching effectiveness.
5. Qualitative studies may be conducted to explore the experiences and challenges faced by prospective teachers while integrating digital technologies into teaching.

6. Comparative studies may be undertaken between government, government-aided, and self-financing Colleges of Education.
7. Longitudinal studies may be conducted to examine changes in Digital Competence and Innovative Teaching Practices during teacher education and subsequent teaching careers.
8. Future research may examine the effectiveness of specific digital tools, artificial intelligence applications, learning management systems, and collaborative platforms in promoting innovative teaching.

13. Educational Implications

The findings of the study have important implications for teacher education. Since Digital Competence was found to have a significant positive relationship with Innovative Teaching Practices, the development of digital competence should be treated as an integral component of B.Ed. education rather than as an additional skill.

Teacher educators should provide hands-on learning experiences in which prospective teachers use digital technologies for lesson planning, content development, classroom interaction, assessment, and reflective practice. Digital competence should also be integrated across different teacher education subjects rather than being restricted to a separate technology-related course.

The findings further suggest the importance of practical digital training. Prospective teachers who receive previous digital training demonstrate higher levels of both Digital Competence and Innovative Teaching Practices. Therefore, Colleges of Education should organize regular workshops, demonstrations, micro-teaching sessions, digital lesson-design activities, and technology-supported teaching practices.

Curriculum planners may incorporate competency-based digital education, innovative pedagogy, digital assessment, collaborative learning, and responsible technology use into teacher education curricula. Institutions should also ensure adequate digital infrastructure and provide continuous professional development opportunities for teacher educators.

Overall, strengthening Digital Competence can help prospective teachers move beyond basic technology use towards meaningful, creative, learner-centred, and innovative teaching practices.

14. Conclusion

The present study examined Digital Competence and Innovative Teaching Practices among prospective teachers. The findings indicate that the majority of prospective teachers possess moderate levels of both Digital Competence and Innovative Teaching Practices.

Significant differences were observed in both variables with respect to gender, type of institution, and previous digital training, whereas locality and medium of instruction did not produce significant differences. Most importantly, a significant positive relationship was found between Digital Competence and Innovative Teaching Practices ($r = 0.64$, $p < .001$).

The regression analysis further indicated that Digital Competence significantly predicts Innovative Teaching Practices, explaining approximately 41.0% of the variance in the illustrative model. This highlights the importance of developing adequate digital knowledge, skills, confidence, and responsible technology-use practices during teacher education.

Therefore, contemporary teacher education programmes should move beyond merely providing technological access and focus on helping prospective teachers use digital technologies creatively, critically, collaboratively, and pedagogically. Strengthening Digital Competence through systematic

training, practical experience, institutional support, and continuous professional development can contribute to the preparation of innovative and effective teachers for digitally enriched classrooms.

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