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DEVELOPING LESSON PLANNING COMPETENCE THROUGH DIGITAL LITERACY IN TEACHER EDUCATION

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Abstract
This research examines the role of digital literacy in enhancing pre service teacher's lesson planning competence in the Department of Education, University of Narowal. The development of lesson planning skills to prepare teachers can be transformed with digital literacy integration in teacher education. It can enhance the quality, structure and engagement of lesson plans. This study aimed to find out how the planning, pedagogical decision making and professional confidence of pre service teachers is enhanced by digital literacies. A qualitative research design was implemented through semi-structured interviews with fifteen purposively selected final-year pre-service teachers of teacher education. After reviewing the participants' experiences, courses related to education technology and lesson planning, the participants were chosen. The thematic analysis method aided in the assessment of the interview data which highlighted the relationship between digital literacy and quality lesson planning competencies. The study shows, the digital literacy significantly improves lesson planning competence through three dimensions. It first enhances the pedagogical structure of lessons and assists in the alignment of objectives, activities and assessment and diversifies access to resources designed for teaching. Secondly, it helps to strengthen pedagogical decisions in which teachers then can choose the appropriate teaching strategy to use and accommodate the diverse needs of learners. Thirdly, it boosts professionalism confidence, equipping pre service teachers for contemporary classroom issues and promoting efficacy. This study has contributed vital insights which shed light on the role of digital literacy in teacher education. The results indicate that the implementation of technology into lesson planning training improves pedagogical and professional competencies.

INTRODUCTION

The ability to plan lessons is one of the core competences required of a teacher in a teacher education program. It structures instructional objectives, sequencing of content, teaching strategies, and evaluation strategies. Effective lesson planning helps align the learning objectives with learning and teaching approaches and assessment. In recent years, educational contexts have undergone a digital transformation whereby their teachers have to incorporate digital tools, internet resources, and tech-supported tutorials in their didactic plans (Holm, 2025).

The modern teacher's competency thus includes the ability to access, evaluate, create and implement digital information for teaching and learning.

Studies show that teachers with advanced digital skills are more flexible in designing lessons; they can better align activities with learning objectives; and (help teachers) address the needs of diverse learners. Many pre service teachers find it difficult to represent their digital skills in a coherent lesson plan that is also pedagogical (Zakir et al., 2025). There is a need for assessment of the use of digital literacy for developing lesson planning competence within teacher education programs.

Research Objective

The objective of this study is to examine how digital literacy development influences lesson planning competence among pre service teachers in teacher education programs.

Research Question

How does digital literacy contribute to the development of lesson planning competence among pre service teachers?

Problem Statement

Teacher education programs provide students with the pedagogical and professional skills necessary for effective practice as teachers. However, several studies show that pre-service teachers have partial digital competence that is not systematically integrated into the learning planning. Although there are more and more educational technology courses in teacher education curricula, these courses usually talk more about technical tools than how to use them when planning lessons. Consequently, pre service teachers may employ a range of digital tools without relating the tools to learning objectives, teaching strategies and assessment means. Digital educators confirmed that lesson planning component of the curriculum obtains a deficient syllabus (Haleem et al., 2022). There is insufficient digital literacy in the lesson planners. Additionally, lack of frameworks to embed digital literacy in lesson planning instruction was a concern among many teacher educators. This most recent circumstance results in a dissonance between the digital requirements of contemporary classrooms and the skills shared in teacher training. To effectively address this issue, there is a need for systematic investigation of how digital literacy can strengthen lesson planning competence in teacher education context.

Rationale of the Study

The reason for conducting this research is due to growing reliance on digital technologies in teaching and learning. These days, schools want teachers to plan lessons with digital resources, online collaboration, and technology enhanced assessment. Comprehending the connection between digital literacy and lesson planning competence may assist in the redesign of teacher education curricula to enhance their conformability to the expectations. This research is a relevant resource for teacher educators, curriculum developers and policy makers who are looking for evidence based strategies to improve the quality of teacher preparation. Through targeting pre service teachers, the research attends to an important phase where the building of professional habits and aptitudes take place.

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Significance of the Study

This research plays a vital role in developing the theoretical and practical understanding of teacher competence in the digital age. It extends current literature by connecting digital literacy with lesson planning competence, a domain that has largely eluded empirical scrutiny. The findings can be applied to teacher education institutions as a contribution to more effectively digital literacy teacher education. An improved lesson planning competence will allow for more coherent instruction, better use of digital tools, and enhanced student learning experiences. Findings may also inform professional development initiatives of significant components of digital literacy in enhancing lesson planning.

Limitations of the Study

The findings of this research may not be applicable to all contexts as it is confined to pre

service teachers getting enrolled in selected teacher education programs. Focusing solely on lesson planning competence may overlook other critical areas of teaching practice, including classroom management and assessment implementation. Moreover, the research depends on self-reported and performance based metrics which may be impacted by the previous exposure of participants to technology. Limitations of Data Collection Scope due to Time and Resource Constraint

Literature Review

Teacher education research now uses 'lesson planning competence' and 'digital literacy' for their findings. The demand that increasing use of technology entails on teachers' professional knowledge and skills is severe. There is growing recognition in the literature that effective lesson planning now involves integrating pedagogical digital use rather than technical digital use (Saturre et al., 2024). The paper presents a review of literature on lesson planning competence, digital literacy in teacher education and their interface. It assesses the current situation of knowledge about the topic under review, identifies gaps (conceptual and empirical) and clarifies how the proposed research will contribute to knowledge.

Lesson Planning Competence in Teacher Education

Competence in lesson planning is considered a basic skill or teaching competency which allows teachers to transform the curriculum goals into systematic practice. Effective lesson planning contributes to effective organization of the classroom, effective delivery of teaching and learning, and effective learning (Doyle, 1991; Burch and Spillane, 2005; Rowan et al, 2002). Research on teacher education defines lesson planning as a complex cognitive process involving the determination of lesson goals, content selection, activity sequencing, teaching strategy selection, and assessment selection. According to Darling Hammond et al. (2022), the planning activity is necessary. However, novice teachers often experience difficulty in engaging in planning activity due to lack of opportunity to practice planning in authentic contexts. Studies show pre service teachers use a pedagogical approach towards lesson planning that is prescriptive and based on a textbook (Yuan et al., 2025). Consequently, this dependence drives the development of inflexible plans that do not respond to learner diversity or contextual needs. As a result, researchers are increasingly studying adaptive and reflective lesson planning that fulfills flexibility, learner centered design and alignment to higher order learning. Although, a lot of the literature perceives lesson plans as just an agnostic skill and not how digital contexts rethink the process of planning.

Digital Literacy in Teacher Education

Over the years, digital literacy has grown from just how to operate a computer to technical, cognitive, and pedagogical capabilities. Present definitions highlight teacher's abilities for critical evaluation of digital resources, designing technology supported lessons, and the contributing use of digital devices for better engagement and assessment. According to Falloon 2023, teacher education should be seen as situated practice, not decontextualized skill acquisition for digital literacy (Chen, 2025). Research in teacher education indicates that pre service teachers usually possess positive dispositions for technology but exhibit inconsistent digital competence levels. According to studies, a number of pre service teachers may use digital tools, but integrating them with teaching and learning is a challenge. Teacher Education Programs (TEPs) segregate the digital literacy component into stand-alone courses (Tondeur et al. 2023). That is counterproductive because it limits the transfer to pedagogical tasks such as lesson planning. Multiple intervention studies indicate that embedded and practice-oriented approaches to digital literacy are more effective than isolated training. For instance, pre-service teachers involved in technology integrated lesson design tasks demonstrate a more robust connection between pedagogy and use of digital tools. Despite these findings, the research on digital literacy focuses on general teaching

competence, classroom practice or attitudes towards technology. There is relatively little research on the specific outcome lesson planning competence.

Linking Digital Literacy and Lesson Planning Competence

The research on digital literacy and lesson planning competence is newly emerging and yet underdeveloped. Studies in this area show that digital literacy can improve lesson planning by providing access to a variety of teaching materials, engaging with multiple formats and forms of content, formative assessment strategies and more. According to Koehler et al. 2023, teachers need to combine technology with pedagogy and content to teach effectively using technology, according to Technological Pedagogical Content Knowledge framework. Lesson planning is the first place that this integration gets visible. Evidence from research studies suggests that pre service teachers with digital competence will design lessons that promote active learning, cooperation and differentiation (Abhinandan, 2024). Self-reported measures of competence are widely used in different studies rather than a systematic analysis of lesson plans. Moreover, the research overlooks the mediating processes through which digital literacy leads to better planning. This assumption restricts comprehension of how and why the digital literacy influences planning competence.

Critical Evaluation of the Existing Literature

The literature has a lot to offer but has limitations. To begin with, most of the studies employ a descriptive or correlational design restricting any causal interpretation. In addition, they often considered digital literacy in rather broad terms, which makes it hard to identify relevant dimensions for lesson planning. In teacher education settings, there are few contextualized studies that examine planning as a situated practice that is influenced by both curriculum requirements and institutional expectations. One other limitation relates to the prominence of Western settings. In developing contexts, the challenges faced by teacher education systems relate to infrastructure, curriculum, and professional suppor (Voisin et al., 2023)t. The limited inclusion of such contexts hampers the generalizability of existing findings. Moreover, only a handful of studies scrutinize the fact that they problematize how digital literacy is constructed in teacher education policies and curricula.

Research Gaps and Emerging Directions

There are several gaps in the literature, the review suggests. Research that looks at lesson planning competence as an outcome of digital literacy development is scarce. There is also a necessity for the analyses of the quality of digitally integrated lesson plans with clear pedagogical criteria. In addition, no adequately theorized research to date explains how digital literacy affects planning competence. The current study is designed to address these gaps specifically in research on lesson planning competence within teacher education and digital literacy as a pedagogically situated construct. This renders an understanding of how digital literacy underpins professional learning in teacher education through a critical and theory informed approach.

Theoretical Framework

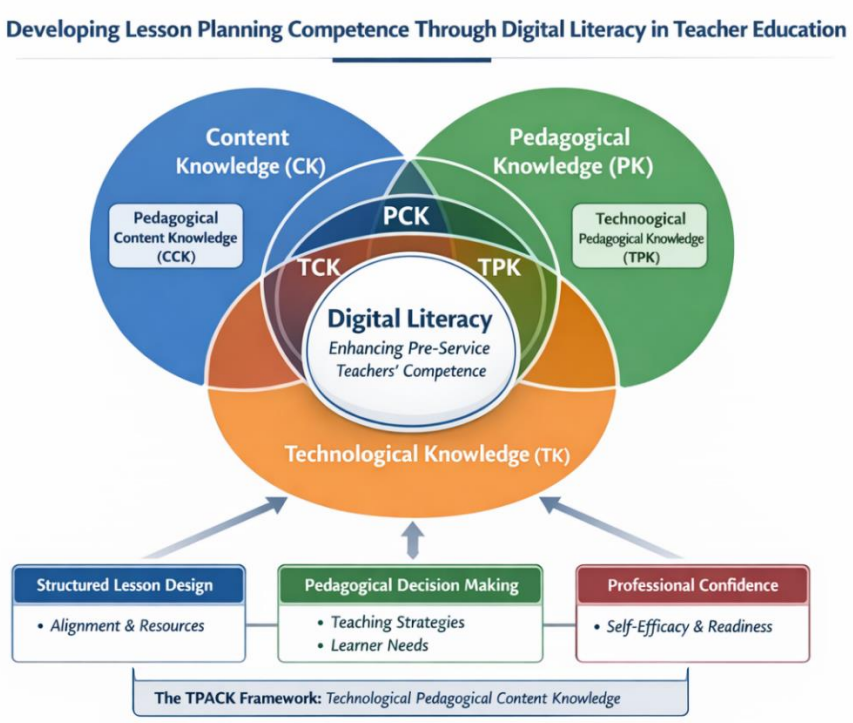


Figure 1: Theoretical Framework for developing lesson planning competency through Digital literacy

The theoretical framework of this research is based on figure 1 TPACK (Technological Pedagogical Content Knowledge) model which specifies digital literacy is a core driver that integrates technology, pedagogy and content and helps the pre-service teachers enhance lesson planning competence. The framework shows how one element interacts with the other to deliver effective teaching.

1. **Content Knowledge (CK)**: This domain refers to teachers' knowledge of the content. In case of lesson planning, CK makes sure that the lessons are accurate, curriculum based, and complete. A strong content knowledge (CK) of pre-service teacher allows them to write appropriate learning objectives and select subject content.
2. **Pedagogical Knowledge (PK)**: PK is the teachers' knowledge about teaching strategies, learner engagement and behavior management. The framework shows that digital literacy acts as a PK enhancer whereby teachers can make the right decision on teaching strategy and address diverse learners' needs. Digital technologies provide ideas for pedagogical planning. for example, teaching strategies and learner needs.
3. **Technological Knowledge (TK)**: TK emphasizes the capability of teachers to use digital tools and resources. As seen, integration of technology with pedagogy and content will not only bring about change but will also measure the effectiveness of this integration process. Teachers who have the competence in TK can use the multimedia and make a low-cost interactive lesson plan and organize the content accordingly.
4. **Intersections (PCK, TCK, TPK, and TPACK)**

a) **PCK:** It is the blending of content and pedagogy. It will show how teachers teach the subject matter.

b) **TCK:** Integrative use of technology and content enables the manifestation of subject knowledge.

c) **TPK:** It merges technology with pedagogy to help teachers use digital tools in teaching methods.

d) **TPACK:** The intersection at the center corresponds to the full combining of all three domains which is enhanced by digital literacy. With this addition, pre service teachers can plan structured lessons which are pedagogically sound and border with technology.

5. **Outcome Domains**

The framework connects TPACK and digital literacy with three important outcomes.

a) **Structured Lesson Design:** The ability to use technology to define learning goals, activities and assessment. It helps create a more coherent lesson.

b) **Pedagogical Decision Making:** In order to properly lesson plan teachers make informed choices.

c) **Professional Confidence:** Teachers are prepared for challenges in modern classrooms with greater self-efficacy and readiness.

The framework suggests that digital literacy is not merely a skill and enhances a teacher's ability to weave together content, pedagogy, and technology. It equips pre service teachers with the understanding, abilities, and assurance necessary for designing lesson plans suited to current educational needs. A visual connection of the TPACK Domains with the outcomes of Lesson Plans shows the interaction of knowledge, practice and profession.

Research Methodology

Research Design and Approach

This research used qualitative research design to find out how future teachers' digital literacy development contribution to lesson planning competence development. The research adopted a qualitative approach since it is concerned with exploring the experiences, perceptions and meanings held by participants. Interviews were seen as the most suitable approach as they provide an opportunity to explore in depth how pre service teachers interpret digital literacy and how they use it during lesson planning. The interpretivist paradigm assumed that professional competence was a social construct formed through the individual lived experiences of people.

Research setting

The study was carried out in the Department of Education of University of Narowal. The population was chosen in that it had a teacher education program with adequate structure where heuristic, digital literacy and lesson planning were addressed officially in the course and teaching practice. The research was carried out in this department because the participants were having hands on training for developing pedagogical competencies during their pre service training.

Participants and Sampling

The final year of a teacher education program was registered by fifteen pre service teachers select the sample through purposive sampling technique. Participants who had studied courses on educational technology and lessons planning were involved on a purposive basis. This sampling strategy ensured that participants had relevant experience with digital tools and instructional planning. The sample size was adequate to reach saturation as there were repeating themes during the latter part of data collection. Both male and female students from various academic backgrounds participated, leading to greater depth and variability in perspectives.

Data Collection Method

Data were collected through semi-structured interviews initiated by the researcher. The interviews examined participants' understandings of digital literacy, experiences of embedding elements of digital technologies into lesson planning, and the perceived influence of digital literacy on their planning competence. Researchers were designed for interviewees according to the research question and the theoretical framework. Open ended questions encouraged the participants to discuss the topic reflecting deeply. Each interview was conducted face to face at the university for a period of forty five minutes to sixty minutes. With permission

from the participants, the entire interview was audio recorded and transcribed verbatim later on.

Data Sources and Instruments

The transcripts of interviews obtained from the semi-structured interviews were the primary source of data. The study solely depended on qualitative data obtained through primary sources and not secondary documents. The use of interview protocol as the main instrument was highlighted after two experts in teacher education provided feedback on its content validity. The clarity and research objectives of the paper underwent minor revisions. Through field notes, researcher also recorded contextual observations and first analytic reflections.

Data Collection Procedure

Data collection was done across six weeks of an intervention. The official department contact was used for communication and the participants were informed about the study. Informed consent was obtained through a written consent before starting the interview with the participants. To minimize disruption to academic activities of the participants, interviews were fixed at their convenience. Subsequent to every interview, recordings were safely archived and transcribed. To ensure accuracy and understanding, the researcher repeatedly reviewed the transcripts.

Data Analysis

The interview data was analyzed using thematic analysis. The analysis was an iterative exercise of becoming acquainted, coding , developing themes , and interpreting the data set. The researchers first created more specific initial codes inductively from the data and organized them into broader codes. The two codes were related to digital literacy and lesson planning competence. The themes were interpreted by linking the narratives of the participants to the knowledge domains that are integrated through TPAC. Confidence in the accuracy of the findings was boosted through member checking with selected participants.

Ethical Considerations

Ethical approval was obtained from the appropriate academic head, University of Narowal. Upon being recruited for the study, participants were informed that their participation in the study was voluntary and they could withdraw at any point in time. The respondents' confidentiality and anonymity is guaranteed through pseudonyms and the removal of identifying information in the transcripts. All data will be kept safe and used for research only.

Limitations of the Methodology

The small sample size and unicentric nature of the study limit its transferability. The bias of self-report data may have made the pocket money more subjective and subjective social desirability. Furthermore, since there was no observational data, conclusions were drawn from participants' comments rather than from lesson plans or classroom practice. In spite of these limitations, the methodology was appropriate in respect of the study's exploratory aims

Data Analysis and Findings

Analysis of interviews with fifteen pre - service teachers revealed the contribution of digital literacy in the development of lesson planning competence. Through thematic analysis, patterns were revealed that explained participants' experiences and meaning making. The findings related to digital literacy were classified into three key themes: support for a structured approach to lesson design; digital literacy, pedagogical decision making; and professional confidence regarding planning lessons. Every theme was enriched with sub-themes and quotes from the participants.

Theme 1. Digital Literacy as a Support for Structured Lesson Design

Sub-theme 1: Improved Alignment of Objectives, Activities, and Assessment

Participants often mentioned that digital literacy helped them create more coherent lesson plans. Prior to the acquisition of the digital skills, many stakeholders were making use of generic templates. Most could not see how the learning

goals connect to the teaching activities or the assessment task. As one participant said, "*When I was taught to use the platforms, I began with objectives and lesson planning, followed by activity selection.*" Meaning, the planning was no longer ad hoc, but systematic design. Another participant reported, "*Everything which I had planned to teach the students to clarify their ideas was taken from the digital tools.*" According to a study, the digital denser they become in lesson design the better he or she can plan introduction, main activity and assessment. This shows that digital literacy reinforces logic of alignment. Utilizing the online planning tools and templates, pre-service teachers were able to imagine the layout of a lesson in a way they hadn't before.

Sub-theme 2: Access to Diverse Instructional Resources

Learners stated that digital literacy increased their instructional resources. A pre-service teacher stated, "Previously, my lesson plans only required the textbook. After acquiring digital skills, my lesson planning now incorporated videos, online activities and presentations." This response showed how digital literacy is helping broaden the content base of lesson planning, enabling more diverse and engaging lessons. Another participant commented, *"I found sites with digital resources that have activities. I organized lessons with interactive quizzes and virtual examples which I could not have used otherwise."* These statements illustrated that access to digital resources enriched the content and interactive potential of lesson plans. Digital Literacy thus served as a gateway to planning options that were pedagogically varied.

Theme 2. Digital Literacy and Pedagogical Decision Making

Sub-theme 1: Selection of Appropriate Teaching Strategies

Participants described how digital literacy affected their teaching strategies when planning a lesson. Many educators told us that using digital tools made them think more deeply about pedagogy. One participant noted: *"When I was planning lessons that involved digital tools, I thought more about which strategy suited the topic loading, discussion, group work, multimedia explanation,"* which pointed to the idea that digital literacy promoted reflective strategic thought. Another participant quoted, *"Digital literacy made me think about students' understanding. I created assignments that encouraged interaction instead of just giving lectures."* This reflected a shift from teacher to students, due to the affordance of the digital medium. Participants explained that digital tools might assist collaborative and interactive methods if deliberately integrated.

Sub-theme 2: Consideration of Learner Needs

According to participants, digital literacy assisted them in planning lessons to meet learners' needs. One participant explained, *"I designed different activities for slow and fast learners using digital content. My earlier lesson plans did not allow this."* This suggests that their digital literacy was enabling differentiation of planning, to cater for different pacing and styles of student learning. Another respondent expressed, *"The availability of digital resources has enabled me to incorporate captions and visual aids for students who face challenges related to language."* I planned with greater empathy and awareness of inclusive planning, where tools were used to support accessibility and understanding. Digital literacy has thus contributed to a more subtle understanding of learner diversity in planning.

Theme 3. Professional Confidence in Lesson Planning

Sub-theme 1: Increased Confidence in Planning with Technology

As their digital literacy enhanced, growth in confidence was reported by many. One participant shared, "I feel more confident now that my lesson plans look professional and well organized now that I include digital elements." This reflects how a sense of professional identity is tied to competence in tech use. A participant said, *"I used to get confused while planning."* The ability to plan independently with increased confidence was observed during the field trip. This was made possible through digital literacy.

Those who took part in the research linked it with preparedness for teaching.

Sub-theme 2: Readiness for Modern Classroom Demands

Participants aligned their digital literacy to expectations for modern classrooms. As per one feeling, teachers are being expected by school. As per certain job profiles, teachers must have digital literacy. *"Digital literacy helped me plan lessons according to modern classroom needs."*

Another participant commented, said, *"Digital literacies made me feel ready for future teaching. I am confident that I can design lessons which parents and principals will value due to their inclusion of meaningful use of technology"*. This showed that digital literacy not only impacted planning competence but also perceived employability and relevance.

Based on the analysis, it was shown in figure 1 that digital literacy may develop lesson planning competence through three interconnected levels. It improved lesson planning by enhancing the matching of objectives, activities and assessment for better structural coherence. Moreover, it stimulates pedagogical decision making through reflection on choices of instructional strategies and responsiveness to learner needs. It also improves the professionalism in the pre service teachers as they now see themselves as teachers capable of designing tasks for a contemporary classroom. According to the narratives of the participants, digital literacy benefitted them pedagogically as well as technically. It influenced the way the participants conceptualized and designed their lesson plans and justified it as well.



Figure 2: Thematic analysis findings

The figure 2 thematic hierarchy diagram organizes the qualitative findings and it is suitable for dissertation publications or journal submissions. This design represents the analytical process applied in the study of how digital literacy is designed to enhance the lesson

planning competence. The diagram presents the research data in three main themes, plus sub-themes and participant quotes that connect the raw data with the findings.

Top-Level Hierarchy: Core Themes

The main axis of the diagram presents three high-level themes marked by color to enhance clarity and concept separation. The Blue branch depicts a technical structure that combines objectives with activities to facilitate assessment, and provides access to the tools required for teaching. There is a clear connection between this finding and that of participants who reported that digital literacy assisted them in organizing their lessons in a more sequential manner and embedding a range of teaching materials (*e.g., "Digital tools have helped me to organize my lesson step by step..." P4; "I included videos and online activities in my planning" P7). The Green branch relates to the cognitive and reflective aspects of planning and includes pedagogical decision making and empathizing with the learner's needs. Participants stated: "I thought of activities that made interaction possible and not just lecture" (P10); "I planned different activities for slow and fast learners by using digital content" (P3). The outcomes (emotional, professional) obtained from the training were more confidence and ability to teach in modern classrooms. 'I feel more confident now as my lesson plans look professional' (P2) and 'Digital literacy helped me plan lessons as per modern classroom needs' (P11) are some instance.*

Secondary Level: Sub-Themes

The sub-themes appear in rounded nodes under each core theme to elaborate on the logical relationship from a concept to its manifestation. As an example, the sub-themes Teaching Strategies and Learner Needs under Pedagogical Decision Making will capture how digital literacy influenced the choice of teaching strategies and learner diversity. Moreover, under the theme of Technical Structure, the sub-theme of Alignment, and the sub-theme of Resources demonstrate how digital literacy enabled alignment of pedagogical and assessment strategies and access to a wide range of learning resources.

Tertiary Level: Participant Voice

The light-boxes at the bottom contain concrete quotes from participants. This layer proofs each theme and sub-theme with evidence to ensure analytical transparency. The diagram codes participants as P1, P2, etc. to maintain anonymity; however, as readers see patterns across multiple participants, this enhances the validity of the analysis.

Visual Symbolism and Analytical Flow

Arrows and connectors indicating the top-down influence reflect the conceptual argument that the core competence of digital literacy leads to the behavior or decisions of DL as reflected in lesson planning The use of sufficient white space enhances readability. It also makes the diagram fit for academic presentation and avoids cognitive overload. Moreover, it does not hamper analysis.

Academic Significance

The figure 2 illustrates how raw qualitative data has been translated into themes in the study. It illustrates the interdependence of digital literacy and competences in lesson planning which draws upon technical skills, reflective and pedagogical practices and professional confidence. Direct quotations act like glue to connect evidence and interpretation making the findings more credible. It enables reviewers and readers to scan the message easily. Thus providing an insight into the study's findings in a compact and organized way. This figure depicts the results of the thematic analysis of interview data outlined above. The participants' accounts are at the heart of each theme, be that structural technicality, pedagogical decision making or professional confidence. All these themes indicate that digital literacy is an empowering and en-traumatizing competence in teacher education contexts.

Discussion

The results of this study give strong proof that digital literacy influences lesson planning competence of pre service teachers significantly. Thematic analysis showed three themes were interrelated with each other namely, technical structure of lessons, Pedagogical decision making

and professional confidence. These elements have been selected in accordance with the research objectives which looked to determine how Digital Literacy impact lesson planning does and fits well within the TPACK framework which highlights their importance in teachers practice (Koehler, Mishra & Cain, 2023).

Digital Literacy as a Support for Structured Lesson Design

An early theme is that digital literacy makes a technical contribution to the structure of lesson planning. Overall, participants emphasized how access to digital tools ensured better alignment of learning outcomes, teaching activities and assessment. One participant said, *"Digital tools helped me set up my lesson step by step."I found it easier than before to plan the introduction, major activity and assessment" (P4).* It shows that digital literacy allows the pre-service teachers to design more systematic and coherent lesson plans instead of just following templates. Further, digital literacy aided access to varied teaching resources. Participants reported utilizing videos, interactive simulations, and web-based activities to enrich lesson content. This finding agrees with the claim made by Falloon (2023), which states that teachers' digital literacy expands their pedagogical repertoire and affords the potential for multimodal lesson designs. When pre-service teachers used the resources for planning, it showed their ability to modify prescribed textbooks into more meaningful learning experiences. Essentially, it applies the TPACK framework, which proposes that more technological knowledge contributes to the more effective delivery of content and pedagogy.

Digital Literacy and Pedagogical Decision Making

The second theme focused on the cognitive processes of planning lessons. Participants' choice of teaching strategies and addressing diversity in learners is stated to be enhanced by digital literacy. Several participants noted that digital tools prompted them to think and deliberate more when making decisions. One participant commented, *"I found when I was planning lessons using a digital tool, I was giving more thought to which strategy suited the lesson, like discussion, group work, multimedia explanation...."* (P10). They also utilized digital resources to differentiate their learning activity for learners. One participant explained, *"I planned different activities for slow and fast learners with the help of digital content (P3).* The findings indicate that digital literacy enhances not only technical execution but also higher order pedagogical reasoning. This argument is in accordance with Koehler et al. (2023), where teaching by technology with correct pedagogical knowledge requires pedagogical knowledge and technological knowledge. And it shows that digital literacy provides reflective planning practices.

Professional Confidence and Readiness for Modern Classrooms

Theme three shows the emotional and professional effects of digital literacy. The participants reported feeling more confident of preparing lesson plans and being ready for contemporary classrooms. As one participant claimed, "Now I feel more confident because when I add digital elements to my lesson plans, they look professional and well organized" (P2). Digital literacy helped me to plan lessons according to the needs of modern classrooms. (P11) The findings reveal that digital literacy contributes to teachers' self-efficacy, which is an important aspect of professional competence (Darling-Hammond et al., 2022). According to Bandura's Social Cognitive Theory, the experience of successfully embedding technology in lesson plans strengthen one's belief in their professional skills and motivate teachers to continue with innovations. The development of professional confidence was not merely a product of a competence-based learning experience but rather a stimulus for continued enhancement of a teacher's practices.

Integration with the TPACK Framework

This findings aligned with TPACK framework whereby effective teaching and learning requires the integration of technological, pedagogical, and content knowledge. Participants' experiences

demonstrate that digital literacy improved their technological knowledge, which promoted reflective pedagogies and strategic planning of content. Through the themes of structured planning, pedagogical decision making and professional confidence, it is illustrated how TPACK works in practice. This goes to show that digital literacy is not simply a technical skill but a pathway towards integrated professional competence.

Implications for Teacher Education

The Findings have Various Practical Implications Initially, the organizing of any course for teacher education programs should comprise the embedding of digital literacy development in lesson planning courses without any technology-related modules. Moreover, the group made a recommendation that pre service teachers be involved in authentic, practice-based tasks, with pedagogical plans integrated for the use of digital tools. In order for technical competence to translate into professionalism and reflective teaching, ongoing support and opportunities for reflection are required. Based on the findings of this study, it can be concluded that digital literacy contributes significantly to the competence of lesson planning through the achievement of structural coherence, pedagogical decision making, and professional confidence. Contributions in the TPACK framework highlight the transformative potential of digital literacy in teacher education. Through integrating theoretical notions with practical experiences of the participants this study sheds light on how technology is facilitating the development of essential professional competencies in pre-service teachers.

Conclusion

The research analyses that how Development of lesson planning competence through Digital Literacy of Pre Service Teachers (PST) in Department of education University of Narowal. In keeping with the purpose of the research, and with guidance from the Technological Pedagogical Content Knowledge (TPACK) framework, qualitative interviews were conducted in this study. Analysis that dealt with various themes showed how digital literacy can influence the competencies in the planning of lessons, through three connected dimensions which include technical structuring of lessons, making pedagogical decisions and professional confidence.

1. The first dimension is technical structure. We average the responses of pre service teachers to see how digital skills and knowledge help them design lessons where learning objectives, teaching activities, and assessments can all be better aligned. According to the participants, the access to digital tools and resources enabled them to develop organized, logical, and content-rich lesson plans. This shows that digital literacy is not just a technical ability but rather a basic key competency that organizes the design and clarity of lessons.
2. The second dimension, pedagogical decision making, showed that digital literacy was a reflective and strategic process. Teachers reported that utilizing digital tools prompted them to be thoughtful in their teaching strategy selection and consideration of learner needs. This study confirms that observation as suggested by TPACK framework when technological knowledge interacts with pedagogical knowledge an effective lesson plan will result. Moreover, digital literacy enables differentiation, affording teachers options to meet the varied pace of learning, language and engagement of students.

3. The third dimension, professional confidence, revealed that digital literacy increased pre service teachers' self-efficacy and readiness to handle the demands of the modern classroom. The participants noted that their planning and delivering lesson confidence increased along with readiness to meet delivery expectations in the tech-entered classroom. The Social Cognitive Theory states that if you successfully learn to use incentives and integrate them into your practice, your professional self-belief and motivation will increase.

The study indicates that TPACK is useful for learning about the impact of digital literacy on lesson planning. The findings reveal that the

knowledge of technology is not enough. This technology needs to be integrated with pedagogical knowledge and content knowledge to develop professional competence. The knowledge areas were connected through digital literacy, enabling the pre service teachers to design structured, pedagogically sound, and learner-responsive lessons. There are several practical health implications of this study. The training for lesson planning should integrate digital literacy, rather than just being an added on technical skill. By indulging in practice-based activities where the student-teachers design digitally integrated lessons can enhance their technical and pedagogical competence. Moreover, confidence and critical decision-making abilities can be further consolidated through reflective exercises and mentoring. Institutions should also ensure adequate access to digital resources and supporting systems for sustainable competence development. Though good, the study takes place in a single university with merely fifteen participants. Thus, it has limited generalization value. The results might not be universal in nature as to context or teacher education.

For future research, this study could be conducted on multiple institutions and observational analysis of lesson implementation can be done which can triangulate self-report data. Longitudinal studies could also examine whether teacher education digital literacy development translates into classroom practice and student learning outcomes. The finding of the research is digital literacy could be a critical enabler of lesson planning competence. Digital literacy equips student teachers with the foundational competencies to respond to contemporary developments, through improved structural coherence, reflective pedagogical decision making and professional confidence. This study illustrates that TPACK can be a guideline for incorporating technology in pedagogical planning. The study's findings underscore the need for teacher education programs to integrate digital literacy as a core component of teachers' professional development to enable future teachers to design efficient and inclusive tech-enhanced learning experiences.

Recommendations

In light of the results from the study pertaining to the development of lesson planning competence through digital literacy in teacher education, the following recommendations are put forward.

1. Teacher education programs should not treat digital literacy as just a technical skill. Instead, it should be embedded in lesson planning courses. Pre service teachers should learn that digital tools have a very crucial role not just in delivering content, but also in organizing, designing and evaluating the lesson plans.
2. Institutes should guarantee pre-service teachers' accessibility to various digital resources, such as interactive platforms, multimedia content, and lesson planning software. When teachers are exposed to resources like these, they can create more engaging and inclusive lessons that meet learner needs.
3. Educational training programs for teachers should promote reflective type exercises and practice-oriented lesson planning tasks uses of technology. Pre service teachers can better connect their digital skills with pedagogical decision making through peer review of digital lesson plans, simulated teaching and guided reflection.
4. Mentorship programs and support from experienced educators could enhance the confidence of pre-service teachers in using digital tools. Feedback and guidance on integrating technology into lesson plans can enhance self-efficacy and professional competence.
5. Teacher training should include designing lessons as per classroom expectations and inclusion of differentiated instructions, interactive learning, and assessing through technology. This readies them to face the challenges of schools that are increasingly more digital in their teaching.

The recommendations aim to ensure that the teacher education program develops the lesson planning competence and digital literacy as a professional skill.

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