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Perspective of Teachers on Technology Integration in the Classroom Setting

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***Abstract*—** This research involved 16 teachers from schools in the Bulan III District, chosen through purposive sampling, to investigate their perceptions of technology's impact on student engagement and motivation. Data was gathered via focus group discussions (FGD), where teachers expressed those interactive tools, such as multimedia and educational apps, can enhance lesson engagement but may also lead to distractions if not managed effectively. To address the challenges of technology integration, teachers collaborate with colleagues and instructional technology specialists, fostering a supportive environment focused on problem-solving and adaptability.

***Keywords*—** Collaboration, Data Analysis, Interactive Learning, Professional Development, Student Engagement, Technology Integration.

I. INTRODUCTION

In the contemporary landscape of education, the integration of technology into classroom instruction has become a critical area of focus worldwide. This dissertation delves into the perspectives of teachers regarding the adoption, challenges, and impacts of technology in educational settings. From global trends to localized practices, understanding how educators perceive and utilize technology is essential for shaping effective teaching strategies and enhancing student learning outcomes in the digital era.

The integration of technology in education has fundamentally transformed how teaching and learning occur in classrooms worldwide. With the rise of digital tools, schools, and institutions are now able to offer more interactive and engaging learning experiences, catering to diverse student needs. Advanced technologies, such as online learning platforms, educational software, and multimedia resources, allow for a more dynamic approach to instruction that fosters collaboration and active participation. These tools also provide personalized learning pathways, enabling students to progress at their own pace and receive individualized feedback. This global shift, which accelerated during the COVID-19 pandemic, has prompted a widespread rethinking of how education is delivered, emphasizing the need for adaptive digital solutions in both in-person and remote settings

In countries with advanced technological infrastructure, teachers have access to cutting-edge platforms that support collaborative learning, real-time feedback, and remote education. The shift toward a technology-driven approach, further intensified by the pandemic, has sparked a global conversation about how to best implement and sustain this transformation in classrooms. However, while technology promises to revolutionize education, the effectiveness of this integration largely depends on teachers—their readiness, perceptions, and the support they receive in navigating this new landscape.

Internationally, the use of technology in education is being acknowledged as a transforming force. Countries such as Singapore have devised extensive initiatives to use technology in the classroom to improve teaching effectiveness and student engagement (Ministry of Education, Singapore, 2023). In contrast, in European countries such as Finland, which are known for their advanced educational practices, incorporating technology is seen to develop student creativity and critical thinking (European Commission, 2022). These multinational endeavors highlight the various techniques and benefits of incorporating technology in different educational contexts around the world.

At the national level, countries such as the Philippines are aggressively exploring measures to increase digital literacy and integrate technology into education. The Department of Education (DepEd) has created the Digital Rise Program, which aims to provide teachers and students with digital skills and resources for 21st-century learning (DepEd Order No. 6, s. 2022). Furthermore, national policies such as the Philippine Digital Education Transformation Agenda (PDETA) provide foundations for the seamless integration of technology at all levels of education, including remote

and blended learning environments (Department of Education, Philippines, 2023). These efforts are critical in providing educators and students across the country with the crucial digital skills and tools required for modern learning settings.

Regional priorities and obstacles shape initiatives to integrate technology into classrooms in the Division of Sorsogon, which is in the Philippines' Region V. Sorsogon's educational landscape includes a mix of urban and rural locations, each with unique infrastructural and socioeconomic factors influencing technology adoption. Initiatives like the Division's ICT Integration Plan seek to standardize digital tools and resources throughout schools, like the Department Computerization Program, ensuring fair access and better learning experiences for students (Division of Sorsogon, 2023). Understanding these localized dynamics is critical for developing educational techniques that are tailored to the specific needs of instructors and students in Sorsogon province and other divisions throughout the region institutions.

In the Division of Sorsogon, technology integration in the classroom reflects both the opportunities and challenges faced by educators in a predominantly rural province. As part of the national effort to modernize education, schools in Sorsogon have been gradually incorporating digital tools into their teaching practices. Initiatives from the Department of Education (DepEd), such as the Digital Rise Program, aim to support teachers in adopting technology for instructional purposes, improving the quality of education in the province. However, the level of integration varies across the division, with urban schools often having better access to digital resources compared to their rural counterparts. Teachers in Sorsogon face a unique set of challenges, particularly in areas where infrastructure, such as stable internet connectivity, is limited, and digital devices are not readily available for all students.

In the Bulan III District under the Division of Sorsogon, technology integration in the classroom is emerging as a vital component of modern educational practices. As part of the broader national and regional efforts to enhance digital literacy, schools in Bulan III have begun adopting various technological tools to improve teaching and learning experiences.

Teachers in the Bulan III District are increasingly finding innovative ways to incorporate technology into their lessons, recognizing its potential to enhance student engagement and streamline instruction. Schools have introduced blended learning models, combining traditional face-to-face teaching with digital platforms, especially in response to the disruptions caused by the COVID-19 pandemic. However, the success of these initiatives depends largely on the availability of resources, including stable internet connections, functional devices, and continuous professional development for teachers. In many cases, educators must also adapt their teaching strategies to ensure that students from remote or underserved areas are not excluded from technology-enhanced learning opportunities.

In conclusion, the integration of technology in the classroom setting represents a dynamic and evolving process influenced by international trends, national policies, regional dynamics, and local school contexts. This dissertation seeks to provide a comprehensive exploration of teachers' perspectives on technology integration in DepEd Computerization Program package recipient schools in Bulan III District, Division of Sorsogon, Region V, Philippines. By examining these perspectives across multiple levels of educational governance and practice, this study aims to offer practical recommendations for fostering effective and equitable technology integration strategies that support enhanced teaching and learning outcomes in Philippine schools.

II. METHODOLOGY

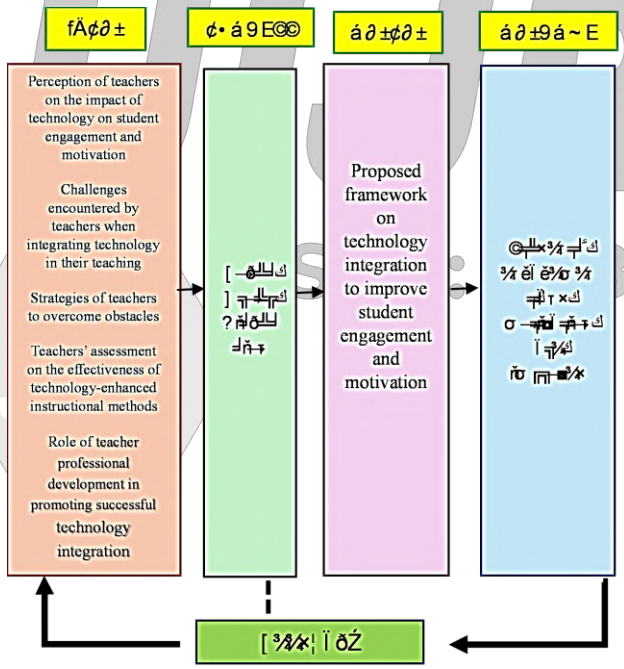
This paper is a qualitative type of research employing phenomenological research exploring the perspective of teachers on technology integration in the classroom setting. Focus group discussions were used to acquire diverse viewpoints and develop dynamic interactions among educators.

This strategy encouraged the communal exploration and validation of shared experiences, allowing participants to articulate and refine their ideas on technology integration through discourse and debate. The participatory aspect of focus groups allowed participants to reflect on their activities, discuss ideas, and produce insights jointly, increasing the depth and breadth of the data collected.

The study was intended to capture a varied range of viewpoints and insights into the use of technology in classrooms by assembling 16 teachers from chosen schools in the Bulan III District who were recipients of the DepEd Computerization Program.

The researcher, with the assistance of the adviser, drafted the focus group discussion (FGD) questions, ensuring that their content was aligned with the research problems addressed in this study. With the research instrument finalized and prepared for administration, the researcher proceeded with the formal request for data collection. A letter of request to administer the questionnaire was addressed to the Superintendent of the Schools Division of Sorsogon and was personally delivered by the researcher to the division office for signature and approval. Once the request was granted, the researcher then sought permission from the District Supervisor, followed by the school head, and finally, the teachers who would be participating in the focus group discussion (FGD). To ensure proper communication and documentation, individual letters were distributed to each party concerned, outlining the purpose and procedures of the study. Upon securing all necessary approvals, the focus group discussion was successfully conducted in July 2024, adhering to the planned schedule and research protocols.

After wrapping up the Group Discussion (FGD), the researcher carefully went through every step to make sure the collected data was well-analyzed and truly reflected the participants' insights. The recorded discussions were transcribed word for word, ensuring that every response was accurately captured. After that, the researcher reviewed, organized, and refined the data, making sure it was clear, consistent, and ready for analysis. From there, the focus shifted to coding and thematic analysis, where meaningful ideas, recurring patterns, and emerging themes were identified and grouped based on their connection to the research questions. To strengthen the reliability of the findings, validation techniques such as member checking and triangulation were used, allowing for comparison with other data sources and gathering participant feedback. Once everything was carefully examined, the key themes were woven into the study's results and discussion, enriched with direct participant quotes and supported by relevant literature. This thorough process ensured that the findings truly captured the essence of the discussion and provided meaningful insights into the research objectives.



Conceptual Paradigm

III. RESULTS

The study used the qualitative research method since a

Focused group discussion FGD was utilized in gathering the primary data as reflected in the problem. The participants were 16 teachers from chosen schools in the Bulan III District who were recipients of the DepEd Computerization Program.

Based on the analysis and interpretation of data, the salient findings of the study are as follows:

1. Teachers believe technology has a complex impact on student engagement and motivation. Interactive

resources, such as multimedia and educational apps, can make lessons more interesting and dynamic, hence increasing student engagement. However, if not used properly, these technologies can lead to distractions and decreased focus. Furthermore, while technology can boost motivation through individualized learning, differences in access and technical concerns can pose challenges, necessitating careful management to preserve its beneficial impacts.

2. Teachers frequently interact with colleagues and instructional technology specialists to troubleshoot problems and enhance their techniques, forming a supportive network to tackle technical hurdles. Another typical approach is to adapt lesson plans on demand in reaction to technological difficulties, displaying teachers' flexibility and resourcefulness. Also, teachers strive to manage time restrictions by prioritizing key tech-related duties and looking for methods to streamline their use of technology, ensuring that it complements rather than disrupts their teaching.
3. Technical concerns, such as software failures or connectivity challenges, regularly disrupt lessons and can be difficult to manage. Many teachers struggle to balance the added burden that comes with embracing technology, which includes creating digital products and resolving issues while teaching. Moreover, there are issues regarding digital equity, as students' differing degrees of access to devices and dependable internet can impede the successful deployment of technology in schools.
4. Teachers evaluate the effectiveness of technology-enhanced educational approaches by regularly monitoring student involvement and participation throughout the lesson. They assess how well technology supports learning objectives and whether it enhances student performance and comprehension. Many teachers utilize digital technologies to monitor progress and collect statistics on student accomplishment, but this can increase their burden and necessitate careful analysis. Despite these efforts, some teachers find it difficult to assess the true influence of technology on learning outcomes, especially when balancing many measures and responding to ever-changing technology tools.
5. Teacher professional development is critical for successful technological integration because it equips educators with the necessary skills and confidence to use digital resources efficiently. However, the uneven quality and availability of training can restrict its effectiveness, making it difficult for teachers to keep up with new technologies. While continual professional development is essential, limited access to high-quality training might restrict the full incorporation of technology into teaching methods.
6. Teachers can adopt the Technology Integration Framework using the Waterfall Model as a suitable approach to improve student engagement and motivation. Through the systematic and sequential stages of the Waterfall Model—beginning with Requirements Analysis, followed by System Design, Implementation, and Verification—the framework ensures that the needs and challenges faced by teachers in integrating technology are addressed comprehensively. The model allows for careful planning, tailored professional development, and structured deployment of technology in the classroom, resulting in a smoother transition for educators. Furthermore, the ongoing evaluation and feedback mechanisms embedded in the Verification phase ensure that student engagement and motivation can be continuously monitored and improved. By providing teachers with targeted support and resources throughout the integration process, this framework enables a more effective use of technology, ultimately enhancing students' learning experiences.

IV. DISCUSSION

The presentation of the data includes the following topics: 1) impact of technology on student engagement and motivation; 2) strategies used by teachers to overcome obstacles related to technology integration; 3) challenges that teachers face when integrating technology into their teaching practices; 4) how teachers assess the effectiveness of technology-enhanced instructional methods; 5) roles of teacher professional development play in promoting successful technology integration; and 6) proposed technology integration framework to improve student engagement and motivation.

1. Impact of technology on student engagement and motivation

In today's digital age, the influence of technology on teachers' strategies for fostering student engagement in the classroom has become increasingly prominent. Teachers have leveraged interactive learning tools and personalization to create tailored educational

experiences that resonate with individual student needs and preferences. These innovative approaches not only enhanced motivation and participation but also encouraged active involvement in learning processes.

Personalization enabled technology to adapt to individual learning styles, demands, and paces, delivering tailored feedback and resources. 5 participants emphasized the use of technology for interactive and personal learning experiences. Tools like educational apps, online resources, and multimedia content allowed teachers to cater to individual student needs and enhance engagement.

As educational technology advances, creating a collaborative environment in which instructors, students, and educational technologists can work together becomes increasingly important. This collaboration not only allows for the smooth integration of digital tools but also encourages a more dynamic and interesting learning experience. In line with this, 9 participants highlighted technology's positive impact on collaboration and communication. It provides platforms for virtual group work, real-time interaction, and shared resources, enhancing students' ability to work together effectively.

Engagement extends beyond just observation to active engagement and input from both students and teachers. This dynamic approach enables the continual improvement of technology integration solutions, ensuring that they satisfy learners' different demands and improve educational outcomes. 8 emphasized the importance of observing students during lessons. They look for changes in engagement, enthusiasm, and active participation. Observing students' curiosity, willingness to explore topics, and overall interest helps gauge the impact of technology

2. Strategies used by teachers to overcome obstacles related to technology integration

Strategies for overcoming obstacles to technology integration focus on practical methods for dealing with the obstacles that arise when bringing technology into education. While technology has the potential to improve learning, its implementation is frequently hampered by barriers such as a lack of access, insufficient teacher preparation, and opposition to change. This theme delves into measures such as professional development, equal access to technologies and the internet, and cultivating an innovative culture.

Resource assessment is the systematic evaluation of the availability, quality, and exploitation of various educational assets, such as financial resources, materials, and staff. Prioritization then entails carefully deciding which resources should be deployed first to maximize impact and efficiency. This dual strategy assists institutions in identifying gaps, optimizing resource allocation, and making informed decisions that support their strategic goals. In connection with this 4 participants emphasized assessing available resources, including devices, software, and internet connectivity. Prioritizing involves addressing critical issues, seeking external support, and considering feasibility.

Reflection entails critically evaluating one's own experiences, activities, and outcomes to obtain a better understanding and identify opportunities for improvement. Feedback, on the other hand, entails getting constructive input from others that provides new insights and suggestions for improvement. Reflection and feedback work together to form a dynamic cycle of self-assessment and external evaluation, fostering a learning and growth culture. Along with this 3 participants highlighted the importance of reflecting on personal experiences and seeking feedback from students, colleagues, and administrators. This helps identify common obstacles and informs strategies for improvement.

With an increased reliance on digital resources for instruction, unexpected obstacles such as technical failures, network concerns, or limited device access can all disrupt learning. Educators can ensure continuity of training by using alternate methods such as blended learning, offline educational resources, or low-tech technologies. In connection with this 8 participants emphasized the importance of having backup plans and alternative methods. These include using printed materials, hands-on activities, group discussions, and low-tech teaching aids to ensure learning objectives are met even when technology fails.

3. Challenges that teachers face when integrating technology into their teaching practices

As technology continues to transform education, teachers must evaluate and pick the best technical tools and resources to help students learn. This procedure includes carefully evaluating each tool's instructional value, convenience of use, and alignment with curricular objectives and student needs. When selecting digital tools, teachers assess elements such as student engagement, accessibility, and adaptability to ensure

they promote meaningful interaction and support varied learning styles. Furthermore, teachers frequently rely on peer feedback, continued professional development, and evidence-based research to make sound decisions.

Effective technology integration necessitates designing and implementing digital tools and resources that meet the unique requirements of all students, including those with disabilities or varying levels of technological skill. This includes selecting tools with capabilities such as flexible font sizes, screen readers, and alternate input techniques, as well as ensuring fair access to devices and internet connectivity. By emphasizing inclusivity and accessibility, educators may foster a learning environment in which every student can participate and benefit from technological innovations, resulting in a more equal and successful educational experience for everyone. In line with this, 2 participants emphasized considering the diverse needs of learners. They prioritize technologies that are accessible and inclusive, ensuring that all students can benefit.

Schools sometimes encounter problems such as restricted budgets, obsolete gear, and insufficient network capabilities, which can impede the integration of digital tools and resources. Addressing these limits requires strategic planning and investment in infrastructure upgrades, connection enhancements, and the provision of appropriate equipment and support. By overcoming these obstacles, educators may create a more welcoming environment for technology use, ensuring that digital resources are accessible, functioning, and capable of improving the learning experience. Moreover, 9 participants highlighted challenges related to limited access to technology resources. These include inadequate internet connectivity, lack of devices (such as laptops or projectors), and unreliable power supply.

Budget limits may limit the procurement of up-to-date devices, software, and high-speed internet connectivity, all of which are required for efficient technology integration. In addition, inadequate financing may limit the ability to give ongoing technical support and professional development to instructors. Addressing these financial issues necessitates novel solutions such as grant applications, community partnerships, and prioritizing cost-effective technologies. In line with this, 4 participants mentioned financial constraints as a significant barrier. Inadequate funding affects the availability of up-to-date devices and necessary infrastructure.

Managing time limits and workload pressures is a key problem for teachers who use technology in their teaching routines, as balancing these demands necessitates careful preparation and efficiency. Teachers frequently confront the combined constraints of fulfilling their current tasks while also adapting to new digital tools and tactics. Effective time management entails prioritizing activities, optimizing lesson planning, and using technology to automate administrative tasks whenever possible.

Strategic lesson planning is designing instructional activities that use technology to improve learning outcomes and engage students. This includes identifying relevant digital resources, producing interactive content, and smoothly incorporating technology into lesson planning. Moderation, on the other hand, is continuously evaluating and adjusting these plans to ensure they fit curriculum standards and address varied learning needs. In line with this, 3 participants emphasize strategic lesson planning. Teachers carefully integrate technology when necessary, ensuring it enhances interactivity without overreliance. Moderation and purposeful use of tech tools are key.

4. How teachers assess the effectiveness of technology-enhanced instructional methods

When teachers use technology-enhanced instructional approaches, they define and measure student learning outcomes by matching digital resources with specific educational goals. They start by establishing clear, quantifiable goals that include both content mastery and skill development. Technology engages kids and improves knowledge, but it also allows teachers to track progress more efficiently. Teachers receive insights into student learning through digital tests, interactive activities, and data analytics, allowing them to assess not just what students know, but also how they apply that information in dynamic, tech-supported contexts.

Clear objectives and alignment are essential for effective teaching and learning. Teachers provide pupils with a clear picture of what is expected of them and what they must accomplish by setting well-defined learning goals. Alignment guarantees that all aspects of education, from class activities to evaluations, directly support these goals, resulting in a cohesive learning experience. When objectives and instructional tactics are in sync, students are more likely to remain engaged, develop meaningful connections, and demonstrate their learning in ways that appropriately represent their progress. Moreover, 5 participants emphasized setting clear, specific

objectives aligned with curriculum goals. Teachers define what they want students to achieve using technology.

Diverse assessment tools help to capture the full extent of student learning by accommodating different learning styles and abilities. Rather than depending on a single form of evaluation, educators employ a variety of tools—from standard tests and quizzes to portfolios, projects, and digital assessments—to provide a whole picture of student progress. In connection with this, 6 participants highlighted using various assessment tools. These include quizzes, projects, presentations, simulations, written tests, and hands-on activities. Teachers use these tools to measure student learning outcomes.

Observational criteria play a crucial role in assessing creativity, especially in educational settings where students' innovative thinking and problem-solving abilities are key indicators of their development. By establishing specific criteria—such as originality, flexibility, elaboration, and risk-taking—teachers can systematically observe and evaluate how students generate new ideas, adapt to challenges, and express their creativity through various tasks.

Diverse assessment methods offer a more inclusive and complete approach to evaluating student learning by considering students' various needs, skills, and learning styles. Instead of depending primarily on traditional exams, teachers use a variety of assessments, including portfolios, projects, presentations, quizzes, peer assessments, and digital tools, to test a wider range of skills and knowledge. 7 participant highlighted using diverse assessment tools. These include rubrics, the HOTS SOLO method, quality of output, completion of tasks, and evaluation sheets.

Monitoring students' progress is an important element of this process. Teachers constantly observe students to see how they are progressing through the curriculum. This monitoring might take several forms, including informal classroom interactions, an evaluation of student work, or just note how students participate in conversations. Willis (2019) said that tracking progress enables teachers to identify potential learning gaps early on and alter their educational approaches accordingly. Teachers can provide timely interventions by remaining aware of their students' learning trajectories, ensuring that all learners are making progress toward their goals.

5. Roles of teacher professional development play in promoting successful technology integration

In today's quickly changing educational scene, technology-related training has emerged as a critical component for improving teaching techniques and effectively incorporating technology into the classroom. Among the numerous forms of professional development programs, instructors frequently feel that training focusing on practical, hands-on applications and personalized, subject-specific tools is the most effective. Workshops that provide real-world scenarios and interactive sessions on digital resources, adaptive learning technology, and data management systems are extremely popular among educators. Furthermore, training that focuses on collaborative tools and tactics for increasing student participation and assessment through technology is invaluable. These programs boost teachers' confidence while also improving their capacity to give innovative and impactful instruction.

Teachers' assessments of the impact of professional development on their confidence and competence in using technology for instructional purposes are critical for understanding the efficacy of such training programs. Professional development programs geared to improve technology skills can have a substantial impact on how instructors incorporate digital resources into their teaching practices. Teachers who are confident and proficient in using technology are more likely to embrace and effectively integrate these tools into their lessons.

Hands-on workshops and practical training have emerged as critical components in the successful integration of technology into classroom environments. These intensive, interactive seminars allow educators to work directly with new digital tools and pedagogical practices, transforming theoretical knowledge into practical abilities. These workshops bridge the gap between abstract concepts and practical use by emphasizing real-world applications and allowing teachers to interact with technology in a controlled setting. To support this, 5 Participants emphasized the value of hands-on workshops and practical training. These sessions allow teachers to actively engage with new technologies, learn how to create digital content, and troubleshoot effectively.

Teachers must constantly update their knowledge and polish their technical abilities to keep up with new tools and instructional approaches. Workshops, online courses, and peer collaboration are examples of ongoing

professional development initiatives that give educators the resources they need to stay up to date on digital education advancements. Similarly, 6 participants emphasized the importance of ongoing professional development for updating skills, strategies, and knowledge. Regular training sessions keep teachers informed about the latest tools, software, and best practices, enabling them to adapt to evolving technology.

Collaboration and peer support are critical components in the successful incorporation of technology in the classroom. As educators negotiate the complexities of digital tools and resources, collaborating with peers gives great possibilities for sharing insights, solving problems, and establishing successful solutions. Collaborative workplaces provide a culture of continuous learning and mutual support, allowing teachers to share practical expertise and innovative ideas for using technology. In connection with this, 4 participants highlighted the value of collaborative problem-solving opportunities. Professional development fosters a supportive community where teachers can exchange ideas, seek mentorship, and learn from experienced colleagues.

6. Proposed technology integration framework to improve student engagement and motivation

The Waterfall Model is a linear and sequential approach to project management and system development. The Technology Integration Framework Using the Waterfall Model presents a structured approach to incorporating technology into educational settings, ensuring a systematic progression through each stage of the integration process. By leveraging the linear and sequential nature of the Waterfall Model, this framework guides educators in thoroughly assessing their technological needs, designing appropriate solutions, implementing these strategies, and evaluating their effectiveness.

Each phase of the framework—Requirements Analysis, System Design, Implementation, Verification, and Maintenance—enables teachers to align technology use with educational objectives, fostering enhanced student engagement and learning outcomes. This methodical approach not only promotes clarity and accountability in technology integration but also addresses the diverse needs of students and teachers alike. As educational environments increasingly embrace digital tools, this framework serves as a valuable roadmap for successful technology implementation in the classroom.

Objectives

This study aims to explore the perspectives of teachers regarding the integration of technology in the classroom setting. Specifically, it seeks:

- Analyze teachers' perspectives on each phase of the Waterfall Model as applied to technology integration in classroom settings.
- Identify the challenges teachers, encounter at different stages of technology integration using the Waterfall Model framework.
- Examine the impact of a structured technology integration process on teachers' instructional methods and classroom management.
- Assess the perceived effectiveness of technology-enhanced instructional methods in improving student engagement and motivation from teachers' viewpoints.
- Determine how teacher professional development influences their confidence and competence in integrating technology, as guided by the Waterfall Model.

CONCLUSION

Based on the findings of the study, the following conclusions were drawn:

1. Teachers see technology as a powerful tool for enhancing student engagement and motivation when used effectively, making lessons more interactive and personalized.
2. Teachers effectively tackle technology integration challenges by collaborating with peers and specialists, which enhances their problem-solving skills and adaptability
3. Teachers face significant challenges with technology integration, including technical issues and the difficulty of balancing teaching with troubleshooting.
4. Teachers assess the effectiveness of technology-enhanced methods by monitoring student engagement and evaluating how well technology supports learning objectives
5. Professional development is essential for successful technological integration, as it provides teachers with the skills and confidence to use digital tools effectively
6. The Technology Integration Framework using the Waterfall Model provides a structured and systematic approach to enhancing student engagement and motivation through technology integration

RECOMMENDATIONS

The following recommendations were formulated from the emerging themes and findings:

1. Teachers should strategically use technology to enhance interactivity and personalize learning, which can boost student engagement and motivation
2. Teachers should enhance collaboration with colleagues and technology specialists to effectively address technology integration challenges and improve their skills.
3. Schools should offer robust technical support and resources to help teachers manage issues like software failures and network problems and allocate time for balancing digital content creation with troubleshooting.
4. To enhance the assessment of technology-enhanced methods, teachers should receive more support and training in data analysis and interpretation.
5. Schools should invest in high-quality, accessible professional development programs that provide ongoing training to keep teachers updated on the latest technologies and methods.
6. Schools are encouraged to adopt the Technology Integration Framework guided by the Waterfall Model for a structured and efficient implementation of technology in classrooms.

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UNPUBLISHED MATERIALS

[41] 41. University of Michigan. (2019). The impact of real-time feedback on student engagement and learning outcomes. University of Michigan.

[42] 42. Integration of Technology in Education: A Local Perspective – A working paper from an educational technology conference or a research report by a local government or university on the current state of technology integration in classrooms in your region.

[43] 43. Teacher Training on Technology Use: A Preliminary Report – An unpublished report from a school district or university department focusing on teachers' skills development in technology integration.

[44] 44. Inclusive Practices in Technology Integration: A Case Study of Philippine Schools – An unpublished conference paper presented at an education technology conference exploring inclusive practices in the classroom using technology.

[45] 45. Bridging the Gap: Collaborative Efforts Between Schools and Tech Companies in Education – A paper presented at an international conference discussing strategies for collaboration between educational institutions and technology providers.

OTHER SOURCES

[46] 46. DepEd ICT Policies: The DepEd has implemented various policies through orders to promote the use of ICT in schools, including the DepEd Computerization Program (DCP), which aims to provide technologies to schools.

[47] 47. Integration of ICT in DepEd: This document discusses the use of ICT in education in the Philippines, emphasizing the importance of integrating ICT into teaching and learning processes.

[48] 48. DepEd Order No. 16, s. 2023: This order provides revised guidelines on the implementation of the DepEd Computerization Program (DCP), aiming to equip public schools and DepEd offices with necessary ICT resources.