

TEACHERS' EXPERIENCE WITH POSITIVE IMPACT: THE NEED OF TECHNOLOGY IN OUR EDUCATIONAL SYSTEM

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ABSTRACT

This study delved into the positive effect of technology to elementary students in Maguintalunan Integrated School, Brgy. New Visayas, Sto. Tomas, Davao del Norte. This study used phenomenological approach on what are the positive experiences of our educators in the effect of technology in educating our students. In exploring the experiences of the eight (8) participants, I employed the qualitative – phenomenological study of which primary instrument of data gathering was through in- depth interview. The following themes appeared namely, technology aids improvement in teaching, developing students learning using technology, and technology as learning motivation. In terms of how technology became a great tool in distributing knowledge in our educational system and its positive effect, it doesn't only assist our students but also helps our educators to be more vigorous in teaching. Likewise, there were three main themes emerged with this which are, software and application is an easy way of disseminating knowledge, effective use of technology as learning tool, and improved teachers' ability in using technology. Thus, teachers might face a different problem however, with the help of technology, it only makes things easier and trouble-free. Finally, educators shared a great insight derived from the effect of technology with the theme: introduce technology with responsibility and creative thinking in using technology as educator. Through this it gives assistance to our educational system is more functionable and hassle-free giving our teachers and students more productive in our academic process. The results of this study may be published in a reputable journal in the Region.

Keywords: Technology, Educational system, positive impact, learning motivation

1. INTRODUCTION

Technology has a profound impact on our daily lives, seamlessly integrating into various aspects of living, from home to the outside world. Web surfing, social media, texting, and remote communication are now routine activities for both adults and children proficient in technology use. For many years, schools have endeavored to provide concrete learning experiences through field trips, laboratory work, and various extracurricular activities. These efforts have been integrated into academic instruction. Today, technology serves as a pivotal tool for teachers, enhancing educational delivery and focusing on student achievement. It simplifies the teaching process, alleviating the burden on educators while creating an active, problem-solving environment for students, enabling them to address their own issues effectively. Given the extensive use of technology globally, its incorporation in teaching and learning is crucial to significantly impact student learning. The advent of the Common Core Standards, with their emphasis on technology, underscores the growing priority of technological integration in schools (Cristen, 2009).

A study in India highlighted the positive effects of technology on teachers and students, asserting that technology revolutionizes education. Computers, in particular, facilitate easier knowledge transfer from teachers to students. Marshall (2002) found compelling evidence that educational technology complements a great teacher's natural abilities, broadening their reach and enriching students' experiences beyond the classroom. With expanding content and technology options, there's an unprecedented need to understand the recipe for success involving the learner, the teacher, the context, and the environment where technology is used.

In the Philippines, a study in Caraga examined students' perceptions of technology use in classrooms. The findings indicated that technology significantly enhances the learning process by providing access to the latest information, enabling quick analysis and manipulation of data, and facilitating effective communication of results. However, if students are left unattended, it can cause classroom disruptions and negate institutional policies regarding strategic teaching and learning interventions (Nworie, et al., 2008).

At Maguintalunan Integrated School, Brgy. New Visayas, Sto. Tomas, Davao del Norte, a study determined the effects of technology on teachers. With the K to 12 Education program's implementation in the Philippines, integrating technology in teaching has become essential. Regression analysis results showed that technology integration significantly impacts teaching performance, making the learning process more conducive, interactive, and fruitful for both teachers and students. The emergence of technology integration opens new opportunities for effective and efficient teaching and learning (Schul, 2014).

Technology empowers educators to innovate their knowledge delivery methods. Over the past decade, significant changes have occurred in classrooms, making lessons more comfortable for teachers and enhancing students' cognitive functions during learning processes. It enables students to engage in activities they couldn't accomplish otherwise (Jonassen, 2000).

In Maguintalunan Integrated School, teachers shared positive experiences using technology in their teaching. This unique challenge has left a mark on student learning and well-being. The main goal of this research is to understand how technology helps educators become more effective teachers and its impact on student learning and well-being.

Purpose of the Study

The challenges educators face range from simple to complex, particularly in adjusting to technology use. This phenomenological study aims to explore the experiences of Grade 5 teachers and the crucial role of technology in the educational system at Maguintalunan Integrated School, Brgy. New Visayas, Sto. Tomas, Davao del Norte. The research focuses on the learning and positive encounters teachers have had using technology as a teaching tool.

Research Questions

1. What are the positive experiences of elementary teachers regarding the effects of technology on education?
2. How do teachers perceive technology as a valuable tool in disseminating knowledge to learners?
3. What insights can be derived from the effects of technology on education?

Significance of the Study

The findings of this study are significant and beneficial to the following stakeholders:

The Department of Education (DepEd): The study can serve as a basis for school regulations and the design of new programs and projects, providing strategic ideas to support teachers and meet learners' needs for quality education.

School Heads: This research helps in planning and organizing school programs that integrate technology as an educational tool, and in establishing organizations that promote teachers' personal and professional growth.

Teachers: The study aims to improve teachers' skills and creativity, enabling them to manage classes more effectively and motivate students to use technology responsibly.

Learners: It encourages students to be optimistic, keen to learn, and responsible in using technology in their daily lives.

Future Researchers: The study provides useful data for conducting qualitative research to validate emerging themes and explore related topics.

Definition of Terms

Positive Impact: The cumulative effects of an alternative expected to improve the resource's status relative to its current condition.

Technology: The application of scientific knowledge to practical aims, involving communication, information, and technological tools used to enhance learning, teaching, and assessment.

Educational System: Comprises laws, policies, regulations, public funding, resource allocations, and procedures at federal, state, or community levels that go into educating public-school students.

Review of Significant Literature

This section presents literature and studies relevant to the investigation, providing a strong framework about the study variables.

Technology as a Main Tool of Teaching

Students today live in a technological world, engaging in daily activities like texting, social networking, and web surfing. These technologies have shifted teaching strategies from traditional methods to more recent, technology-enhanced approaches, transforming the teacher's role from sole information source to learning facilitator.

Scholars believe that computers can improve teaching and learning by creating student-centered, personalized learning environments. For instance, in distance learning, students may never meet the teacher, as all work is done online. Teachers must adapt their techniques to these new environments (Decoito & Richardson, 2018).

Despite global efforts to enhance technology use in education, many countries face challenges in maximizing the provided technology (Albirini, 2006). Franklin (2007) found that elementary teachers primarily use computers for administrative and preparatory tasks and some instructional activities, while Bolick et al. (2003) noted limited use of technology in teacher education. Using technology in classrooms can enhance student engagement and attention spans (Ponto, 2015). However, technological tools should complement and enhance what a teacher does naturally (Ruman &

Prakash, 2017). Teachers should utilize technology to create authentic learning experiences and solve real-world problems (Taber, 2018).

Baytak, Tarman, & Ayas (2011) found that integrating technology into the curriculum makes learning fun and interactive, increasing student motivation. Additionally, technology helps students with special learning needs meet their IEP goals more quickly (Courduff, 2011).

Importance of Technology in Education

Technology plays a four-fold role in education: as part of the curriculum, an instructional delivery system, a means of aiding instruction, and a tool to enhance the learning process. Effective use of digital learning tools can increase student engagement, improve lesson plans, and facilitate personalized learning, helping students build essential 21st-century skills (School of Education, 2020). Technology in education provides easy access to information, improves communication skills, offers fun learning experiences, and helps students stay updated with technological advancements (Lim, 2021). It enhances teacher efficiency and allows students to work at their own pace (Scalzo, 2022).

Advantages of Technology in Education

Blended learning, combining online and traditional classroom settings, offers a personalized learning experience (Lagua, 2020). Mobile devices allow learners to access information anytime, anywhere, motivating and helping them understand the curriculum better (Nikana, 2000).

Technology supports collaborative learning and makes communication with learners easier. Mobile learning enables students with different learning styles to actively participate in the learning process (Albadi, 2016).

Benefits of Technology in Education

Technology provides students with easy access to information, accelerates learning, and offers engaging opportunities to practice what they learn. It helps teachers improve student performance, facilitates personalized learning, and prepares students for future occupations (School of Education, 2020). Educational technology offers a wide range of learning materials, improves communication skills, provides engaging learning experiences, and helps learners stay updated with technological advancements (Lim, 2021).

Use of Technology in Education

Technology inspires students to become problem-solvers, critical thinkers, collaborators, and creators. It personalizes learning, making education relevant to students' digital lives and preparing them for the future. Technology helps educators create blended learning environments and use digital tools for assessments, enhancing learning and teaching (Intel.com). New technology initiatives in education are becoming more common, emphasizing the need for effective integration at the teacher and learner levels (Trucano, 2016). Technology facilitates learning, problem-solving, and modern skills development (Allison Academy, 2021).

Theoretical Lens

This research is viewed through Fuller's (1969) stages of concern theory, which analyzes teachers' development of teaching skills and abilities. The theory examines how teachers adapt and adopt technology in their teaching. The goal is to implement technology in classrooms effectively, considering teachers' specific concerns and providing necessary training. Teachers must become technologically literate to create learning environments that foster advanced skills, critical thinking, and problem-solving (Gershner & Snider, 2001).

Figure 1 presents the conceptual framework, mapping the actions required during the study based on previous research and observations. The study explores elementary school teachers' experiences with the positive effects of technology on teaching and learning at Maguintalunan Integrated School, Brgy. New Visayas, Sto. Tomas, Davao del Norte. It also examines the insights and challenges encountered in this context.

2. METHOD

This chapter presents the methods and processes employed in the conduct of the study. It includes the philosophical assumptions of the study, research design, research participants, ethical considerations, role of the researcher, data collection, data analysis, and trustworthiness of the study.

Philosophical Assumptions of the Study

In every study, philosophical assumptions provide the framework for collecting, analyzing, and interpreting data. These assumptions establish the foundation for the conclusions and decisions made. As a qualitative researcher, I emphasize understanding the beliefs and theories that inform research and actively incorporating them into reports and studies. This study focuses on examining elementary school teachers' experiences with adopting technology in education, exploring how they cope with technological integration, and understanding the impact of technology on their teaching

practices. Qualitative research aligns with the constructivist paradigm, where the researcher relies on participants' views of the situation being studied. The intention of this study is to create a theory or pattern of meanings by relying on the collection and analysis of qualitative data (Creswell, 2013). Phenomenology, a form of qualitative research, focuses on studying individuals' lived experiences. It is an interpretive approach that seeks to uncover and describe the meaning of these experiences (Neubauer, 2019).

Different philosophical assumptions are used in qualitative research, including ontology, epistemology, axiology, and rhetoric.

Ontology concerns the nature of reality. Creswell (2012) states that reality is subjective and multiple, as shown through the perspectives of participants. This study relies on participants' voices and interpretations to establish a realistic situation.

Epistemology refers to the theory of knowledge, particularly its methods, validity, and scope. Creswell (2012) suggests that researchers reduce the distance between themselves and what they analyze, often becoming insiders by spending time in the field with participants.

Axiology deals with values and the role they play in research. Creswell (2012) affirms the importance of openly discussing values that shape the narrative and combining personal understanding with participants' interpretations.

Rhetoric emphasizes the use of a literary, informal style in writing, utilizing personal voice and qualitative terms. This study employs personal voice and qualitative terms such as credibility, transferability, dependability, and confirmability to convey the findings.

Qualitative Assumptions

Methodology refers to the creative and responsive approach to understanding questions and subject matter, while the method refers to specific procedures (Gerodias, 2013). The researcher's interest in teachers' experiences became the basis for this qualitative research. Phenomenology, as defined by Becker (1992), treats experience as a valid, rich, and rewarding source of knowledge. This study explores Grade 5 teachers' experiences with technology integration at Maguintalunan Integrated School, Brgy. New Visayas, Sto. Tomas, Davao del Norte.

Research Design

This study employs a qualitative research design using narrative analysis and phenomenological approaches. Interviews were conducted with individuals knowledgeable about the subject, providing subjective information based on their understanding. The goal was to construct a universal meaning of the experiences and gain a profound understanding of the phenomenon.

Rudduck and Flutter (2000) identify three main roles for participants in research: sources of data, active participants, and co-researchers. Fielding (2001) adds a stage describing participants as researchers if they initiate research and lead dialogue. In this study, teachers are the sources of data, and phenomenology aims to extract pure, untainted data through bracketing. In-depth interview questions captured the day-to-day experiences of teachers.

Research Participants

The participants in this phenomenological study include eight (8) elementary school teachers from Maguintalunan Integrated School, Brgy. New Visayas, Sto. Tomas, Davao del Norte. These participants underwent in-depth interviews (IDI). According to Creswell (2014), 8 to 14 participants are sufficient to saturate information in qualitative inquiry, and Morse (1994) suggests at least six. Lichtman (2010) adds that a small number of individuals can provide in-depth information in qualitative research.

Qualitative researchers often use purposive sampling to locate and select information-rich cases related to the phenomenon of interest (Palinkas, 2015). Homogeneous sampling, as described by Creswell and Plano (2011), focuses on describing in-depth details for a specific group.

Selection criteria included:

1. Permanent teachers in public elementary school at Maguintalunan Integrated School.
2. Advisory roles for Grade 5 pupils.
3. Either male or female teachers.

These eight participants provided sufficient information to identify and generate themes.

Role of the Researcher

As the researcher, my role involved accessing the thoughts and feelings of study participants through interviews. At the time of this study, I served as a teacher at the site where the study was conducted. Face-to-face interviews were conducted in classrooms, and efforts were made to avoid bias and keep personal views out of the study (Gilford, 2016).

Qualitative research involves observation, open-ended questions, in-depth interviews, and field notes (Denzin & Lincoln, 2012).

As a researcher conducting this study, I acted as an interviewer, observer, and interpreter, ensuring confidentiality and trust with participants. The relationship between the researcher and participants in qualitative studies can raise ethical concerns, including respect for privacy, honest interactions, and avoiding misrepresentations (Warusznski, 2002).

Ethical Considerations

Ensuring participants' safety, anonymity, and confidentiality of responses was crucial. Ethical considerations adhered to the fundamental principles outlined in the Belmont Report (1979), which emphasizes respect for persons, beneficence, and justice. Participants were informed about the research, provided consent, and given the opportunity to ask questions. Compliance with the Data Privacy Act of 2012 (Republic Act 10173) was also ensured.

Participants were allowed to review and verify the transcripts of their interviews, ensuring accuracy and authenticity. The study was submitted to the ethics committee of Rizal Memorial College for verification and approval.

Data Collection

Data collection began with teacher interviews, following several steps to ensure comprehensive data gathering. According to Creswell (2013), gaining access to participants and establishing rapport is essential for obtaining good data. Data collection methods included in-depth interviews, focus group interviews, observation, and video recording (Yuksel & Yildirim, 2015).

Participants were selected using purposive sampling, and consent forms were signed. A virtual orientation emphasized the study's purpose and participants' roles. Interviews were conducted using validated guides and recording devices to capture detailed responses.

The interview process involved an introductory phase, open-ended questions, and follow-up probes to encourage elaboration. The researcher moderated the discussion, summarized responses, and thoroughly reviewed the collected data for accuracy.

Data Analysis

All collected data were carefully examined and analyzed. The analysis began with interview transcripts and followed traditional steps for data management, reading, classifying, interpreting, and visualizing. Qualitative research involves understanding the meaning attributed to individuals' experiences (Merriam & Tisdell, 2015).

In this phenomenological study, themes and experiences were identified through data organization and analysis. Triangulation of data sources ensured consistency and accuracy. Participants reviewed findings to confirm the correctness and completeness of the analysis.

Analytical Framework

Braun and Clarke's (2006) thematic analysis method guided the data analysis process, consisting of six phases:

1. Familiarizing with the data by reading the entire dataset and noting initial ideas.
2. Generating initial codes to identify interesting features of the data.
3. Searching for themes by sorting codes into potential themes and collating data extracts within themes.
4. Reviewing and refining themes at the level of coded data extracts and the entire dataset, producing a thematic map.
5. Defining and naming themes to convey their essence.
6. Writing the report to convince the reader of the analysis's merit and validity, using data extracts within an analytical narrative.

Trustworthiness of the Study

Trustworthiness in qualitative research involves validating the accuracy of findings, as described by participants (Creswell, 2007). Validity was demonstrated through thorough data collection, rigorous analysis, and the explanation of alternate meanings (Worthen, as cited in Merriam & Associates, 2002).

Lincoln and Guba's (1985) criteria for qualitative validation include credibility, transferability, dependability, and confirmability:

Credibility ensures the truthfulness of research outcomes based on participants' original views. In-depth interviews captured participants' lived experiences accurately.

Transferability relates to the extent qualitative research results can be applied to other contexts. Detailed narratives and purposive sampling enhance transferability.

Dependability refers to the stability of findings over time, ensured by reviewing and examining the research process and data analysis.

Confirmability involves ensuring findings are based on data rather than the researcher's imagination. Objectivity was maintained through transcribing, member checking, and triangulation.

By adhering to these criteria, this study aimed to provide a credible, transferable, dependable, and confirmable exploration of elementary school teachers' experiences with technology integration in education.

3. RESULTS

This section presents the experiences of eight teachers regarding the effects of technology on education in Maguintalan Integrated School, Brgy. New Visayas, Sto. Tomas, Davao del Norte. Using a qualitative framework, this study describes the teachers' positive experiences and insights into the impact of technology on their teaching and students' learning. The findings are based on participants' responses to interview questions, resulting in the identification of several key themes.

The Positive Experiences of Elementary Teachers in the Effect of Technology to Education

This section highlights the experiences of elementary teachers with technology in teaching. Three main themes emerged: technology aids improvement in teaching, developing students' learning using technology, and technology as a learning motivation.

Technology Aids Improvement in Teaching

Teachers' technological and computer competencies are crucial as educational institutions increasingly integrate technology into their curricula and classroom activities. Participants shared their experiences of using technology and its benefits.

IDI-P5 shared:

"Before the pandemic, DepEd introduced us to various types of technology such as PowerPoint, Excel, Word, and other software, making it easier to handle and teach our classes. It's efficient and simplifies tasks like creating visual aids and writing lesson plans."

IDI-P3 noted:

"Preparing for my class used to be long and challenging, with materials like Manila paper and 'cartolina.' Now, using PPT makes preparation much more efficient."

IDI-P4 added:

"It's more fun creating animations in PowerPoint rather than writing on Manila paper. Although it was initially challenging, once you become knowledgeable, it becomes very easy."

These narratives indicate a preference among teachers for using technology over traditional methods. Technology enhances efficiency and engagement, making lessons more attractive to students. Effective technology integration also supports constructivism, cooperative learning, and problem-based learning (Royer, 2002).

Technology positively impacts student learning by increasing engagement and retention of information. Visual aids, videos, and interactive content make lessons more interesting and enjoyable, leading to improved motivation and focus. However, teachers must model appropriate technology use to support the curriculum and maximize its benefits (DePasquale, McNamara, & Murphy, 2003).

Students' Development in Learning Technology

Technology exposure encourages active participation and interaction among students, leading to enhanced learning experiences.

IDI-P1 observed:

"In the teaching and learning process, sustainability in using technology is crucial. Students are more active and motivated during discussions involving technology."

IDI-P7 mentioned:

"Some of my students understand lessons better with PowerPoint presentations. Technology has developed their learning, especially during discussions."

Technology's universal presence makes it a natural part of students' lives, directly connecting to their learning experiences. Studies show that technology use increases student engagement, motivation, and attendance (Semerci & Aydin, 2018; Ponto, 2015).

Technology as Learning Motivation

Technology enhances learning motivation, making lessons fun and engaging. Participants shared their experiences of motivating students through technology.

IDI-P8 stated:

"As a teacher, I use different strategies to apply learning motivation. I see positive results in enhancing students' learning with technology."

IDI-P2 added:

"Using technology is effective in the teaching process, but teachers must be responsible and knowledgeable through proper training and seminars."

Effective technology integration can help "at-risk" students by providing authentic learning activities and enhancing curriculum and student learning (Taber, 2018). Technology should complement traditional teaching methods, fostering an intellectually, emotionally, and ethically mature learning environment (Raposo et al., 2020).

The Use of Technology as a Great Tool in Distributing Knowledge for the Learners

This section explores how technology aids in disseminating knowledge to students, revealing three themes: software and applications as easy tools, effective use of technology as a learning tool, and improved teachers' ability in using technology.

Software and Applications as Easy Tools

The pandemic highlighted the importance of learning various software and applications to maintain communication and teaching effectiveness.

IDI-P3 shared:

"I wasn't familiar with many software applications, but during the pandemic, I learned to use tools like Zoom and Google Applications, which became essential for teaching."

IDI-P2 added:

"As someone used to traditional teaching methods, learning new software was challenging. However, once familiar, they became indispensable tools for teaching, even now with face-to-face classes."

Technological advancements have made teaching and learning processes more effective and efficient. Integrating technology into teaching can improve student performance, increase interest, and create a more engaging learning environment (Costley, 2014; Ranasinghe & Leisher, 2009; Majid, 2019).

Effective Use of Technology as Learning Tool

Effective use of technology as a learning tool increases student engagement and helps teachers improve their teaching methods.

IDI-P5 stated:

"Children today can easily use technology as a learning tool. Teachers must be optimistic and knowledgeable in using technology."

IDI-P8 added:

"Teachers must effectively apply technology as a teaching method, enhancing students' learning."

Technology fosters collaboration, personalized learning, and curiosity, leading to academic success. It also supports teachers in creating engaging and interactive lessons (American University, 2020; Ramorola, 2013; Bana, Romasame, & Cristobal, 2016).

Improved Teachers' Ability in Using Technology

Teachers must enhance their technological skills to effectively integrate technology into teaching. Proper training and seminars are essential.

IDI-P6 shared:

"Using technology can be easy with proper training. It's effective in class, but sometimes I feel confused."

IDI-P7 added:

"Teachers need training to use technology properly, ensuring better student understanding."

Teachers' technological proficiency is crucial for maximizing technology's potential in education. Continuous professional development is necessary to keep up with technological advancements and improve teaching methods (American University, 2020; Paduraru & Mihaila, 2017; Thornbury, 2002).

The Insights that can be Derived from the Effects of Technology to Education

Teachers face various challenges in teaching but find satisfaction in students' eagerness to learn, especially with technology. Participants shared insights into the responsible use of technology and creative thinking in education.

Introduce Technology with Responsibility

Teachers must ensure responsible technology use, guiding students to interact with technology safely and ethically.

IDI-6 stated:

"As a teacher, it's my responsibility to apply technology cautiously and thoroughly. My students are more attentive with PowerPoint presentations, which helps in teaching."

IDI-1 added:

"Teaching involves responsibility in using technology, which is advantageous in imparting knowledge."

IDI-4 shared:

"Teachers must be responsible in using technology, explaining its importance and safe use to students."

Responsible technology use is crucial in education, ensuring safe and ethical interactions. Schools should promote good digital citizenship and responsible use of technology (Ahmadi & Reza, 2018; Academic Council, 2016; Portola Valley School District, 2023).

Creative Thinking in Using Technology as Educator

Creative use of technology enhances teaching effectiveness and student engagement.

IDI-4 stated:

"Creative thinking with technology motivates students. Fun activities respond to learners' needs using technology."

IDI-7 added:

"Teachers must be creative in disseminating knowledge, building students' interest in learning."

Creative teachers adapt activities and materials to support creative teaching, making lessons more engaging and productive. Emerging technologies positively impact students' creativity and learning experiences (Burton, 2010; Richards, 2013; Li et al., 2022).

4. CONCLUSION

The purpose of this phenomenological study was to discover the positive impact and the necessity of technology in the educational system for elementary students, specifically at Maguintalunan Integrated School, Brgy. New Visayas, Sto. Tomas, Davao del Norte. This chapter presents a summary of the study's findings, drawing implications for future directions. Based on the teachers' insights regarding the effects of technology on education, this study emphasizes the importance of introducing technology responsibly and creatively in educational settings. The study also outlines methods and techniques used by teachers that can be shared with others.

The study's objective was achieved using a qualitative phenomenological method with thematic analysis. The interview questions adhered to Creswell's (2012) principles, utilizing open-ended inquiries to genuinely understand the participants' experiences. The interview method allowed participants to contribute their own definitions and interpretations of the phenomena. Findings revealed that the positive experiences of elementary teachers with technology in education led to the emergence of several themes: technology aids improvement in teaching, enhances student development in learning, and serves as a motivational tool for students. Teachers applied methods such as using software and applications for disseminating knowledge, employing technology effectively as a learning tool, and improving their own ability to use technology. Insights derived from these findings include the importance of introducing technology with responsibility and fostering creative thinking in its use by educators.

The research conducted through the lens of the educational management program revealed several implications for educational modifications and policy development. Teachers' experiences sent a clear message to the Department of Education (DepEd), urging them to revisit and refine policies, programs, and mechanisms to efficiently implement the methods identified in the study. One key implication is the need for effective delegation of tasks to lighten teachers' workloads, allowing them to focus on their primary teaching responsibilities. This also provides opportunities for other teachers to develop skills in performing ancillary school functions. Additionally, the study highlighted the importance of helping educators understand their courses' place within the larger educational program, enabling them to assist students in comprehending why specific courses are required. Moreover, participants emphasized the significance of designing teaching methods using technology, which facilitates students' acquisition of new knowledge and helps them evaluate their learning levels through performance feedback. The use of technology also strengthens the teacher-student

relationship, benefiting both parties. Based on the study's results and discussion, several future directions are recommended. To further enhance the positive impact of technology, teachers should organize diverse activities to build students' interest and develop their skills using technology. Motivating and understanding students is crucial for improving the learning experience. Given that this study used a qualitative phenomenological approach, it is highly recommended to conduct related studies utilizing a mixed-method approach, combining qualitative and quantitative methods, to generate more valid and reliable findings. Additionally, longitudinal studies should be conducted to observe the long-term impacts of technology on education. Lastly, policies should be updated based on the study's findings to incorporate effective technology use in education.

By following these future directions, researchers can further validate the positive impacts of technology in education and develop comprehensive strategies for its effective implementation. This will not only enhance students' learning experiences but also support teachers in their professional growth and effectiveness.

5. REFERENCES

- [1] Ahmadi, D., & Reza, M. (2018). The Use of Technology in English Language Learning: A Literature Review. *International Journal of Research in English Education*, 3(2), 115-125.
- [2] Academic Council. (2016). Guidelines for Responsible Technology Use. Portola Valley School District.
- [3] Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: The case of Syrian EFL teachers. *Computers & Education*, 47(4), 373-398.
- [4] American University. (2020). The Impact of Technology on Education. Retrieved from <https://www.american.edu/soc/communication/upload/the-impact-of-technology-on-education.pdf>
- [5] Bana, R., Romasame, T., & Cristobal, D. (2016). The Role of Technology in Education. *Journal of Educational Technology*, 12(3), 65-78.
- [6] Baytak, A., Tarman, B., & Ayas, C. (2011). Experiencing Technology Integration in Education: Children's Perceptions. *International Electronic Journal of Elementary Education*, 3(2), 139-151.
- [7] Bolick, C. M., Berson, M. J., Coutts, C., & Heinecke, W. F. (2003). Technology applications in social studies teacher education: A survey of social studies methods faculty. *Contemporary Issues in Technology and Teacher Education*, 3(3), 376-389.
- [8] Burton, L. J. (2010). The Effect of Digital Technology on Learning: A Case Study. *Journal of Educational Technology Development and Exchange*, 3(2), 45-52.
- [9] Courduff, J. (2011). One size never fits all: Tech integration for special needs. *Learning and Leading with Technology*, 38(8), 16-19.
- [10] Cristen, K. (2009). The Impact of Technology on Education. *Journal of Educational Technology*, 11(3), 45-56.
- [11] Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson Education.
- [12] Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). SAGE Publications.
- [13] Decoito, I., & Richardson, T. (2018). Using technology to enhance science education. *Journal of Educational Technology*, 14(2), 115-128.
- [14] DePasquale, R., McNamara, E., & Murphy, K. (2003). Meaningful connections: Using technology in primary classrooms. *Young Children*, 58(6), 12-18.
- [15] Franklin, C. (2007). Factors that influence elementary teachers' use of computers. *Journal of Technology and Teacher Education*, 15(2), 267-293.
- [16] Gerodias, E. M. (2013). *Research methods in education*. Mandaluyong: National Book Store.
- [17] Gershner, V. T., & Snider, S. L. (2001). Integrating technology into teaching and learning: Concepts and applications. *Journal of Educational Technology Systems*, 29(2), 147-156.
- [18] Jonassen, D. H. (2000). *Computers as mindtools for schools: Engaging critical thinking* (2nd ed.). Merrill.
- [19] Laguna, R. (2020). Blended learning in Philippine education: Challenges and opportunities. *Philippine Journal of Education*, 92(2), 123-135.
- [20] Li, L., Yamaguchi, S., & Takada, J. (2022). Emerging technologies and their impact on students' creativity in higher education. *Journal of Educational Technology*, 15(1), 67-78.
- [21] Lim, M. (2021). The Importance of Technology in Education. *International Journal of Educational Research*, 15(4), 78-90.
- [22] Majid, U. (2019). Research Fundamentals: Study Design, Population, and Sample Size. *Undergraduate Research in Natural and Clinical Science and Technology Journal*, 3(1), 1-7.

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- [23] Marshall, J. (2002). *Learning with Technology: Evidence that Technology Can, and Does, Support Learning*. San Diego: San Diego State University Press.
- [24] Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2), 90-97.
- [25] Nikana, T. (2000). The role of mobile devices in education. *Journal of Educational Technology*, 14(3), 145-157.
- [26] Nworie, J., Haughton, N., & Olaniran, B. A. (2008). Leveraging the Influence of Technology in Teaching. *International Journal of Instructional Media*, 35(3), 295-306.
- [27] Paduraru, S., & Mihaila, S. (2017). Enhancing the Technological Competence of Teachers. *Journal of Educational Technology*, 10(4), 235-245.
- [28] Palinkas, L. A. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544.
- [29] Ponto, J. (2015). Understanding and addressing learning gaps in education. *Journal of Educational Psychology*, 7(2), 165-175.
- [30] Ranasinghe, A. I., & Leisher, D. (2009). The benefit of integrating technology into the classroom. *International Mathematics Forum*, 4(40), 1955-1961.
- [31] Raposo, J., et al. (2020). Technology Integration in the Classroom: How Teachers Can Use Technology to Improve Student Learning. *Journal of Educational Technology*, 17(3), 212-227.
- [32] Richards, R. (2013). *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. American Psychological Association.
- [33] Royer, R. (2002). Supporting Technology Integration Through Action Research. *The Clearing House*, 75(5), 233-237.
- [34] Ruman, N., & Prakasha, R. (2017). Enhancing Teaching and Learning through the Use of Technology. *Journal of Educational Technology*, 12(2), 145-162.
- [35] Schul, J. (2014). Revolutionizing the classroom: Integrating technology in education. *Journal of Educational Research*, 8(3), 243-256.
- [36] Semerci, C., & Aydin, M. K. (2018). Examining high school teachers' attitudes towards ICT use in education. *Journal of Educational Technology*, 14(2), 22-31.
- [37] Taber, K. S. (2018). Constructing knowledge: Constructivist approaches to learning in science. In K. S. Taber (Ed.), *The International Handbook of Science Education*. Springer.
- [38] Thornbury, S. (2002). *How to Teach Vocabulary*. Pearson Education.
- [39] Trucano, M. (2016). New technologies in education: Reducing the risk of failure. *International Journal of Educational Development*, 50, 165-175.
- [40] Warusznski, B. T. (2002). Ethics and the teaching profession. *Journal of Educational Research*, 7(2), 34-41.
- [41] Worthen, H. (2002). Validity in qualitative research. In Merriam, S. B., & Associates, *Qualitative Research in Practice*. Jossey-Bass.
- [42] Yuksel, P., & Yildirim, S. (2015). Theoretical frameworks, methods, and procedures for conducting phenomenological studies in educational settings. *Turkish Online Journal of Qualitative Inquiry*, 6(1), 1-20.