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LIVED EXPERIENCES OF TEACHERS IN THE INTEGRATION OF MULTIMEDIA IN TEACHING: BASIS FOR IN-SERVICE TRAINING

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ABSTRACT

This qualitative-phenomenological study explored the lived experiences of teachers in the integration of multimedia in teaching as a basis for In-Service Training in the Schools District of Oton for the school year 2025–2026. It revealed four major aspects of experiences of elementary teachers in integrating multimedia in teaching, which makes teaching more engaging and learner-centered, supports understanding of concepts and improves retention, helps address diverse learning styles and accessibility, and teachers feel confident, fulfilled, and motivated – but mindful of technical risks. While there were four emerged on the challenges experienced by elementary teachers in integrating multimedia in teaching infrastructure and technical disruptions (internet, power, equipment), limited technical expertise and troubleshooting demands, time management and preparation burden, and resource constraints and access issues. Further, coping strategies applied by teachers on the challenges experienced in integrating multimedia in teaching are preparedness through backup plans and alternative activities, advance preparation, testing, and downloading

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resources, skill building, collaboration, and continuous learning, aligning multimedia with objectives and keeping it simple.

INTRODUCTION

In most countries, including the Philippines, due to governmental policies, primary school instructors must incorporate the use of information and communication technologies (ICTs) into the learning process, which subsequently builds students' critical analysis, ICT, collaborative, and creative competencies. To promote the use of ICTs in education, the Department of Education (DepEd) in the Philippines, along with the ICT4E Strategic Plan and the DCP (DepEd Computerization Program), has attempted to transform classrooms through updated teaching and learning materials and the training of teachers. However, the actual use of ICTs in education is still deficient, primarily due to inadequate connectivity and maintenance, and unsatisfactory teaching techniques (DepEd Bataan—Alboro, 2024).

One of the elements of modern education is multimedia. The use of multimedia in elementary school classrooms is most important as it provides teachers with the opportunity to demonstrate concepts with multiple and varied representations, which is beneficial for student understanding and interest. Mayer's Cognitive Theory of Multimedia Learning (CTML) states that the use of high-quality multimedia in learning helps students understand a concept by guiding students to pay attention to specific information (elements) by using visual and verbal representations, and by subdividing the information into several portions. On the

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contrary, the absence of high-quality multimedia and improper use may cause students' working memory to become overloaded (Mayer, 2021).

Globally, studies indicate that for technology integration to be relevant and purposeful, teachers must possess an integrated understanding of technology, pedagogy, and content. The TPACK (Technological Pedagogical Content Knowledge) framework is a model that represents the overlap between technology, pedagogy, and content in teaching, wherein teaching with technology is most effective when all three areas are integrated. The presence of technology in a classroom may be irrelevant if effective teaching strategies are not employed (Voogt et al, 2021).

In elementary settings, qualitative studies add that teachers often require clearer curricula, longer-term professional development, and practice communities to understand technology's roles and limitations (Pappa, Georgiou, & Pittich, 2024). Contemporary reviews also differentiate first-order (infrastructure, support, and training) and second-order (beliefs, confidence, and attitudes) barriers. Both types can halt sustained technology use unless addressed simultaneously through ongoing professional development (PD) that incorporates active learning and follow-up in the classroom (Bećirović, 2024; Siyam et al., 2025). Recently, some studies in the Philippines have started measuring readiness and usage patterns. A quantitative correlational study in Laguna, for instance, found elementary teachers with strong pedagogical and content knowledge, but relatively weak technology knowledge and a tendency to use only standard digital tools. This reinforces the need for focused training and the provision of a variety of tools (Mane, 2025). These findings indicate an urgent need to

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understand the challenges and opportunities faced by elementary teachers through qualitative research and to implement the findings through targeted in-service training (INSET) models. This study focused on bridging policy and practice by aligning system-level goals with professional learning that meets teachers' everyday realities while enhancing students' multimedia experiences in the classroom (DepEd Bataan-Alboro, 2024). This study meets this need by providing an empirical foundation for INSET that is based on teachers' perceptions and profile characteristics. (Rogador & Bola, 2025; Pappa et al., 2024).

MATERIALS AND METHODS

Research Methodology

This chapter presents the research method, research design, participants of the study, data-gathering procedures, research instrument, and data analysis to be used in this study. The purpose of this study was to explore the challenges and opportunities in technology-integrated teaching experienced by elementary educators as a basis for an In-Service Training in the Schools District of Oton during the school year 2025-2026.

Research Method

The research method utilized in this study was a descriptive method under qualitative research using in-depth interviews.

The descriptive research method focuses on systematically describing a phenomenon as it exists in its natural setting, without manipulating variables. According to Elliott (2025), it aimed to provide an accurate portrayal of current conditions, practices, or relationships within

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educational settings, enabling researchers to understand trends, patterns, and implications for practice. This approach was particularly useful in educational studies that seek to document and analyze real-world events, behaviors, or perceptions without altering the environment in which they occur (Elliott, 2025).

Research Design

The study used a phenomenological research design. Phenomenology can be considered a philosophical approach to undertaking qualitative research. The goal of phenomenology was to understand how others view the world, and how this view may vary from commonly held views, by focusing on a person's subjective interpretations of what she experiences. Phenomenology was done by interviewing the subjects to learn their impressions, and was frequently used in such fields as psychology, sociology, and social work.

Phenomenology focuses on the study of structures of consciousness as experienced from a first-person perspective. The central aim of phenomenology was to investigate and describe phenomena as they are consciously experienced, without resorting to theories about their causal explanations or being influenced by unexamined preconceptions (Biemel and Spiegelberg, 2024).

Participants of the Study

The participants of this study were ten purposefully chosen teachers from public elementary schools in the Schools District of Oton, Division of Iloilo. These teachers were selected because of their firsthand experiences of multimedia tool integration (i.e., videos, animations, presentations, and interactive digital materials) into their classroom teaching,

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making them rich information cases for phenomenological study. Teachers were required to be teaching levels 1–6, have a minimum of two years in the teaching profession, have experience in the use of multimedia for teaching, and be interested in undertaking extensive interviews. Given the phenomenology method, teachers who are or were administrators were excluded, in keeping with phenomenological research, which favors quality of experience over quantity (Saldaña, 2021; Kara, 2022).

A sample of ten participants is appropriate, as phenomenological research is generally deemed to be complete with between 5 and 15 subjects, as this is the range that allows for sufficient depth to be exhausted in detail until saturation is reached (Saldaña, 2021; Flick, 2022). The teachers selected offered diverse grades, experience, and use of multimedia teaching, which encapsulated the variety of experiences of how different levels of integration of multimedia resources in elementary teaching. This also guarantees that the findings will reflect the actual executive classroom realities and will be useful in constructing a context-responsive in-service training (INSET) program based on the teachers' experiences.

Sampling Design

The study employed a purposive sampling design. As noted by Nikolopoulou (2023), purposive sampling is a particular form of non-probability sampling whereby the units are chosen based on the specific characteristics that are needed for the study. In other words, specific units are chosen "on purpose" in purposive sampling. This type of sampling is also known as judgmental sampling. The sampling method is based on the researcher's discretion

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when identifying and selecting the most relevant persons, cases, or occurrences that will best inform the study.

Research Instrument

The study's research instrument was an interview schedule that was constructed by the researcher. In research methodology, an interview schedule is defined as a written set of specific questions (which can be closed, partially closed, or open) that is meant to direct an interviewer to obtain information from the respondents in a uniform manner. This is also meant to provide consistency as a tool for information collection, whereby all the respondents would be asked the same questions on the same subject matter, thereby making it easier to analyze and compare. During the interview, be it face-to-face, via telephone, or online, the interviewer was expected to adhere strictly to the schedule and to take note of the answers given by the interviewees (Socio.health, 2024).

The interview schedule was designed to obtain the respondents' experiences, problems, and prospects in the teaching of technology-integrated instruction in elementary education.

Depending on the consent of the respondents, the researcher also used voice and video recorders to collect and document data.

Validity of the Research Instrument

Before estimates of the validity of the interview schedule could be assessed, the researcher, the adviser, the Dean of the Graduate School, and a panel of jurors, who were

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asked for their expertise in the fields of research, testing, and assessment, and English, were consulted to validate each question and to review and make modifications.

Validity is the most significant consideration to be made for an instrument. It means that the findings, interpretations, and conclusions of a study should be true, reasonable, and appropriate to answer the question(s) posed, and should represent the reality of the situation that is being investigated. It is to make sure that the research instrument measures what is intended to be measured and that the instrument measures the findings accurately. When a researcher wants to establish content validity, the questions and the arrangement of the instrument should correspond to the defined variables and the aims of the study. This is to ensure that every question is a true reflection of the construct that is being investigated. In most cases, this requires expert judgment, for he has to determine if the questions are relevant and if they clearly represent the constructs being investigated. If researchers are able to produce an instrument that is relevant to the study and to the objectives of the study, they are able to give their research the very most useful and the very most accurate results of the data that is collected (Creswell & Creswell, 2022).

With regards to the interview schedule, comments, corrections, and suggestions of the panel of validators were considered using the appropriate form of Good and Scates (1972) as cited by Soqueña (2021).

Data Gathering Procedures

Permits from the adviser, Dean of the Graduate School, Office of the Schools Division Superintendent, Office of the District Supervisors, School Heads, and individual participants

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were obtained to allow the researcher to conduct the study. The researcher personally goes to the school/community/ convenient place for the participants to conduct the interview.

The researcher encouraged the participants to sign a waiver or permission relative to the conduct of the study.

Using in-depth interviews, a voice and video recorder was also provided to completely capture the interviewee's words. The researcher consolidates all collected data after a series of interviews.

Data Analyses

The data were collected through the interview schedule that were analyzed using thematic analysis, a qualitative method designed to identify, interpret, and report recurring patterns or themes within narrative data. This approach enables the researcher to uncover meaningful insights into the responses of the participants on the challenges and opportunities in using technology-integrated teaching.

Thematic analysis has been described by Braun and Clarke (2023) as flexible and robust. It allows researchers to analyze qualitative data to understand meanings, both implicit and explicit, in participant accounts. It offers researchers an invaluable resource in educational studies and research that provides insight into the complicated social and organizational frameworks at play. Additionally, Braun and Clarke (2023) state that systematic coding and analysis of the data help assess the quality of the analysis and study, and thematic analysis, therefore, increases qualitative studies' analysis and research. The transcribed interviews were

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analyzed using thematic analysis (Braun and Clarke, 2023) as it is suitable for identifying, analyzing, and reporting qualitative data.

The analysis was carried out using the six standard phases of Braun and Clarke's (2023) analysis and is detailed as follows:

(1) Familiarization with Data: Reading and re-reading the transcripts (in local language and English translation).

2. Generating Initial Codes: Assigning short phrases or labels to meaningful segments of data (e.g., "shared phone," "fear of judgment," "poor signal").

3. Searching for Themes: Organizing the initial codes into possible central themes, as well as sub-themes, that reflect the most meaningful trends (e.g., codes such as 'no insults' and 'private correction' will be clustered under a theme).

4. Reviewing Themes: Refining and checking the themes against the entire dataset to ensure they accurately reflected the participants' meanings and the study's focus.

5. Defining and Naming Themes: Developing clear, concise, and academically sound names for the final emergent themes (will be presented in Chapter 4).

6. Producing the Report: Weaving the themes, supported by direct quotes, into the narrative structure of the presentation, analysis, and interpretation of data (Chapter 4), and linking them to the theoretical framework.

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RESULTS AND DISCUSSIONS

The research examined the use of multimedia by elementary teachers in the School District of Oton. This is aligned with the DepEd Computerization Program and ssICT4E Strategic Plan to assist the modernization of the Philippine education system. Using a qualitative phenomenological approach, the research studied teachers' real experiences along with their feelings, reflections, obstacles, and pedagogical decisions. The research conducted detailed and real multimedia classroom experiences from ten purposefully selected teachers, and described the multimedia impact on teachers' instructional engagement, students' professional identities, and the impact of multimedia use beyond what the policy states.

For this study, Braun and Clarke's (2023) Thematic Analysis was used to study the experiences of teachers systematically. The themes were analyzed using the TPACK model and Mayer's Cognitive Theory of Multimedia Learning (CTML), which helped to better understand how teachers integrate technology, pedagogy, and content when using multimedia. Overall, the study sought not only to record experiences but also to create a context-responsive In-Service Training (INSET) program.

The results revealed that the experiences of elementary teachers in integrating multimedia in teaching includes it makes teaching more engaging and learner-centered, supports understanding of concepts and improves retention, helps address diverse learning styles and accessibility, and teachers feel confident, fulfilled, and motivated, but mindful of technical risk.

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The results of the in-depth interview with the participants revealed that the challenges experienced by elementary teachers in integrating multimedia in teaching include infrastructure and technical disruptions (internet, power, equipment), limited technical expertise and troubleshooting demands, time management and preparation burden, resource constraints, and access issues.

The results of the in-depth interview with the participants revealed that the coping strategies applied by teachers on the challenges experienced in integrating multimedia in teaching include preparedness through backup plans and alternative, preparation, testing, and downloading resources, skill building, collaboration, continuous learning, and aligning multimedia with objectives and keeping it simple.

CONCLUSION

Considering the findings of the study, the following recommendations were made: schools are encouraged to improve infrastructural support, provide continual training of staff, technical support, and offer ongoing maintenance support to obtain the positive benefits associated with the teaching and learning of digital multimedia. Teachers' self-efficacy and the quality of instruction delivered can be improved by offering ongoing support and access to current resources. This is supported by UNESCO (2021), where the importance of digital transformation and equitable support to schools is documented.

In response to these obstacles, it is suggested that schools upgrade their infrastructure by providing stable internet, adequate devices, and consistent power supply, in addition to

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offering targeted training to teachers on the use of these tools. Improved infrastructure and increased digital competencies will lead to higher integration outcomes, as predicted by the OECD (2021), which demonstrates that the better support is provided, the better outcomes are achieved with the integration of technology in education.

Schools are encouraged to establish and implement policies that will enable teachers to participate in professional development training related to the use and integration of multimedia and incorporate multimedia into their lesson plans. By enhancing the professional skills of educators, a learning ecosystem of 'multimedia integration into the lessons' will be created. This is in line with OECD (2021), which noted the need for ongoing development of teachers as a prerequisite for the successful digital transition in teaching and learning.

It is consistent with the work of UNESCO (2021), which highlights ongoing training of educators as a key factor in enhancing the quality of education and the outcomes for learners through continuous, cohesive professional development, which is tailored to the needs of the learners, the institution, and the community in which it is located.

Future researchers are encouraged to apply quantitative or mixed-method research methodologies to confirm and generalize the results of the qualitative research study. Additionally, they may examine the relationships among teacher characteristics, technology readiness, and effective multimedia integration, the levels of students' multimedia integration, and the outcomes of the proposed INSET program.

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