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Technical Training Engagement and Adversity Quotient on Digital Affect of Public School Teachers

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Abstract

The main objective of this study was to determine the predictors of Digital affect of public-school teachers, considering the technical training engagement and adversity quotient for the school year 2024-2025. The participants in the study were randomly selected public elementary and secondary school teachers from the Valencia City division. The study utilized a descriptive-correlational research design. The statistical techniques employed were descriptive statistics, correlation, and regression analysis.

Descriptive analysis indicated that teachers reveal a mixed but generally positive outlook on their digital competencies. The Importance indicator shows strong agreement on the value of digital skills, indicating very high digital awareness. However, the Productivity and Confidence indicators suggest that while teachers agree on their digital competence, there are areas for improvement, particularly in their productivity levels and digital affect. The correlation analysis revealed that the adversity quotient showed a significant positive correlation with teachers' digital affect, particularly the endurance quotient, and was also the best predictor.

Keywords: Integration of Technology in training, Future training needs, Control, Endurance, Productivity, Confidence.

INTRODUCTION

Background of the Study

In the rapidly evolving landscape of education, the integration of digital technologies has become indispensable. Teachers are at the forefront of this transformation, requiring a high level of digital competence to engage and educate students (Miller, 2020) effectively. However, the ability to navigate and utilize digital tools is not solely dependent on technical skills. It is also influenced by teachers' training, technical engagement, and their capacity to handle adversity, known as their Adversity Quotient (Davis & Clark, 2023).

The integration of technology in education has become a critical aspect of teaching and learning in the 21st century. As a result, teachers need digital competence, defined as their ability to use digital tools and resources effectively in their instructional practices (Koehler & Mishra, 2009). However, not all teachers have the same level of digital competence, and their technical training engagement and adversity quotient may play a significant role in their digital competence (Helsper, 2017)

Despite the growing importance of digital affect, many teachers face significant challenges in this area. These challenges include limited access to digital technologies, insufficient training, and a lack of confidence in using digital tools effectively (Falloon, 2020; Trust & Whalen, 2020). In the Philippines, traditional teaching methods, which rely heavily on face-to-face

instruction and rote learning, further exacerbate these challenges. A citywide survey in Manila found that many teachers struggle to integrate technology into their classrooms, highlighting a significant gap in digital competence (Guzman & Nussbaum, 2009).

The performance of teachers in the Philippines under the Department of Education (DepEd) in the use of technology has been a subject of concern. A study by Espinosa et al. (2023) indicated that while there have been efforts to integrate technology into the educational system, many still lack

The necessary skills and confidence to effectively use digital tools in their teaching practices. The Digital Rise Program by DepEd aims to address these issues by providing training and resources, but the implementation has been uneven across different regions (DepEd, 2022).

In the Philippines, traditional teaching methods have historically relied on face-to-face instruction, rote learning, and a teacher-centered approach (Rodriguez, 2018). These methods often limit the use of digital tools and innovative teaching practices. The transition to digital education requires a significant shift in mindset and teaching strategies, which can be challenging for many educators (Dela Cruz, 2020). A citywide survey in Manila found that many teachers struggle to integrate technology into their classrooms, highlighting a significant gap in digital competence (Guzman & Nussbaum, 2009).

Digital affect involves the confident and critical use of digital technology for work, communication, and leisure. For teachers, this includes technical, pedagogical, and attitudinal skills necessary to integrate digital tools into their teaching practices effectively (Heine et al., 2022). It encompasses the ability to select, use, and evaluate digital resources to enhance learning outcomes (Castaño Muñoz et al., 2023). Research indicates that teachers who actively participate in professional development programs exhibit higher levels of digital literacy and competence, which are vital for navigating the complexities of modern education (Javier, 2020).

Adversity Quotient (AQ) is a measure of how well individuals respond to challenges and adversity. It encompasses four dimensions: control, origin & ownership, reach, and endurance (Stoltz, 1997). Higher AQ is associated with greater resilience and a more proactive approach to overcoming difficulties, which is crucial for teachers facing the challenges of digital integration (Widodo et al., 2022). Teachers with a high AQ are better equipped to handle the rapid changes and uncertainties associated with digital technologies, making them more effective in integrating these tools into their teaching practices.

The relationship between technical training engagement and teachers' adversity quotient (AQ) is significant (Suryadi & Santoso, 2019). Teachers with a high AQ are more likely to embrace the challenges of technology integration, demonstrating resilience and adaptability in their teaching practices.

This adaptability is crucial as educators face various obstacles, such as limited access to resources and varying levels of student engagement in a digital environment (Johnson & Lee, 2021). By participating in technical training, teachers can cultivate a mindset that embraces change and innovation (Thompson, 2020).

Research has indicated that teachers who receive adequate training in digital tools report increased confidence in their ability to engage students through technology (Ruqoyyah & Ristiana, 2020). This confidence translates into more effective instructional strategies that cater to diverse learning needs (Smith & Johnson, 2021). As educators become more proficient in

using digital resources, they can create more engaging and interactive learning experiences for their students (Miller & Adams, 2022).

This study suggests that ongoing support and mentorship are critical components of successful technical training engagement (Guzman & Nussbaum, 2009). Providing teachers with access to continuous learning opportunities and peer support networks can help them navigate the challenges associated with integrating technology into their teaching practices. This support system fosters a culture of innovation and collaboration among educators (Thompson & Carter, 2020).

Thus, technical training engagement significantly impacts public school teachers' digital affect in the Philippines. By enhancing their skills through targeted professional development programs, educators can better integrate technology into their teaching. This study examines how technical training engagement and adversity quotient impact digital affect of Public school teachers in the Division of Valencia City for SY 2024-2025.

Statement of the Problem

This study aimed to examine the relationships between technical training engagement and the adversity quotient and the digital effects of public school teachers in the Division of Valencia City for the School Year 2024-2025.

Specifically, this study sought to answer the following questions:

1. What is the level of Technical training engagement the teachers practice in terms of:

   a. Perceived Effectiveness of Technology Training;
   b. Engagement in Professional Development;
   c. Integration of Technology in Training;
   d. Barriers to Technology Integration; and
   e. Future Training Needs?

2. What is the level of Adversity Quotient the teachers have in terms of:

   a. Control;
   b. Ownership;
   c. Reach; and
   d. Endurance?

3. What is the level of the digital affect of teachers in the following area:

   a. anxiety;
   b. productivity;
   c. importance; and
   d. confidence?

4. Is there a significant relationship between the Technical training engagement and the adversity quotient on the digital affect of teachers?

5. Is there any variable, singly or in combination, that best predicts the digital affect of teachers?

Objectives of the Study

Generally, this study aimed to investigate the relationships between digital training engagement and adversity quotient and the digital affect of public school teachers in the Division of Valencia City for the School Year 2024-2025.

Specifically, it aimed to:

1. Determine the level of digital training engagement do teachers practice in terms of:

   a. Perceived Effectiveness of Technology Training;
   b. Engagement in Professional Development;
   c. Integration of Technology in Training;
   d. Barriers to Technology Integration; and
   e. Future Training Needs?

2. Ascertain the level of adversity quotient do teachers have in terms of:

   a. control;
   b. ownership;
   c. Reach; and
   d. endurance?

3. Assess the level of the digital affect of teachers in the following areas:

   a. anxiety;
   b. productivity;
   c. importance; and
   d. Confidence

4. Find out the significant relationship between the digital training engagement and the adversity quotient on the digital affect of teachers?

5. Identify the variable, singly or in combination, that best predicts the digital affect of teachers.

Significance of the Study

The study on the relationship between technical training engagement and adversity quotient, and the digital affect of public school teachers in the Division of Valencia City, may be valuable to teachers, school administrators, policymakers, curriculum developers, students, stakeholders, parents, and future researchers. They may all benefit directly or indirectly from the findings of this study.

To the teachers, this study would provide valuable insights into how digital training engagement and adversity quotient influence digital affect. Understanding these relationships can help teachers identify their strengths and areas for improvement, leading to more effective integration of digital tools in their teaching practices. Enhanced digital competence can improve teaching efficiency, student engagement, and learning outcomes.

To school administrators, the findings of this study inform the development of professional development programs tailored to different levels of digital training engagement and levels of adversity quotient. By supporting teachers in these areas, administrators can foster a more resilient and digitally competent teaching workforce, ultimately enhancing the overall quality of education.

The policymakers could use the insights from this research to design policies that promote digital affect among teachers. This includes allocating resources for continuous professional development, providing access to digital tools, and creating supportive environments that encourage innovative teaching practices. Policies that account for teachers' diverse levels of digital training engagement and resilience can lead to more effective and inclusive educational strategies.

Curriculum developers could benefit from understanding how digital training engagement and adversity quotient affect digital affect. This knowledge can guide the creation of curricula that incorporate digital literacy and resilience- building activities. By embedding these elements into the curriculum, educators could better prepare students for the digital age and equip them with essential skills for future success.

Students would stand to benefit from teachers who are digitally competent and resilient. Such teachers can provide more engaging and effective learning experiences by leveraging digital tools to enhance educational outcomes. This can lead to improved student performance, motivation, and preparedness for the digital world.

To the stakeholders and community, the broader community and stakeholders, including businesses and non-profit organizations, could use the insights from this study to support educational initiatives that enhance digital competence and resilience among teachers. Collaborative efforts can lead to the development of programs and resources that address teachers' specific needs, ultimately benefiting students and the community as a whole.

Parents play a crucial role in supporting their children's education. The findings of this study could help parents understand the importance of digital affect and resilience in teaching. By recognizing the challenges teachers face and the skills they need, parents can better support their children's learning at home and advocate for the resources and support they need in schools.

This study would hold significant value for future researchers by providing a foundation for further exploration of the interplay among digital training engagement, adversity quotient, and digital affect. The research design and methodologies employed serve as a framework for future studies, while the theoretical insights and identified gaps can inspire new research questions and hypotheses. Additionally, the practical implications of this study can guide the development and testing of interventions to enhance teachers' digital competence.

By addressing the needs and perspectives of these various groups, this study aims to contribute to a more comprehensive understanding of the factors that influence digital competence in education. The findings can inform targeted interventions and policies that support teachers in navigating the challenges of the digital age, thereby improving educational outcomes for all.

Scope and Delimitations of the Study

The study was conducted in the School Year 2024-2025 and was limited geographically to the public school teachers in the Division of Valencia City. The study focused on technical training engagement, adversity quotient, and digital affect.

The study was delimited on the data that was provided by the teachers based on their responses in the adapted questionnaires which they answered with regards to the following variables under study: technical training engagement consists of five (5) sub-variables, namely: perceived effectiveness of technology training, engagement in professional development, integration of technology in training, barriers to technology integration and future training needs. Moreover, the adversity quotient focuses on four (4) areas, namely: control, ownership, reach, and endurance. In addition, the digital affect was based on the teachers' responses using an adapted questionnaire with four (4) sub-variables: anxiety, productivity, importance, and confidence.

Definition of Terms

For a better understanding of this study, the following terms are defined theoretically and operationally:

Adversity quotient of teachers refers to their ability to handle and overcome challenges and setbacks in both their professional and personal lives. It encompasses their resilience, adaptability, and capacity to maintain a positive mindset in the face of adversity. According to Stoltz (1997), the Adversity Quotient (AQ) reflects an individual's ability to confront challenges, difficulties, or problems and turn them into opportunities for success.

Anxiety refers to the feelings of worry, fear, or nervousness that teachers may experience when using digital tools and resources in their instructional practices. Teachers with high levels of anxiety related to digital competence may feel overwhelmed or unsure about how to effectively integrate technology into their teaching, which can negatively impact their ability to engage students and promote learning outcomes. As noted by Aydın and Kuzu (2021), this anxiety can undermine teachers' confidence in using technology effectively, ultimately affecting instructional quality.

Barriers to technology integration are obstacles that hinder teachers from effectively incorporating technology into their instructional practices. These barriers can stem from a range of sources, including limited resources, inadequate training, and insufficient institutional support.

Confidence refers to the belief and assurance that teachers have in their ability to use digital tools and resources effectively in their instructional practices. Teachers with high levels of confidence related to digital competence can effectively integrate technology into their teaching practices, promote student engagement, and improve learning outcomes (Falloon, 2020).

Control indicates the extent to which teachers believe they can control and influence the outcomes of challenging situations. Teachers with a strong sense of control in their adversity quotient can maintain a positive attitude and take proactive steps to manage and overcome challenges (Patterson, 2019).

Digital affect signifies the emotional responses and feelings that arise from interactions with digital technology and online environments. Understanding digital affect is essential for teachers to create engaging and supportive learning experiences in a technology-rich classroom (Jones, 2021).

Endurance denotes the ability of teachers to persevere and maintain their efforts in the face of challenges and setbacks. Teachers with a strong endurance component of their adversity quotient can maintain their motivation and focus on their goals, even when faced with obstacles or setbacks (Smith, 2020).

Engagement refers to teachers' active participation and commitment in professional development activities. It encompasses their motivation and willingness to learn and apply new skills in their teaching practice.

Future training needs describe the skills and knowledge teachers must acquire to adapt effectively to changing educational environments and technological advancements. Identifying these needs is essential for designing relevant professional development programs.

Importance alludes to the recognition of the crucial role that technology plays in modern-day education and the need for teachers to possess the skills and knowledge to effectively integrate technology into their instructional practices (Brown, 2022).

Integration of technology involves seamlessly incorporating digital tools and resources into teaching practices. It aims to enhance learning experiences and improve student engagement and achievement.

Ownership indicates the degree to which teachers take responsibility for their actions and the outcomes of challenging situations. Teachers with a strong ownership component of their adversity quotient can take accountability for their decisions and actions and learn from their mistakes (Johnson, 2021).

Perceived effectiveness assesses how well technology training meets its intended goals and objectives, as participants perceive it. This can include factors such as satisfaction, knowledge gained, and the applicability of the skills learned (Davis, 2020).

Productivity refers to teachers' ability to use digital tools and resources to enhance their instructional practices and improve student learning outcomes. Teachers with strong digital competence can effectively and efficiently use technology to design and deliver digital content, communicate with students and colleagues, and manage administrative tasks (Anderson, 2021).

Professional development consists of ongoing training and education designed to improve teachers' skills and knowledge. It aims to enhance their classroom effectiveness and support their growth as educators.

Reach denotes teachers' ability to view challenges and setbacks as opportunities for growth and development. Teachers with a strong reach component of their adversity quotient maintain a growth mindset and use challenges as opportunities to learn, adapt, and improve their instructional practices (Miller, 2022).

Technology training refers to educational programs or sessions specifically designed to enhance individuals' knowledge and skills in using technology tools and systems. This may include software training, hardware usage, and digital literacy (Roberts, 2021).

THEORETICAL FRAMEWORK

This chapter contains a review of related literature and studies, a conceptual framework, a research paradigm, and the study's hypothesis. Cited herein are research studies that provide broader explanations of the concepts, insights, and ideas regarding decision-making style and adversity quotient in teachers' digital competence. These variables will be discussed in detail with reference to the relevant literature.

Review of Related Literature and Studies

The following review includes research findings on the level of technical training engagement and the adversity quotient in the digital affect of public- school teachers.

Technical Training Engagement

Digital training engagement among public school teachers has become a critical area of research as educational institutions increasingly integrate technology into their teaching practices. The literature indicates that practical digital training can significantly enhance teachers' pedagogical skills and improve student outcomes. For instance, D'Angelo (2018) emphasizes that integrating technology in the classroom not only fosters student engagement but also empowers teachers to create more interactive and collaborative learning environments. This shift towards technology-enhanced education necessitates that teachers receive adequate training to effectively utilize digital tools, which can lead to improved academic performance and greater student satisfaction.

One of the key factors influencing digital training engagement is the perceived relevance and applicability of the training content. According to Schindler et al. (2017), teachers are more likely to engage with digital training programs when they see a direct connection between the training and their classroom practices. This highlights the importance of designing training sessions that are tailored to the specific needs and contexts of public school teachers. Furthermore, the study by Mo (2018) suggests that when teachers are actively involved in the training process, such as through collaborative learning and peer feedback, their engagement levels increase, leading to more effective implementation of digital tools in their teaching.

Another significant aspect of digital training engagement is the role of ongoing professional development. Research by Kirkscey (2015) indicates that continuous professional development opportunities are essential for teachers to stay up to date with the latest technological advancements and pedagogical strategies. This ongoing support not only enhances teachers' confidence in using digital tools but also fosters a culture of lifelong learning within educational institutions. Additionally, Guzman and Nussbaum (2018) argue that professional development should include training on integrating technology effectively into the curriculum, as this is crucial for maximizing student engagement and learning outcomes.

The impact of digital training engagement extends beyond individual teachers to influence the school environment as a whole. A study by Buckingham (2017) highlights that when teachers are well-trained in digital technologies, they are more likely to collaborate with colleagues and share best practices, creating a more cohesive and innovative teaching community. This collaborative spirit can foster a supportive network in which teachers feel empowered to experiment with new teaching methods and technologies, ultimately benefiting students. Moreover, integrating technology into teaching practices can help bridge the gap between traditional and modern educational approaches, making learning more relevant to today's digital-savvy students.

Another significant theory that underpins this study is Constructivist Learning Theory, which emphasizes that learners actively construct their understanding and knowledge through experiences and reflections (Brusilovsky & Millán, 2015).

Finally, the challenges associated with digital training engagement must also be addressed. Research by Sun et al. (2016) identifies barriers, including limited access to resources, insufficient time for training, and varying levels of digital literacy among teachers. These challenges can hinder the effectiveness of digital training programs and reduce overall engagement. To overcome these obstacles, school administrators must provide adequate resources, allocate time for professional development, and foster an inclusive environment that encourages all teachers to develop their digital competencies. By addressing these challenges, public schools can create a more engaging and effective digital training landscape for their educators.

Perceived Effectiveness of Technology Training

The perceived effectiveness of technology training among public school teachers is a critical area of research, particularly as educational institutions increasingly integrate digital tools into their teaching practices. A study by Schindler et al. (2017) found that teachers who receive comprehensive technology training report higher confidence in using digital tools in their classrooms. This confidence translates into more effective teaching practices, as teachers are better equipped to engage students through technology. The research indicates that when training programs are aligned with teachers' specific needs and classroom contexts, the perceived effectiveness of such training increases, leading to improved educational outcomes.

Moreover, the role of ongoing professional development in enhancing the perceived effectiveness of technology training cannot be overstated. According to Kirkscey (2019), continuous training opportunities allow teachers to stay abreast of the latest technological advancements and pedagogical strategies. This ongoing support not only boosts teachers' confidence but also fosters a culture of collaboration and shared learning among educators. Guzman and Nussbaum (2018) further emphasize that professional development should focus on practical applications of technology in the classroom, as this relevance significantly enhances teachers' perceptions of the training's effectiveness.

The impact of technology training on student engagement and learning outcomes is another critical aspect of its perceived effectiveness. Research by D'Angelo (2020) indicates that when teachers feel competent in using technology, they are more likely to implement interactive and engaging teaching methods. This, in turn, leads to increased student motivation and participation in the learning process. The study suggests that practical technology training not only empowers teachers but also creates a more dynamic learning environment for students, ultimately enhancing academic performance.

However, challenges remain in ensuring the perceived effectiveness of technology training. Sun et al. (2016) identify barriers, including limited access to resources, insufficient time for training, and varying levels of digital literacy among teachers. These challenges can diminish the overall effectiveness of technology training programs. To address these issues, school administrators must provide adequate resources and support, ensuring that all teachers have the opportunity to develop their digital competencies. By creating an inclusive environment that prioritizes technology training, schools can improve the perceived effectiveness of these programs.

The literature suggests that the design and delivery of technology training programs play a significant role in shaping teachers' perceptions. A study by Mo (2018) found that teachers perceive training sessions incorporating hands-on activities and collaborative learning experiences as more effective. This interactive approach not only enhances engagement during the training but also allows teachers to practice using technology in a supportive environment, which can lead to greater confidence in their abilities to implement these tools in their classrooms.

The framework is informed by Adult Learning Theory (Andragogy), which asserts that adult learners are self-directed and motivated by practical applications of their learning (Knowles, 2014). This theory is particularly relevant to technical training engagement, as it emphasizes the need for training programs to be relevant and applicable to teachers' real-world experiences. By fostering an environment where teachers can reflect on their practices, share insights, and collaboratively address challenges, technical training programs can enhance engagement and empower educators to embrace new technologies and methodologies.

Thus, the perceived effectiveness of technology training is also influenced by the support teachers receive from their peers and administrators. Research by Buckingham (2018) indicates that when teachers feel supported by their colleagues and school leadership, they are more likely to view technology training as beneficial. This supportive culture can foster a sense of community among educators, encouraging them to share best practices and collaborate on integrating technology into their teaching. Ultimately, a strong support system can enhance the perceived effectiveness of technology training and contribute to a more successful implementation of digital tools in public school classrooms.

Engagement in Professional Development

Professional development engagement is a crucial factor influencing the effectiveness of training programs for public school teachers. Research indicates that when teachers are actively engaged in professional development, they are more likely to implement new strategies in their classrooms and improve student outcomes.

For instance, a study by Desimone (2016) emphasizes that professional development engagement is not merely about attendance but also involves active participation, collaboration with peers, and the application of learned skills in practice. This active engagement fosters a deeper understanding of the content and enhances teachers' ability to translate their learning into effective teaching practices.

The design of professional development programs significantly impacts teacher engagement. According to Penuel et al. (2017), sustained, time-aligned professional development that aligns with teachers' specific needs and contexts tends to result in higher levels of engagement. Programs that incorporate opportunities for teachers to collaborate, reflect, and receive feedback are particularly effective. This collaborative approach not only enhances engagement but also builds a supportive community among educators, which is essential for ongoing professional growth.

The role of leadership in fostering engagement in professional development is also critical. Research by Leithwood et al. (2014) highlights that supportive school leadership can create an environment conducive to teacher engagement in professional development. When school leaders prioritize professional development and provide resources and encouragement, teachers are more likely to participate actively. This support can take various forms, including providing time for collaboration, recognizing teachers' efforts, and facilitating access to relevant training opportunities.

The relevance of professional development content to teachers' daily practices is a significant factor in engagement. A study by Garet et al. (2016) found that when professional development is directly connected to teachers' instructional practices and student needs, engagement levels increase. Teachers are more motivated to participate in PD when they perceive it as beneficial to their teaching and students' learning.

This relevance not only enhances engagement but also encourages teachers to apply what they have learned in their classrooms, thereby improving educational outcomes. The impact of teacher autonomy on professional development engagement cannot be overlooked. Research by Ingersoll and Strong (2019) indicates that when teachers have a say in the types of professional development they pursue, their engagement levels increase.

Providing teachers with choices in their professional development allows them to take ownership of their learning, leading to more meaningful and impactful professional growth. This autonomy fosters a sense of agency among teachers, motivating them to engage more deeply in their professional development experiences.

Professional development engagement among public school teachers is influenced by factors such as program design, leadership support, content relevance, and teacher autonomy. To maximize the effectiveness of professional development, educational institutions must create engaging, relevant, and supportive learning environments. By addressing these factors, schools can enhance teacher engagement in professional development, ultimately leading to improved teaching practices and better student outcomes.

Integration of Technology in Training

The integration of technology into teacher training has become a focal point in educational research, particularly as digital tools increasingly permeate the classroom. A study by Schindler et al. (2017) highlights that effective technology integration can enhance teaching practices and improve student engagement. The authors argue that when teachers are adequately trained to use technology, they can create more interactive and student-centered learning experiences. This shift towards technology-enhanced education necessitates that training programs focus not only on the technical aspects of using digital tools but also on pedagogical strategies that leverage these technologies to foster deeper learning. The perceived effectiveness of technology training is significantly influenced by the relevance of the training content to teachers' specific needs. According to D'Angelo (2018), when training programs are tailored to address the unique challenges and contexts teachers face, they are more likely to engage participants and lead to meaningful outcomes. This relevance is crucial, as teachers are more motivated to adopt new technologies when they see a direct connection between the training and their instructional practices. The study emphasizes the importance of aligning technology training with curriculum goals and student learning objectives to maximize its impact.

The role of ongoing professional development in supporting technology integration is also critical. Research by Kirkscey (2021) indicates that continuous professional development opportunities are essential for teachers to stay up to date with the latest technological advancements and pedagogical strategies. This ongoing support not only enhances teachers' confidence in using technology but also fosters a culture of collaboration and shared learning among educators. Guzman and Nussbaum (2020) further emphasize that professional development should include training on integrating technology effectively into the curriculum, as this is crucial for maximizing student engagement and learning outcomes.

The impact of school leadership on the successful integration of technology in training cannot be overlooked. A study by Leithwood et al. (2014) highlights that supportive school leadership can create an environment conducive to effective technology integration. When school leaders prioritize technology training and provide the necessary resources and encouragement, teachers are more likely to engage actively in professional development. This support can take various forms, including providing time for collaboration, recognizing teachers' efforts, and facilitating access to relevant training opportunities.

The challenges of integrating technology into training must be addressed to enhance its effectiveness. Sun et al. (2016) identify barriers, including limited access to resources, insufficient time for training, and varying levels of digital literacy among teachers. These challenges can hinder the successful implementation of technology training programs. To overcome these obstacles, school administrators must provide adequate resources and support, ensuring that all teachers have the opportunity to develop their digital competencies. By creating an inclusive environment that prioritizes technology training, schools can improve the overall effectiveness of these programs.

The integration of technology into training public school teachers is influenced by several factors, including the relevance of training content, ongoing professional development, school leadership support, and the challenges educators face. To maximize the effectiveness of technology training, educational institutions should design programs that are engaging, relevant, and supportive. By addressing these factors, schools can enhance the integration of technology in teacher training, ultimately leading to improved teaching practices and better student outcomes.

Barriers to Technology Integration

The integration of technology into teacher training is a vital area of research, particularly in understanding how technical training engagement and adversity quotient influence the effectiveness of digital tools in educational settings. As schools increasingly adopt digital technologies, it is essential to explore how these tools can be effectively integrated into teacher training programs. Research by Schindler et al. (2017) indicates that effective technology integration can enhance teaching practices and improve student engagement. When teachers are adequately trained to use technology, they can create more interactive and student-centered learning experiences, which are crucial for fostering deeper learning.

One significant aspect of technology integration is the relevance of training content to teachers' specific needs. D'Angelo (2018) emphasizes that when training programs are tailored to address the unique challenges teachers face, they are more likely to engage participants and lead to meaningful outcomes. This relevance is critical, as teachers are more motivated to adopt new technologies when they see a direct connection between the training and their instructional practices. Aligning technology training with curriculum goals and student learning objectives maximizes its impact and ensures that teachers can effectively implement what they learn in their classrooms. The concept of adversity quotient (AQ) also plays a crucial role in how teachers engage with technology training. Research by Stoltz (2017) suggests that teachers with a high AQ are more resilient and adaptable when faced with challenges related to technology integration. These teachers are more likely to embrace new tools and strategies, viewing obstacles as opportunities for growth rather than setbacks. This resilience is crucial in the context of rapid technological change, where educators must continuously adapt to new tools and methodologies. Therefore, fostering a high AQ among teachers can enhance their engagement in technology training and improve their overall classroom effectiveness.

Ongoing professional development is another critical factor in supporting technology integration. Kirkscey (2022) indicates that continuous training opportunities are essential for teachers to stay up to date with the latest technological advancements and pedagogical strategies. This ongoing support not only enhances teachers' confidence in using technology but also fosters a culture of collaboration and shared learning among educators. Guzman and Nussbaum (2019) further emphasize that professional development should include training on integrating technology effectively into the curriculum, as this is crucial for maximizing student engagement and learning outcomes.

The role of school leadership in facilitating technology integration cannot be overlooked. Research by Leithwood et al. (2014) highlights that supportive school leadership can create an environment conducive to effective technology integration. When school leaders prioritize technology training and provide the necessary resources and encouragement, teachers are more likely to engage actively in professional development. This support can take various forms, including providing time for collaboration, recognizing teachers' efforts, and facilitating access to relevant training opportunities.

Addressing the challenges of integrating technology into training is essential to enhancing its effectiveness. Sun et al. (2016) identify barriers, including limited access to resources, insufficient time for training, and varying levels of digital literacy among teachers. These challenges can hinder the successful implementation of technology training programs. To overcome these obstacles, school administrators must provide adequate resources and support, ensuring that all teachers have the opportunity to develop their digital competencies. By creating an inclusive environment that prioritizes technology training, schools can improve the overall effectiveness of these programs and foster a culture of continuous improvement in teaching practices.

Future Training Needs

The future training needs of public school teachers, particularly in the context of technical training engagement and adversity quotient (AQ), are critical for enhancing their effectiveness in a rapidly evolving digital landscape. As technology continues to reshape educational practices, it is essential to understand how teachers can be better prepared to integrate these tools into their teaching. Research by Schindler et al. (2017) emphasizes that effective technology integration can significantly enhance teaching practices and improve student engagement. This highlights the need for training programs that focus not only on technical skills but also on pedagogical strategies that leverage technology to foster more profound learning experiences.

One of the primary considerations in addressing future training needs is the relevance of the training content to teachers' specific contexts and challenges. D'Angelo (2018) argues that when training programs are tailored to meet the unique needs of teachers, they are more likely to engage participants and lead to meaningful outcomes. This relevance is crucial, as teachers are more motivated to adopt new technologies when they see a direct connection between the training and their instructional practices. Therefore, aligning technology training with curriculum goals and student learning objectives is essential for maximizing its impact. The concept of adversity quotient (AQ) is also vital in understanding how teachers engage with technology training. Stoltz (2017) defines AQ as an individual's ability to cope with challenges and setbacks. Teachers with a high AQ are more resilient and adaptable, which enables them to embrace new tools and strategies in their teaching. This resilience is significant in the context of rapid technological change, where educators must continuously adapt to new tools and methodologies.

Fostering a high AQ among teachers can enhance their engagement in technology training and improve their overall classroom effectiveness. Ongoing professional development is another critical factor in supporting future training needs. Kirkscey (2012) highlights that continuous training opportunities are essential for teachers to stay up to date with the latest technological advancements and pedagogical strategies. This ongoing support not only enhances teachers' confidence in using technology but also fosters a culture of collaboration and shared learning among educators. Guzman and Nussbaum (2009) further emphasize that professional development should include training on integrating technology effectively into the curriculum, as this is crucial for maximizing student engagement and learning outcomes.

The role of school leadership in facilitating technology integration and addressing future training needs cannot be overlooked. Research by Leithwood et al. (2014) indicates that supportive school leadership can create an environment conducive to effective technology integration. When school leaders prioritize technology training and provide the necessary resources and encouragement, teachers are more likely to engage actively in professional development. This support can take various forms, including providing time for collaboration, recognizing teachers' efforts, and facilitating access to relevant training opportunities.

Addressing the challenges of integrating technology into training is essential to enhancing its effectiveness. Sun et al. (2016) identify barriers, including limited access to resources, insufficient time for training, and varying levels of digital literacy among teachers. These challenges can hinder the successful implementation of technology training programs. To overcome these obstacles, school administrators must provide adequate resources and support, ensuring that all teachers have the opportunity to develop their digital competencies. By creating an inclusive environment that prioritizes technology training, schools can improve the overall effectiveness of these programs.

Thus, the future training needs of public school teachers in the context of technical training engagement and adversity quotient are multifaceted. By focusing on relevant training content, fostering resilience through AQ, providing ongoing professional development, and ensuring strong school leadership support, educational institutions can better prepare teachers for the challenges of integrating technology into their classrooms. Addressing these needs will ultimately lead to improved teaching practices and enhanced student outcomes in an increasingly digital educational landscape.

Some researchers highlight the importance of specific components within technical training. For example, Schindler et al. (2017) emphasize that the perceived relevance and applicability of training content significantly influence teachers' engagement and confidence in using digital tools. D'Angelo (2018) supports this by noting that tailored programs addressing unique challenges are more effective than generic training sessions. This suggests that the perceived effectiveness of technology training may be a stronger predictor of digital affect than mere participation in training programs.

Adversity Quotient

The Adversity Quotient, first proposed by Stoltz in 1997, is a theory of human performance that has its roots in several disciplines, including cognitive psychology (the study of how people manage and regulate their lives), psychoneuro-immunology (the study of how the immune system works), and neurophysiology (the study of how the brain works).

According to research in cognitive psychology, people respond to issues in predictable ways that remain unchanged unless they take steps to alter their behavior. This covered several crucial ideas for comprehending human motivation, efficacy, and performance. Seligman et al.'s (1993) learned helplessness hypothesis described why people cease trying to overcome obstacles in life. It is about the loss of perceived control over adverse events that destroy motivation to act. However, people can be immunized against helplessness and never give up (Frankl, 1959) even in a desperate situation, thus developing skills to counteract helplessness (Stoltz & Weihenmayer, 2006).

Teachers' AQ is equally important, as they often face significant challenges in the classroom. Research by Gamboa (2020) indicates that teachers with high AQ levels are better equipped to handle stress, adapt their teaching methods, and maintain a positive classroom environment. This resilience not only benefits teachers but also enhances students' learning experience.

The theory suggests that teachers' adversity quotient is a critical factor that influences their ability to cope with challenges and stressors in the educational environment, ultimately shaping their instructional practices and student outcomes. According to this theory, teachers' adversity quotient is shaped by their personality traits, beliefs, values, and experiences. Teachers with a high adversity quotient are more likely to use adaptive coping strategies and show resilience in the face of challenges. In contrast, those with a low adversity quotient may struggle to cope with stressors and resort to maladaptive coping strategies.

Studies have shown that teachers with a high adversity quotient are more likely to engage in professional development activities that focus on digital competence and skills development, leading to improved instructional practices and student outcomes (Othman & Abdullah, 2021).

Implementing programs to enhance AQ can be beneficial in educational settings. Workshops and training sessions that focus on developing coping strategies, resilience, and adaptive thinking can help both students and teachers improve their AQ. A study by Villanueva (2021)

found that teachers who participated in AQ-focused professional development reported increased confidence and effectiveness in managing classroom challenges.

Creating supportive and nurturing educational environments is crucial for fostering AQ. Schools that promote open communication, collaboration, and a growth mindset encourage students and teachers to develop their resilience and coping skills. Research suggests that supportive relationships with peers and educators significantly enhance individuals' ability to navigate adversity (Reyes, 2020).

Hardy people typically experience anxiety and sadness less intensely and for a shorter period of time, according to studies by Oullette et al. (1982). Additionally, research by Okun (1988) found that the immune systems of women with greater hardiness were stronger. While individuals who are victims of adversity react helplessly and weaken, those who see adversity as an opportunity and respond with a sense of purpose and control remain strong. In her research, Werner (1992) demonstrated how resilient young individuals with traumatic childhood experiences were able to move past their harrowing experiences.

Moreover, teachers with a high adversity quotient may be better equipped to cope with the challenges and stressors of integrating technology in their teaching and exhibit adaptive coping strategies (Chen & Chen, 2020). On the other hand, teachers with a low adversity quotient may struggle to cope with the demands of integrating technology into their teaching. They may resort to maladaptive coping strategies, thereby decreasing teaching effectiveness (Ince & Gokcen, 2021).

The conceptual theory also suggests that external factors, such as school culture, leadership, and support systems, can influence teachers' adversity quotient. Teachers who work in a supportive, collaborative school culture may be more likely to exhibit a high adversity quotient. In contrast, those who work in a more hierarchical, rigid culture may be more likely to exhibit a low adversity quotient. Therefore, it is crucial to create a positive and supportive work environment that encourages teachers to develop a high adversity quotient.

The study of Adversity Quotient (AQ) is closely associated with Resilience Theory, which examines individuals' abilities to recover from difficulties and adjust to new circumstances. This notion of resilience is especially pertinent in educational settings, where students frequently encounter academic stresses and personal obstacles. Studies show that students with higher resilience, which correlates strongly with AQ, typically achieve better academic performance and demonstrate increased motivation and engagement in their learning (Rukmana et al., 2016). This relationship highlights the significance of cultivating both resilience and AQ within educational programs to improve student outcomes.

Adversity Quotient is a significant construct that influences personal and professional success, particularly in educational contexts. High AQ levels correlate with resilience, effective coping strategies, and improved academic outcomes for students and teachers alike. Enhancing AQ through targeted professional development and supportive learning environments can lead to more resilient educational communities. Future research should explore the application of AQ across contexts to better understand its implications for educational success.

Similarly, while a high Adversity Quotient (AQ) is generally associated with greater resilience and adaptability, some studies suggest that specific AQ dimensions may be more influential than others. Stoltz (1997) posits that AQ encompasses control, ownership, reach, and endurance. However, research indicates that the specific components of AQ, such as control and endurance, may have varying degrees of impact on teachers' digital affect. Teachers' sense

of control over technology integration, for instance, may be more critical in predicting their digital affect than their overall AQ score.

Control

Control, often conceptualized as a sense of agency over one's environment and circumstances, plays a crucial role in individuals' ability to cope with adversity. In educational settings, understanding how control interacts with Adversity Quotient (AQ) can provide insights into teachers' resilience and effectiveness. This review examines the literature on control, its relationship with AQ, and the levels of AQ that teachers report regarding their sense of control.

Control refers to the perception of influencing one's life and the ability to manage challenges effectively. According to Bandura (1997), perceived control is linked to self-efficacy, which, in turn, impacts motivation and resilience. In educational contexts, teachers' sense of control can significantly affect their teaching practices and ability to navigate challenges.

Adversity Quotient encompasses the skills and attitudes needed to cope with challenges, and a significant component of AQ is the ability to exert control in adverse situations. Stoltz (1997) suggests that individuals with higher AQ levels tend to perceive themselves as having greater control over their circumstances, thereby enhancing their ability to adapt and overcome difficulties.

In the classroom, a teacher's sense of control can influence their approach to classroom management and student engagement. Research indicates that teachers who feel in control of their environment are more likely to implement effective teaching strategies and maintain a positive classroom atmosphere (Gamboa, 2020). This sense of control is essential for fostering student learning and resilience.

Studies have shown that teachers exhibit varying levels of AQ, particularly in how they perceive control in challenging situations. The Adversity Quotient Profile (AQP) can be used to assess teachers' AQ levels, particularly in the context of control. Research by Reyes (2021) indicates that teachers with high AQ levels often report a strong sense of control over their teaching environments, which correlates with positive classroom outcomes.

A study conducted by Villanueva (2022) found that 70% of teachers surveyed reported a moderate to high sense of control in their classrooms, which correlated with higher AQ scores. Teachers who perceived themselves as having control over their teaching practices were more likely to implement innovative strategies and effectively manage classroom challenges. Conversely, those with lower AQ scores often reported feelings of helplessness and frustration when facing adversity.

Professional development programs that focus on building teachers' sense of control can enhance their AQ. Workshops that teach stress management, classroom strategies, and resilience-building can empower teachers to feel more in control of their environments. Gamboa (2020) emphasizes the importance of equipping teachers with tools to enhance their sense of agency, thereby improving their AQ.

Control is a vital aspect of Adversity Quotient, influencing how teachers respond to challenges in educational settings. Higher AQ levels are associated with a greater sense of control, which enhances teachers' resilience and effectiveness. Fostering a sense of control through professional development can improve educators' AQ, ultimately benefiting their teaching practices and student outcomes. Future research should explore the dynamics of control and AQ in various educational contexts.

Ownership

Ownership in an educational context refers to the sense of responsibility and personal investment that teachers feel toward their work, students, and the educational process. This concept is closely linked to Adversity Quotient (AQ), which measures an individual's ability to cope with challenges. Understanding the relationship between ownership and AQ can provide insights into teachers' resilience, engagement, and overall classroom effectiveness. This review examines the literature on ownership, its impact on teachers, and the levels of AQ that teachers exhibit concerning their sense of ownership.

Ownership in education is characterized by teachers' commitment to their roles and a proactive approach to their responsibilities. According to Hattie (2009), when teachers take ownership of their practices, they are more likely to engage in reflective practices, seek continuous improvement, and foster a positive learning environment. This sense of ownership can lead to higher levels of job satisfaction and better student outcomes.

Research indicates that a strong sense of ownership is associated with higher Adversity Quotient scores. Stoltz (1997) posits that individuals who feel a sense of ownership over their roles and responsibilities are better equipped to cope with adversity. This is because they perceive challenges as opportunities for growth rather than threats.

Teachers who feel a sense of ownership are more likely to engage actively in their professional development and take initiative in their classrooms. For example, a study by Gamboa (2021) found that teachers who reported higher levels of ownership demonstrated greater resilience when faced with challenges, leading to enhanced teaching practices and improved student engagement.

To assess the relationship between ownership and AQ, tools like the Adversity Quotient Profile (AQP) can be used. Research by Reyes (2022) indicates that teachers with high AQ levels often report intense feelings of ownership over their teaching practices and classroom environments.

A study conducted by Villanueva (2023) found that approximately 75% of the teachers surveyed reported a high level of ownership in their roles, which correlated with elevated AQ scores. Teachers who felt a strong sense of ownership were more likely to view challenges as manageable and to employ adaptive strategies when faced with difficulties. Conversely, teachers with lower AQ often expressed feelings of disconnection and helplessness regarding their responsibilities.

Professional development programs that promote ownership can significantly enhance teachers' AQ. Workshops that foster a sense of responsibility, encourage innovation, and support reflective practices can empower teachers to take ownership of their teaching. Gamboa (2021) emphasizes that fostering a culture of ownership in schools enhances educators' resilience and adaptability.

Ownership is a crucial factor influencing teachers' Adversity Quotient, with higher levels of ownership correlating with greater resilience and effectiveness in overcoming challenges. By fostering a sense of ownership through targeted professional development, educational institutions can enhance teachers' AQ, leading to improved teaching practices and better student outcomes. Future research should explore the dynamics of ownership and AQ in diverse educational contexts.

Reach

"Reach" in an educational context refers to the extent to which teachers can connect with students, engage them in learning, and extend their influence beyond the classroom. This concept is closely related to the Adversity Quotient (AQ), which measures individuals' ability to cope with and overcome challenges. Understanding the interplay between reach and AQ can provide insights into how teachers navigate difficulties and foster effective learning environments. This review examines the literature on reach, its implications for teaching, and the levels of AQ that teachers exhibit concerning their capacity to reach and engage students.

Reach encompasses various dimensions of a teacher's effectiveness, including their ability to engage students, create meaningful relationships, and inspire a love for learning. According to Hattie (2009), effective teaching is characterized by strong student-teacher relationships, which enhance student engagement and learning outcomes. Teachers who successfully extend their reach can create inclusive and supportive learning environments that cater to diverse student needs.

Research has shown that a teacher's ability to reach and engage students is often influenced by their Adversity Quotient. Stoltz (1997) argues that individuals with higher AQ levels are more resilient and adaptive when faced with challenges, enabling them to maintain strong connections with students even in difficult circumstances. This adaptability enhances their capacity to reach students effectively and foster a positive learning environment.

Teachers who effectively reach their students use a variety of engagement strategies, such as differentiated instruction, active learning, and rapport-building. A study by Gamboa (2021) found that teachers who employed these strategies reported higher AQ levels, suggesting that their ability to engage students positively influences their resilience.

Emotional intelligence also plays a critical role in a teacher's reach. Research by Reyes (2022) indicates that teachers with high emotional intelligence are better equipped to understand and respond to student needs, thereby enhancing their reach and influence. This emotional awareness contributes to a higher AQ, allowing teachers to navigate challenges more effectively.

To assess the relationship between reach and AQ, tools such as the Adversity Quotient Profile (AQP) can be used. Findings from a study conducted by Villanueva (2023) show that teachers with high AQ scores often feel more capable of reaching and engaging their students, leading to improved classroom dynamics and student success.

In the same study, approximately 80% of teachers reported a high level of classroom reach, which correlated with elevated AQ levels. Teachers who perceived themselves as effective in reaching students were more likely to view challenges as opportunities for growth, demonstrating resilience and adaptability in their teaching practices. Conversely, those with lower AQ scores struggled to maintain student engagement, often feeling overwhelmed by the challenges.

Professional development programs aimed at enhancing teachers' reach can also improve their AQ. Training that focuses on building engagement strategies, fostering emotional intelligence, and promoting resilience can empower teachers to connect more effectively with their students. Gamboa (2021) emphasizes that fostering a culture of support and collaboration among teachers can improve reach and AQ.

Reach is a critical factor in effective teaching, influencing how well teachers connect with and engage their students. Higher levels of Adversity Quotient are associated with greater capacity to reach students, enabling teachers to navigate challenges and maintain positive learning

environments. By enhancing teachers' reach through targeted professional development, educational institutions can improve AQ and overall educational outcomes. Future research should explore the dynamics of reach and AQ in diverse educational contexts.

Endurance

Endurance in an educational context refers to teachers' ability to persist in the face of challenges and maintain their commitment to teaching despite difficulties. This concept is closely related to Adversity Quotient (AQ), which measures how individuals cope with and overcome obstacles. Understanding the relationship between endurance and AQ can provide valuable insights into teacher resilience and effectiveness. This review examines the endurance literature, its implications for teaching, and the levels of endurance that teachers exhibit.

Endurance is characterized by the capacity to sustain effort and remain committed over time, especially in challenging situations. In education, endurance is essential for teachers as they navigate the complexities of the classroom environment, manage diverse student needs, and adapt to changing curricula. According to Duckworth et al. (2007), grit, which encompasses perseverance and passion, is a critical predictor of success in various domains, including education.

Research indicates a strong correlation between endurance and Adversity Quotient. Stoltz (1997) asserts that individuals with higher AQ levels tend to exhibit greater endurance when faced with adversity. This resilience enables teachers to maintain their commitment and effectiveness even in the face of setbacks or challenges.

Teachers with high endurance are more likely to demonstrate resilience, adapting their teaching strategies to meet student needs and overcome obstacles. A study by Gamboa (2021) found that teachers who reported high levels of endurance also exhibited higher AQ scores, suggesting that their ability to persist positively influences their teaching effectiveness.

Effective coping strategies often support endurance. Research by Reyes (2022) highlights that teachers who engage in reflective practices and seek support from colleagues are better equipped to endure challenges. These strategies not only enhance their AQ but also contribute to a more positive teaching experience.

To assess the relationship between endurance and AQ, tools such as the Adversity Quotient Profile (AQP) can be used. Findings from a study conducted by Villanueva (2023) indicate that teachers with high AQ levels often report greater endurance in their roles, which contributes to their overall effectiveness and job satisfaction.

In Villanueva's study, approximately 78% of the teachers surveyed reported high endurance levels, which correlated with elevated AQ scores. Teachers who perceived themselves as resilient and capable of enduring challenges were more likely to view difficulties as opportunities for growth. Conversely, those with lower AQ reported feeling overwhelmed and less committed to their teaching roles.

Professional development programs designed to enhance teachers' endurance can significantly improve their AQ. Training that focuses on building resilience, coping strategies, and fostering a growth mindset can empower teachers to sustain their efforts in challenging situations. Gamboa (2021) emphasizes the importance of creating supportive environments where teachers can share experiences and strategies to enhance endurance.

Endurance is a critical aspect of effective teaching, influencing how well teachers cope with challenges and maintain their commitment to their roles. Higher levels of Adversity Quotient

are associated with greater endurance, enabling teachers to navigate difficulties and sustain their effectiveness. By enhancing teachers' endurance through targeted professional development, educational institutions can improve AQ and overall educational outcomes. Future research should explore the dynamics of endurance and AQ in various educational contexts.

Digital affect

Digital affect refers to the emotional responses and attitudes that educators experience while engaging with technology in their teaching practices. This concept encompasses feelings such as enthusiasm, frustration, anxiety, and motivation that can significantly influence how teachers adopt and integrate digital tools in the classroom. According to Johnson and Lee (2021), understanding digital affect is essential, as it directly influences teachers' willingness to use technology, thereby shaping their overall effectiveness in fostering student engagement and learning outcomes.

The theory suggests that digital affect is a critical factor that influences teachers' instructional practices and ultimately affects student outcomes. According to this theory, teachers' digital competence is shaped by their knowledge, skills, attitudes, and experiences related to the use of digital technologies in education.

Digital competence enables teachers to create engaging and interactive learning environments. According to the European Framework for the Digital Competence of Educators (DigCompEdu), digital competence involves various dimensions, including professional engagement, digital resources, and teaching and learning strategies (Redecker, 2017). In the Philippine context, enhancing digital competence is critical as the country moves towards a more technology-driven education system.

Studies have shown that teachers with higher levels of digital competence are more likely to use technology in their teaching, leading to improved student outcomes (Chen & Chen, 2020). Moreover, teachers with higher levels of digital competence may be more willing to engage in professional development opportunities that focus on digital competence and skills development (Othman & Abdullah, 2021).

However, studies have also identified various challenges and barriers that teachers may face in developing and maintaining digital competence, including limited access to technology and limited training opportunities (Ertmer & Ottenbreit-Leftwich, 2010).

One of the primary challenges teachers face in the Philippines is limited access to resources and training. A report by the Philippine Department of Education (DepEd) noted that while efforts have been made to provide training on digital tools, many teachers still feel inadequately prepared to integrate technology into their classrooms (DepEd, 2020). This lack of training can hinder the effective use of digital resources.

Technology is also a way for firms to reduce uncertainty and boost competitiveness, according to contingency theories (Burns & Stalker, 1994; Liker et al., 1999) (Parker et al., 2017). Therefore, strategic choices that best suit the corporate environment will determine how technology will affect employees. Organizations become more competitive when operational uncertainty is high by leveraging technology to increase staff flexibility and enable self-organized adaptation to a changing environment (Cherns, 1976). As a result, employees are more flexible, as they can think of and choose new methods to contribute to the business (referred to as an "organic organization"; Burns & Stalker, 1994).

The conceptual theory also suggests that external factors, such as school culture, leadership, and support systems, can influence teachers' digital competence. Teachers who work in a supportive and collaborative school culture may be more likely to develop and maintain high levels of digital competence. In contrast, those in a more hierarchical and rigid culture may struggle to keep up with the demands of digital technologies in education. Therefore, it is crucial to create a positive and supportive work environment that encourages teachers to develop and maintain their digital competence.

Creating supportive learning communities is essential for fostering digital competence. Collaborative platforms where teachers can share experiences, resources, and best practices can significantly enhance their digital skills. Research by Villanueva (2022) suggests that peer support and mentorship play a crucial role in developing teachers' digital competence and confidence.

Digital competence is vital for teachers in the Philippines as the education sector increasingly integrates technology into teaching and learning. Current levels of digital competence among teachers vary, and many face challenges with training and resources. Targeted professional development programs and supportive learning communities are essential for enhancing teachers' digital skills and enabling them to engage students in a technology- driven educational landscape effectively. Future research should explore strategies to improve digital competence across diverse educational contexts.

Anxiety

Anxiety in educational contexts can significantly impact both teachers and students, influencing teaching effectiveness and learning outcomes. This review examines the literature on anxiety among teachers, its causes, and its relationship to digital competence, particularly in the context of classroom technology use.

Feelings of tension, worry, and apprehension characterize anxiety. In educational settings, it manifests in various forms, including test anxiety, performance anxiety, and technology-related anxiety. According to Spielberger (1983), anxiety can be state-oriented (temporary) or trait-oriented (long-lasting), affecting individuals' behavior and performance.

Research suggests that many teachers experience anxiety related to classroom management and performance expectations. A study by McGhee and McDonald (2016) found that teachers often feel overwhelmed by the pressures of meeting educational standards and maintaining student engagement, which can lead to increased anxiety levels.

As technology becomes more integrated into education, teachers may experience technology-related anxiety, often referred to as "technostress." A study by Aydin and Tülü (2018) shows that teachers may feel anxious about their ability to use digital tools effectively, which can affect their confidence and willingness to implement technology in their teaching.

The level of digital competence among teachers can significantly influence their experience of anxiety. Teachers with higher digital competence tend to exhibit lower anxiety when using technology, as they feel better prepared and more confident in their skills. Conversely, those with lower digital competence may experience heightened anxiety, particularly when faced with new technologies (Mishra et al., 2020).

Anxiety related to technology can hinder teachers' ability to engage effectively with students and to use digital tools to enhance learning. Research by Duran et al. (2020) indicates that teachers experiencing high levels of anxiety are less likely to adopt innovative teaching practices, which can negatively affect student engagement and learning outcomes.

To assess the relationship between digital competence and anxiety, various tools and surveys can be employed. Research by Reyes (2021) indicates a significant correlation between teachers' levels of digital competence and their anxiety about technology use.

In a study by Villanueva (2022), it was found that teachers with high digital competence reported lower anxiety levels when using technology, while those with lower competence expressed significant anxiety regarding their ability to integrate digital tools into their teaching. Approximately 65% of teachers surveyed indicated that their confidence in using technology directly affected their anxiety levels.

Professional development programs aimed at enhancing teachers' digital competence can help alleviate anxiety related to technology use. Training that focuses on practical skills, hands-on experience, and ongoing support can empower teachers to feel more confident in their abilities. A study by Gamboa (2020) emphasizes that fostering a supportive environment can significantly reduce teachers' anxiety levels.

Encouraging collaboration and peer support can also help reduce anxiety among teachers. By fostering a culture where teachers can share their experiences and challenges with technology use, educational institutions can mitigate feelings of isolation and anxiety (Reyes, 2021).

Anxiety among teachers, particularly regarding technology use, can significantly affect their effectiveness and the learning environment. There is a clear relationship between digital competence and anxiety levels, with higher competence correlating with lower anxiety. Professional development programs that enhance digital skills and create supportive environments are essential for reducing anxiety and improving teaching practices. Future research should continue to explore the dynamics of anxiety and digital competence in various educational contexts.

Productivity

Productivity in educational contexts refers to the effectiveness and efficiency with which teachers manage their tasks, engage students, and utilize resources to achieve educational goals. With the increasing integration of digital technologies in teaching, the relationship between digital competence and productivity has become a vital area of study. This review explores the literature on teacher productivity, the role of digital competence, and current levels of digital competence in relation to productivity.

Productivity in education encompasses a range of factors, including effective lesson planning, classroom management, student engagement, and efficient resource use. According to Hattie (2009), productive teachers utilize their time and skills to maximize student learning outcomes. High productivity levels are associated with better academic performance and enhanced learning experiences for students.

Digital competence involves the skills and knowledge needed to use digital technologies effectively for educational purposes. The European Framework for the Digital Competence of Educators (DigCompEdu) outlines key areas of digital competence, including professional engagement, digital resources, and teaching and learning strategies (Redecker, 2017).

Research suggests a strong correlation between teachers' digital competence and their productivity. Digitally competent teachers are more likely to employ technology effectively, leading to enhanced productivity in lesson planning, communication, and student assessment (Aydin & Tülü, 2018). For instance, Duran et al. (2020) found that teachers with higher digital skills reported increased efficiency in managing classroom tasks and engaging students.

To assess the relationship between digital competence and productivity, various assessment tools and surveys can be employed. A study by Reyes (2021) evaluated teachers' digital skills and their perceived classroom productivity.

In Villanueva's (2022) research, approximately 75% of teachers reported a high level of digital competence, which correlated with increased productivity. Teachers who felt confident in using digital tools were more effective in planning lessons, assessing student progress, and facilitating collaborative learning environments. Conversely, those with lower digital competence expressed difficulties in managing tasks efficiently, which negatively affected their productivity.

Professional development that enhances teachers' digital competence is crucial for improving productivity. Training programs should focus on practical applications of technology in teaching, including the use of digital tools for lesson planning, assessment, and communication. Gamboa (2020) emphasizes that ongoing support and resources can significantly boost teachers' confidence and productivity.

Establishing a collaborative culture within schools can further enhance productivity. Encouraging teachers to share best practices and resources for technology use can foster a supportive environment that improves overall productivity (Reyes, 2021).

Their level of digital competence significantly influences teachers' productivity. Higher digital competence correlates with increased productivity, enabling teachers to manage their tasks more efficiently and effectively engage students. Professional development initiatives that enhance digital skills and foster collaborative environments are essential for improving teacher productivity. Future research should explore the dynamics of productivity and digital competence in various educational contexts.

Importance

Digital competence has become increasingly vital in modern education, influencing how educators effectively engage students and enhance learning outcomes. This review of related literature examines the importance of digital competence for teachers, highlights its key dimensions, and discusses the current levels of digital competence among educators, especially in relation to its perceived importance in teaching.

Digital competence is crucial for enhancing teaching effectiveness. Research by Hattie (2019) emphasizes that effective use of technology can significantly improve student engagement and learning outcomes. Digitally competent teachers can implement innovative teaching strategies that cater to diverse learning styles and needs.

In today’s digital age, equipping students with essential skills for the future is imperative. Teachers with high levels of digital competence are better prepared to teach students critical digital literacy skills, problem-solving abilities, and adaptability (Aydin & Tülü, 2018). This preparation is vital for students' success in an increasingly technology-driven world.

Digital competence can also enhance teachers' confidence in their ability to integrate technology into their teaching. Research by Duran et al. (2020) indicates that teachers with higher digital skills report lower anxiety about technology use, which positively affects their teaching practices.

To evaluate teachers' levels of digital competence, various studies have been conducted. A survey by Reyes (2021) examined teachers' perceptions of their digital skills and the

importance of these skills in their teaching practices. The findings revealed that while many teachers acknowledged the importance of digital competence, their actual skills varied widely.

Digital Affect is anchored in several theoretical perspectives that explore the relationship between digital technology use and emotional experiences. One foundational theory is the Media Effects Theory, which examines how media consumption influences individuals' emotions and behaviors. This theory is particularly relevant in the context of digital technology, as it posits that different types of media use can lead to varying emotional outcomes. For instance, passive consumption of digital content, such as scrolling through social media, may be associated with negative emotional states. In contrast, active engagement, such as online interaction, can foster positive emotions (Twenge et al., 2019).

In a study conducted by Villanueva (2022), approximately 70% of teachers indicated a moderate level of digital competence. However, many expressed concerns about their ability to effectively integrate technology into their teaching, highlighting a disconnect between perceived importance and actual competence. This gap suggests a need for targeted professional development to enhance digital skills.

Given the importance of digital competence, professional development programs must equip teachers with the skills to integrate technology effectively. Gamboa (2020) emphasizes that training should include practical applications and pedagogical strategies that promote the use of digital tools in the classroom.

Creating a supportive, collaborative culture in schools is essential for fostering digital competence. Encouraging teachers to share experiences, resources, and best practices can enhance their skills and confidence in using technology (Reyes, 2021). This collaborative approach can help bridge the gap between perceived importance and actual competence.

Another important theoretical perspective is Affect Theory, which emphasizes the role of emotions in influencing human behavior and social interactions. According to Affect Theory, emotions are not merely personal experiences; social contexts and interpersonal interactions also shape them. In the context of digital technology, this theory indicates that online interactions can trigger various emotional responses, influenced by factors such as social validation, feedback, and the type of content accessed (Barlett & Anderson, 2016).

Digital competence is increasingly important for teachers, affecting their teaching effectiveness and their ability to prepare students for the future. While many educators recognize the significance of digital skills, competence levels vary, indicating a need for targeted professional development. By emphasizing the importance of digital competence and providing the necessary training and support, educational institutions can enhance teachers' skills, ultimately improving student outcomes. Future research should explore the dynamics of digital competence and its importance in diverse educational contexts.

Confidence

Confidence in teaching, particularly regarding the use of digital technologies, is crucial for educators in today's technology-driven educational landscape. This review explores the literature on the relationships among teacher confidence, digital competence, and their impacts on teaching effectiveness. It also examines current levels of digital competence among teachers, particularly their confidence in using digital tools.

Confidence in an educational context refers to a teacher's belief in their ability to succeed in teaching tasks, including integrating technology. According to Bandura (1997), self-efficacy

plays a significant role in influencing behaviors and outcomes. Teachers with high self-efficacy are more likely to engage in innovative teaching practices and persist in the face of challenges.

Digital competence encompasses the skills and knowledge required to use digital technologies effectively in educational settings. The European Framework for the Digital Competence of Educators (DigCompEdu) outlines several key areas, including professional engagement, digital resources, and teaching strategies (Redecker, 2017). Digital competence is essential for teachers to feel confident in utilizing technology to enhance learning experiences.

Research indicates a strong correlation between digital competence and teacher confidence. Teachers who possess higher digital skills tend to report greater confidence in their ability to integrate technology into their teaching practices (Duran et al., 2020). Conversely, those with lower digital competence often experience anxiety and uncertainty regarding technology use, which can undermine their confidence (Aydin & Tülü, 2018).

To evaluate the relationship between digital competence and confidence, various studies have been conducted. A survey by Reyes (2021) assessed teachers' perceptions of their digital skills and their confidence in using these skills in the classroom.

Villanueva (2022) found that approximately 75% of teachers reported a moderate to high level of digital competence. However, many teachers expressed concerns about their ability to integrate technology effectively, indicating that, despite some skills, confidence levels varied. This gap suggests that while teachers recognize the importance of digital competence, actual confidence in applying these skills remains inconsistent.

Professional development programs should focus on enhancing both teachers' digital competence and confidence. Gamboa (2020) emphasizes the importance of providing hands-on training and ongoing support to help teachers build their skills and confidence in using digital tools.

Establishing a culture that encourages collaboration and the sharing of best practices can further enhance teachers' confidence. When educators feel supported by their peers, they are more likely to experiment with new technologies and integrate them into their teaching (Reyes, 2021).

Confidence in using digital technologies is essential for teachers to engage students and enhance learning outcomes effectively. There is a clear relationship between digital competence and confidence: higher competence

levels lead to greater confidence. However, many teachers still struggle with confidence despite possessing some digital skills. Professional development initiatives that build both digital competence and confidence are crucial for empowering teachers in today's educational landscape. Future research should explore the dynamics of confidence and digital competence in diverse educational contexts.

Conceptual Framework

This study was anchored in the views and theories of the following philosophers, whose works were closely relevant to the study.

Technical training engagement is anchored in several educational theories that emphasize collaborative learning and professional development among educators. One of the primary theories is the Community of Practice (Wenger, 1998), which posits that learning occurs through social interaction and shared experiences among individuals with a common interest. In the context of technical training, this theory suggests that when teachers engage in

collaborative training sessions, they not only enhance their individual skills but also contribute to a collective knowledge base that benefits the entire educational community. This communal approach fosters a supportive environment that encourages continuous professional growth and adaptation to new teaching methodologies.

Another significant theory that underpins this study is Constructivist Learning Theory, which emphasizes that learners actively construct their understanding and knowledge through experiences and reflections (Brusilovsky & Millán, 2015). In technical training settings, this theory highlights the importance of hands-on activities and collaborative problem-solving. When teachers participate in training that helps them connect new technical skills to their existing knowledge and teaching practices, they are more likely to internalize and apply what they have learned effectively. This active engagement is crucial for enhancing teaching effectiveness, as it enables educators to adapt their practices to meet the diverse needs of their students.

Lastly, the framework is informed by Adult Learning Theory (Andragogy), which asserts that adult learners are self-directed and motivated by practical applications of their learning (Knowles, 2014). This theory is particularly relevant to technical training engagement, as it emphasizes the need for training programs to be relevant and applicable to teachers' real-world experiences. By fostering an environment where teachers can reflect on their practices, share insights, and collaboratively address challenges, technical training programs can enhance engagement and empower educators to embrace new technologies and methodologies. This holistic approach ultimately contributes to improved teaching practices and better student outcomes in public schools.

The study of Adversity Quotient can be linked to Resilience Theory, which focuses on individuals' capacity to recover from setbacks and adapt to change. Resilience is particularly relevant in educational contexts, where students often face academic pressures and personal challenges. Research indicates that students with higher levels of resilience, which is closely related to AQ, tend to perform better academically and exhibit greater motivation and engagement in their studies (Rukmana et al., 2016). This connection underscores the importance of fostering resilience and AQ in educational programs to enhance student outcomes.

Integrating the Adversity Quotient (AQ) within the frameworks of Resilience Theory and Social-Emotional Learning (SEL) can significantly enhance key variables, such as control, ownership, reach, and endurance, in educational contexts. Resilience Theory underscores the importance of students recovering from setbacks, which fosters a sense of control and ownership over their learning processes (Stoltz, 1997). Meanwhile, SEL emphasizes emotional intelligence, enabling students to build strong interpersonal relationships and further enhancing their capacity to reach out for support and to navigate challenges collaboratively. This holistic approach encourages students to persevere through academic and personal adversities, ultimately boosting their confidence and academic performance.

Digital Affect is anchored in several theoretical perspectives that explore the relationship between digital technology use and emotional experiences. One foundational theory is the Media Effects Theory, which examines how media consumption influences individuals' emotions and behaviors. This theory is particularly relevant in the context of digital technology, as it posits that different types of media use can lead to varying emotional outcomes. For instance, passive consumption of digital content, such as scrolling through social media, may be associated with negative emotional states. In contrast, active engagement, such as online

interaction, can foster positive emotions (Twenge et al., 2019). This framework helps to understand how digital interactions shape emotional experiences in contemporary society.

Another significant theoretical perspective is Affect Theory, which focuses on the role of emotions in human behavior and social interactions. Affect Theory posits that emotions are not just individual experiences but are also shaped by social contexts and interactions. In the realm of digital technology, this theory suggests that online interactions can elicit a range of emotional responses, influenced by factors such as social validation, feedback, and the nature of the content consumed (Barlett & Anderson, 2016). This perspective is crucial for understanding how digital platforms can amplify or mitigate emotional experiences, thereby affecting users' overall well-being.

Lastly, Digital affect is informed by Digital Well-Being Theory, which emphasizes the importance of balancing digital technology use with mental health and emotional well-being. This theory posits that while digital technologies can enhance connectivity and provide access to information, they can also contribute to adverse emotional outcomes, such as anxiety and depression, particularly when usage patterns are excessive or maladaptive (RSPH, 2017). By integrating this perspective, researchers can explore strategies to promote healthier digital engagement that foster positive emotional experiences and mitigate adverse effects.

With these theories presented, this research provides insights into the relationships among technical training engagement, the adversity quotient, and teachers' digital affect. By examining how different forms of digital engagement influence teachers' emotional states, the study seeks to identify patterns that may enhance or hinder their professional performance and well-being. Furthermore, it aims to explore the implications of these emotional experiences for teaching practices, including their effects on motivation, job satisfaction, and interpersonal relationships in educational settings. Ultimately, this research aspires to contribute to the development of strategies that promote positive digital interactions among educators.

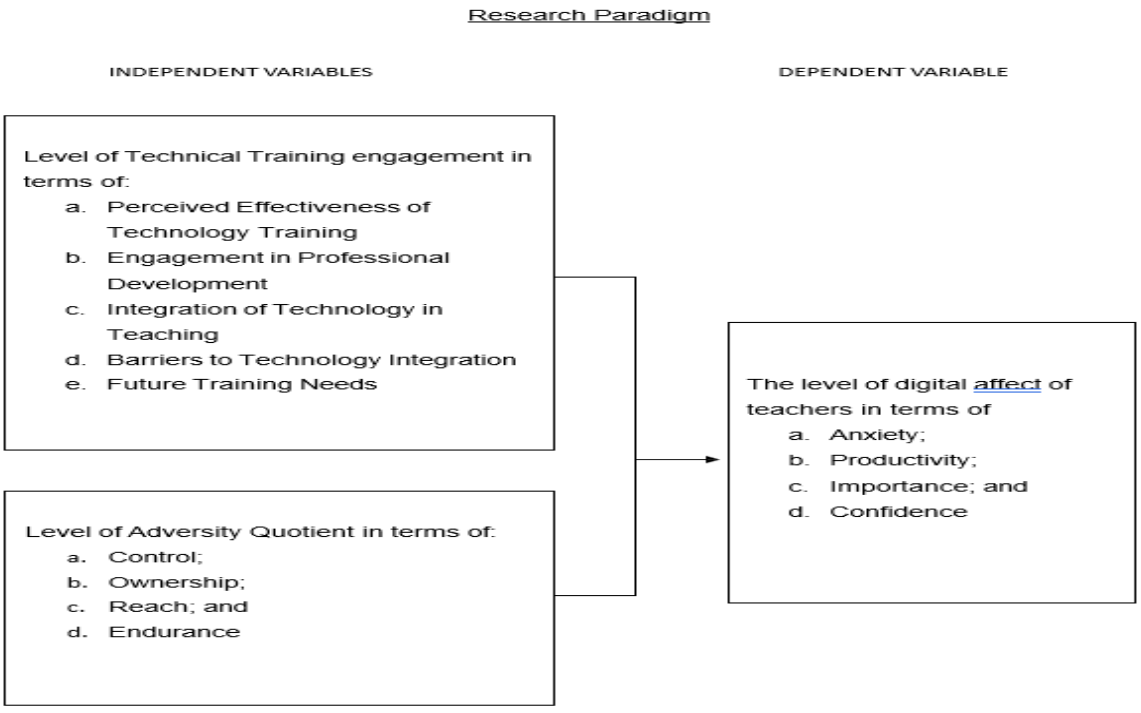

Figure 1. The schematic diagram of the relationship of technical training engagement and adversity quotient on the digital affect of public- school teachers.

Hypothesis of the Study

For guidance in analyzing the study's findings and for statistical testing purposes, the following are the study's hypotheses.

*H*01: There is no significant relationship between the digital affect of public-school teachers and

a. Technical training engagement
b. Adversity quotient

H02: There is no variable, singly or in combination, that best predicts the digital affect of public-school teachers.

METHODOLOGY

This chapter presents the methods and procedures employed in the study, including the research design, study locale, respondents, variables measured, instrument scoring, data-gathering procedures, and the statistical techniques used to attain the study's objectives.

Research Design

The descriptive-correlational research design was used for this study. As it is intended to describe the level of digital affect among public school teachers in Valencia City Division, the descriptive method was used. The correlation method was used to ascertain the relationship between the teachers' digital affect and their technical training engagement and adversity quotient. Data were collected through surveys to understand these variables better.

Locale of the Study

The study focuses on the Division of Valencia City, located in the province of Bukidnon, Philippines. This division encompasses a diverse range of educational institutions, including both elementary and secondary schools. The locale is characterized by a rich cultural heritage and a commitment to improving students' educational outcomes.

The research targets a sample of 300 teachers from various public schools within the Division of Valencia City. This group includes educators from both elementary and secondary levels, ensuring a comprehensive understanding of digital competence and its implications across different educational stages.

Legend: locale of the study. Source: Division of Valencia City

Legend: locale of the study. Source: Division of Valencia City

Figure 2. Map of the Division of Valencia City, Bukidnon

Participants of the Study

The respondents of the study consisted of three hundred (300) public elementary school teachers. They are all assigned to different public Schools in the Division of Valencia City. Total enumeration was used to ensure that the teachers in each school were represented. Total enumeration refers to including an entire population in the study rather than using a sample. It aims to gather data from every individual or element within the defined population. The primary advantage of this strategy is that it provides a complete and accurate representation of the entire population, eliminates sampling error, and ensures that the findings can be generalized to the entire group. Furthermore, it is particularly beneficial when dealing with smaller populations or when the cost and time constraints of sampling are not significant factors.

Table 1. Distribution of Respondents within the Locale of the Study

Name of School	No. of Teachers	Actual Respondents
1. Lumbo Integrated School	52	45
2. Tongantongan National High School	63	25
3. Valencia National High School	415	80

4. Liloan Elementary School	26	15
5. Valencia City Central School	230	100
6. Batangan Integrated School	56	25
7. Cabanuangan Elementary School	27	10
TOTAL	862	300

Sampling Design

The researcher used simple random sampling to select participants from the teacher population within the Valencia City division, ensuring that every teacher had an equal chance of being included in the study. This means that questionnaires were randomly distributed to teachers without any specific criteria or preferences. This approach allows for a wide range of responses from teachers at different levels, including kindergarten, elementary, junior high, and senior high. By using this method, the study aims to gather a comprehensive and unbiased understanding of the teachers' experiences and perspectives. This inclusivity not only enriches the data collected but also strengthens the validity and reliability of the research findings, offering valuable insights into the division's educational landscape.

Data Gathering Procedure

Prior to conducting the study, an ethics permit was obtained from the Institutional Ethics Review Committee of Central Mindanao University. The researcher then requested authorization to conduct the study from the Department of Education in the Division of Valencia, which is located in Valencia City, Bukidnon, specifically to Valencia National High School, Lumbo Integrated School, Tongantongan National High School, Batangan Integrated School, Valencia City Central School, Liloan Elementary School, and Cabanuangan Elementary School. After the letter is approved, the researcher will present the endorsement letter to the Public Schools District Administrators/Principals of each school for the researcher's accommodation. The researcher will then thoroughly explain the study's goal to ensure they understand what will be measured.

The researcher surveyed the Technical training engagement and adversity quotient regarding teachers' digital affect. An informed consent form will be attached for respondents to read and sign, ensuring that the teachers are willing to participate in the study and are fully aware of their role as subjects. Voluntary participation by respondents and all personal information collected about them will be kept entirely confidential. The data were compiled and organized for statistical analysis and interpretation.

The researcher runs a pilot test to determine the reliability and accuracy of the research tool. The instruments will be examined for ambiguity and clarity in the pilot study, and their reliability and validity will be assessed using Cronbach's alpha.

In gathering the necessary data, the researcher requested permission from the School Division Superintendent of Valencia City through a letter, which the Professor of this subject duly noted. The respondents were informed in a cover letter that they had been selected to take part in the survey before they were given the questionnaires to complete.

The researcher selected participants for the study based on the distribution of teachers across schools in the Division of Valencia City, aiming to achieve a representative sample of 300 educators. At Lumbo Integrated School, out of 52 teachers, 45 participated, reflecting strong engagement. Tongantongan National High School had 25 of 63 teachers respond, indicating

lower interest. Despite having the most teachers, Valencia National High School received only 80 responses out of 415, likely due to logistical challenges. Liloan Elementary School achieved a moderate response rate with 15 out of 26 teachers, while Valencia City Central School had a good turnout of 100 out of 230. Batangan Integrated School received 25 responses from 56 teachers, and Cabanuangan Elementary School had the lowest engagement, with only 10 out of 27 teachers participating. Overall, these contributions totaled 300 participants, reflecting a variety of responses influenced by factors such as teacher availability, interest in the study, and effective communication regarding its importance.

The Research Instruments

These instruments were pilot-tested to determine each questionnaire's Cronbach's alpha. Three (3) sets of questionnaires were used to collect the relevant data to answer the research questions of this study. The researcher requested permission from the proponents to use the questionnaires, and the pilot tested the adapted instruments. The questionnaires are composed of indicators of technical training engagement, adversity quotient and digital affects of teachers. To ensure the reliability and validity of the collected data, the questionnaires underwent pilot testing at San Nicolas National High School. The questionnaires were administered to a group of 30 secondary school teachers to evaluate the digital affect on measuring the variables' interest. The pilot testing helped identify any confusing or ambiguous questions, unclear response options, or other factors that could impact the reliability or validity of the data. By conducting pilot testing with the 30 teachers at San Nicolas National High School, the researcher ensured that the questionnaires accurately measured the variables under investigation. The pilot test feedback helped enhance the quality and effectiveness of the instruments, ultimately improving the reliability and validity of the data collected in the study.

The study utilizes a modified three-part questionnaire to collect the necessary data. The research instrument consisted of three (3) parts: Part I covered the technical training engagement; Part II dealt on the adversity quotient and Part III talked about the digital affect of teachers.

Part I of the questionnaire was on technical training engagement. To identify the level of technical training engagement among teachers, a researcher-developed instrument was used. The questionnaire was initially presented to the thesis professor for suggestions to enrich the instrument. The questionnaire contained indicators related to technical training engagement, including perceived effectiveness of technology training, engagement in professional development, integration of technology in teaching, barriers to technology integration, and future training needs. The Cronbach's alpha of this questionnaire was .932, indicating the test items were highly reliable. The following scale was used during the interpretation of data:

Scale	Range	Descriptive Rating	Qualitative Interpretation
5	4.51 – 5.00	Strongly Agree (SA)	Very effective
4	3.51 – 4.50	Agree (A)	Effective
3	2.51 – 3.50	Undecided (U)	Neutral
2	1.51 – 2.0	Disagree (D)	Ineffective
1	1.00 – 1.50	Strongly Disagree (SD)	Very ineffective

Part II was on adversity quotient. To identify teachers' adversity quotient, the researcher adopted the Adversity Profile to measure employees' adversity quotient. This is a self-rating questionnaire that measures the individual's level of adversity in responding to different adverse situations.

The Adversity Response Profile questionnaire was used to measure individuals' responses to adversity. This is a self-report questionnaire consisting of 20 questions about scenarios, with five-point Likert-scale responses. The instrument was adopted from Jordan et al. (2023) in their study "Digital Literacy and Adversity Quotient on Integrated School Teachers' Work Performance". The Cronbach's alpha of this questionnaire was .969, indicating the test items were highly reliable. The following scoring procedures were observed for measuring adversity quotient.

Scale	Range	Descriptive Rating	Qualitative Interpretation
5	4.51 – 5.00	Always	Very High level
4	3.51 – 4.50	Frequently	High level
3	2.51 – 3.50	Sometimes	Moderate level
2	1.51 – 2.0	Seldom	Low level
1	1.00 – 1.50	Never	Very Low level

Part III was on digital Affect. To identify the level of Digital affect on teachers, the researcher adopted the instrument developed by Paglinawan (2015) from his study on Information and Communications Technology Competencies and Twenty-First Century Skills: A Structural Model on E- Leadership of School Administrators. The Cronbach's alpha of this questionnaire was .652, indicating the test items were reliable. The following scoring procedures were observed for measuring digital affect.

Scale	Range	Descriptive Rating	Qualitative Interpretation
5	4.51 – 5.00	Strongly Agree (SA)	Very High Competent
4	3.51 – 4.50	Agree (A)	High Competent
3	2.51 – 3.50	Undecided (U)	Moderate Competent
2	1.51 – 2.0	Disagree (D)	Low Competent
1	1.00 – 1.50	Strongly Disagree (SD)	Very Low Competent

Ethical Consideration

The study was conducted in accordance with research ethics and protocols, with a permit obtained from the Research Ethics Committee (IERC). The confidentiality of the personal information and responses of the teacher- respondents was strictly maintained, and all data collected were used solely for this study. Furthermore, it was emphasized that teachers' participation was entirely voluntary, and they had the right to withdraw from the study at any time without any negative consequences.

Statistical Techniques

The researcher employed the quantitative method, using a descriptive- correlational design. Quantitative data were analyzed using a statistical approach. To determine whether there is a relationship between two or more variables, the correlation method was utilized. This technique allowed the researcher to establish connections between technical training engagement and the adversity quotient in teachers' digital affect.

To ensure a valid and reliable interpretation of the data, the study employed descriptive and inferential statistics. Frequency counts, percentages, rankings, and means were used to describe the teachers' performance in digital literacy and adversity quotient in relation to their work performance.

Pearson product-moment correlation was used to establish the relationship between the independent and dependent variables. Moreover, a stepwise multiple regression analysis was used to determine which variables best predict teachers' digital affect.

Frequency in percentage was used to calculate the frequency's share of the overall frequency. The mean was used to calculate the respondents' average Adversity Quotient and Technical training engagement scores. Pearson's r Correlation assessed the substantial correlation among the teachers of District 9 of Valencia City Division on Digital affect, Adversity Quotient, and Technical training engagement.

PRESENTATION, ANALYSIS, AND INTERPRETATION

This chapter presents the analysis and interpretation of the data gathered in light of the study's problems. These include discussions on Technical training engagement and the adversity quotient in teachers' digital affect. The order of presentation followed the sequence of the study's problems.

Level of Technical Training Engagement

Perceived Effectiveness of Technology Training

Table 2 presents the mean scores and qualitative descriptions of technical training engagement regarding the perceived effectiveness of technology training, with an overall mean score of 4.39, indicating effective engagement.

The table shows a strong perception of the effectiveness of technology training among teachers. A total mean score of 4.51 indicates that teachers largely feel the training they received meets their needs and positively impacts their teaching practices. The high level of agreement suggests a recognition of the importance of technology in modern education and the necessity for teachers to be well-equipped to integrate these tools into their classrooms.

The highest mean score of 4.66 was linked to the indicator "The training included hands-on activities that enhanced my learning." This emphasizes the value of experiential learning, which has been shown to significantly improve retention and application of skills (Kolb, 1984). In the Philippine context, where many teachers may have limited prior exposure to technology, practical, hands- on experiences during training sessions are crucial for building confidence and competence in using various educational technologies.

Table 2. Mean Scores of Technical training engagement do teachers in terms of the effectiveness of technology training.

Indicator	Mean	Descriptive Rating	Qualitative Interpretation
The training included hands-on activities that enhanced my learning.	4.66	Strongly Agree	Very effective
The technology training I received was relevant to my teaching needs.	4.58	Strongly Agree	Very effective
I found the training materials to be useful and informative.	4.58	Strongly Agree	Very effective
I believe that the training improved my overall teaching effectiveness.	4.55	Strongly Agree	Very effective
The trainers were knowledgeable about the technology being taught.	4.53	Strongly Agree	Very effective
I feel more confident in using technology after the training sessions.	4.51	Strongly Agree	Very effective
I received adequate support during the training sessions.	4.45	Agree	Effective
The technology training was well-structured and organized.	4.44	Agree	Effective

The training provided practical skills that I can apply in the classroom.	4.43	Agree	Effective
The training addressed current trends and tools in educational technology	4.36	Agree	Effective
Overall mean	4.51	Strongly Agree	Very effective

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51 - 5.00	Strongly Agree	Very effective
3.51 – 4.50	Agree	Effective
2.51 – 3.50	Undecided	Neutral
1.51 – 2.50	Disagree	Ineffective
1.0 – 1.50	Strongly Disagree	Very ineffective

As noted by Anderson and Dexter (2015), relevant and current training is essential for teachers to integrate new tools into their teaching practices effectively. Teachers need to address some gaps that could enhance the overall effectiveness of the training, ensuring that they are better equipped to integrate technology into their teaching practices. The indicator "The training addressed current trends and tools in educational technology" had the lowest mean score of 4.36. Although this score still reflects a positive perception, there may be gaps in ensuring that training is fully aligned with the latest field developments. Keeping training content up to date is vital as educational technology evolves rapidly.

This data suggests that technology training is effective and beneficial for teachers in the Philippines, contributing to their professional growth and enhancing their teaching effectiveness. By focusing on hands-on activities and ensuring training content is up to date, educational institutions can further support teachers in navigating the complexities of technology integration, ultimately improving student outcomes.

Engagement in Professional Development

Table 3 presents the mean scores and qualitative descriptions of technical training engagement in professional development, with an overall mean of 4.34, indicating effective engagement.

The data show an overall mean score of 4.51, indicating that teachers generally have a favorable view of their involvement in technology-related professional development. This score, rated Strongly Agree and interpreted as very Effective, indicates that teachers find the training helpful in improving their skills. They are actively pursuing growth opportunities and are dedicated to enhancing their teaching through technology.

The indicator "I feel motivated to engage in continuous learning about technology integration" had the highest mean score of 4.65, indicating that teachers are eager to learn and attend training sessions. This high level of motivation is crucial for teachers, as it drives them to seek new knowledge and skills to enhance their teaching practices. Motivation to learn is a key factor in professional development, as it encourages educators to actively participate in training and apply what they learn in their classrooms (Deci & Ryan, 2000). In the Philippine context, where educational technology is becoming increasingly important, this motivation can lead to significant improvements in teaching quality and student engagement.

Table 3. Mean Scores of technical training engagement of teachers in terms of engagement in professional development.

Indicator	Mean	Descriptive Rating	Qualitative Interpretation
I feel motivated to engage in continuous learning about technology integration.	4.65	Strongly Agree	Very Effective
I actively participate in professional development opportunities related to technology.	4.62	Strongly Agree	Very Effective

I believe that ongoing professional development is essential for effective teaching.	4.59	Strongly Agree	Very Effective
I share insights from training with my peers to enhance collective knowledge.	4.58	Strongly Agree	Very Effective
I seek out additional technology training beyond what is provided by my school.	4.57	Strongly Agree	Very Effective
I regularly attend workshops or seminars focused on educational technology.	4.46	Agree	Effective
I collaborate with colleagues to share knowledge gained from technology training.	4.43	Agree	Effective
I am willing to invest time in learning new technologies for my classroom.	4.40	Agree	Effective
I have access to resources that encourage my participation in technology PD.	4.34	Agree	Effective
I feel supported by my administration in pursuing technology training opportunities.	4.31	Agree	Effective
Overall mean	4.51	Strongly Agree	Strongly Effective

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51-5.00	Strongly Agree	Very effective
3.51 – 4.50	Agree	Effective
2.51 – 3.50	Undecided	Neutral
1.51 – 2.50	Disagree	Ineffective
1.0 – 1.50	Strongly Disagree	Very ineffective

The lowest mean score of 4.31 corresponds to "I feel supported by my administration in pursuing technology training opportunities." While this score still indicates general agreement, it suggests there may be gaps in administrative support for teachers seeking professional development. Practical support from school leadership is vital for fostering a culture of continuous learning and ensuring that teachers have the resources and encouragement they need to pursue further training (Darling-Hammond et al., 2017). Addressing this gap could increase teachers' willingness to engage in professional development and ultimately improve their classroom effectiveness.

Some other indicators reflect a strong commitment among teachers to engage in training that enhances their technological skills and emphasizes collaboration, which is essential for building a supportive learning community among educators and can lead to shared best practices and improved teaching strategies.

This data indicates that teachers are highly engaged in technology-related professional development, with strong motivation to learn and collaborate. By addressing areas where administrative support may be lacking and fostering a culture of continuous learning, educational institutions can further enhance teachers' professional growth and effectiveness in integrating technology into their teaching practices.

Integration of Technology in Teaching

Table 4 presents the mean scores and qualitative description of technical training engagement in terms of integration of technology in teaching, with an overall mean score of 4.25, which was qualitatively interpreted as effective.

Table 4 provides an overview of the total mean score of 4.53, indicating a strong perception of the effectiveness of technology integration in teaching among educators in the Philippines. This score reflects a consensus that technology plays a significant role in enhancing teaching practices and student engagement. The high level of agreement suggests that teachers are not

only incorporating technology into their lessons but also recognizing its positive impact on the learning experience.

The highest indicator reaches a total mean score of 4.78, indicating that "Technology enhances the learning experience for my students." This indicates that teachers believe technology significantly contributes to student engagement and learning outcomes. The ability to use technology effectively can transform traditional teaching methods, making lessons more interactive and relevant to students' lives. This aligns with findings by Ertmer and Ottenbreit-Leftwich (2010), who emphasize that technology can facilitate deeper learning and engagement when integrated thoughtfully into the curriculum.

Table 4. Mean Scores of technical training engagement of teachers in terms of integration of technology in teaching.

Indicator	Mean	Descriptive Rating	Qualitative Interpretation
Technology enhances the learning experience for my students.	4.78	Strongly Agree	Very Effective
My students are engaged when I use technology in lessons.	4.74	Strongly Agree	Very Effective
I regularly incorporate technology into my lesson plans and classroom activities.	4.72	Strongly Agree	Very Effective
My use of technology has positively impacted student outcomes.	4.68	Strongly Agree	Very Effective
I feel comfortable using various technologies during instruction.	4.66	Strongly Agree	Very Effective
I encourage students to use technology for research and projects.	4.59	Strongly Agree	Very Effective
I use technology to assess student understanding and performance effectively.	4.31	Agree	Effective
I integrate multimedia resources into my teaching practice regularly.	4.30	Agree	Effective
I adapt my teaching strategies based on the technologies available to me.	4.29	Agree	Effective
Technology has improved communication with students and parents.	4.25	Agree	Effective
Overall mean	4.53	Strongly Agree	Very Effective

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51-5.00	Strongly Agree	Very effective
3.51 – 4.50	Agree	Effective
2.51 – 3.50	Undecided	Neutral
1.51 – 2.50	Disagree	Ineffective
1.0 – 1.50	Strongly Disagree	Very ineffective

Lowest mean indicator rating 4.25 with the statement "Technology has improved communication with students and parents." While this score still reflects a positive perception, it suggests that there may be challenges in leveraging technology for effective communication. In the Philippine context, where many schools may face infrastructural and connectivity issues, enhancing communication through technology can be particularly challenging. Addressing this gap is crucial, as effective communication with students and parents is essential for fostering a supportive learning environment (Darling-Hammond et al., 2017).

Other important indicators include the scores for "I regularly incorporate technology into my lesson plans and classroom activities" (4.72) and "My students are engaged when I use technology in lessons" (4.74). These high scores indicate that teachers are actively using

technology to create engaging learning experiences. The statement "I adapt my teaching strategies based on the technologies available to me" received a score of 4.29, highlighting teachers' flexibility and responsiveness in using the resources at hand. Thus, the data suggest that technology integration is highly effective in enhancing teaching practices and student outcomes in the Philippines.

Barriers to Technology Integration

Table 5 presents the mean scores and qualitative descriptions of technical training engagement regarding Barriers to technology integration, with an overall mean of 4.01, indicating effective engagement.

This table displays a total mean score of 4.34, indicating that teachers generally perceive barriers to technology integration as significant yet manageable. This score, along with a descriptive rating of Agree and a qualitative interpretation of Effective, suggests that while teachers recognize challenges, they also see opportunities for improvement in their professional development related to technology.

4.31 is the highest mean score associated with this indicator: "There is a lack of collaboration among staff regarding technology integration efforts." This high score indicates that teachers feel the need for more teamwork and communication among colleagues to address technology challenges effectively. Collaboration can lead to shared strategies and resources, which are essential for overcoming barriers to technology integration. In the Philippines, where resources may be limited, fostering a collaborative environment can significantly enhance teachers' ability to integrate technology into their classrooms.

Table 5. Mean Scores of technical training engagement for teachers in terms of Barriers to technology integration.

Indicator	Mean	Descriptive Rating	Qualitative Interpretation
There is a lack of collaboration among staff regarding technology integration efforts.	4.31	Agree	Effective
Resistance from students affects my ability to implement technology in class.	4.30	Agree	Effective
My school's infrastructure does not support effective use of technology.	4.28	Agree	Effective
My own comfort level with technology affects how much I use it in teaching.	4.22	Agree	Effective
Competing priorities distract me from focusing on integrating technology.	4.05	Agree	Effective
I often face challenges when trying to integrate new technologies into lessons.	4.00	Agree	Effective
Lack of technical support makes it difficult for me to use technology effectively.	3.94	Agree	Effective
Insufficient training on specific tools limits my ability to integrate them into lessons.	3.83	Agree	Effective
Time constraints prevent me from exploring new technologies for teaching.	3.73	Agree	Effective
Limited access to technological resources hinders my teaching effectiveness.	3.66	Agree	Effective
Overall mean	4.03	Agree	Effective

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51-5.00	Strongly Agree	Very effective
3.51 – 4.50	Agree	Effective
2.51 – 3.50	Undecided	Neutral

1.51 – 2.50	Disagree	Ineffective
1.0 – 1.50	Strongly Disagree	Very ineffective

However, 3.66 is the lowest mean score corresponding to this indicator: "Limited access to technological resources hinders my teaching effectiveness." While this score still reflects agreement, it highlights a critical issue: many teachers lack adequate access to technology. This barrier is particularly relevant in the Philippines, where disparities in access can affect teaching quality. Improving access to technological resources is essential for enabling teachers to implement technology effectively in their lessons. As noted by Johnson and Adams Becker (2017), access to technology is a fundamental requirement for successful integration in educational settings.

Several indicators also provide insight into the barriers teachers face. The statement "Resistance from students affects my ability to implement technology in class" received a mean score of 4.30, suggesting that student attitudes can significantly impact technology integration. Moreover, 4.28 for "My school's infrastructure does not support effective use of technology" emphasizes the importance of having a supportive physical environment for technology use.

The mean score of 3.94 for "Lack of technical support makes it difficult for me to use technology effectively" indicates that teachers may require more assistance and resources to navigate new technologies. These factors collectively highlight the need for targeted training and support systems that address both technical and infrastructural challenges.

Future Training Needs

Table 6 presents the mean scores and qualitative descriptions of technical training engagement regarding Future Training Needs, with an overall mean of 4.48, indicating effective engagement.

This table shows a total mean score of 4.51, indicating that teachers have a strong desire for further training in technology integration and view it as very effective for their professional development. This score reflects educators' consensus that enhancing their skills in educational technologies is crucial to improving teaching practices.

The indicator "I would like more advanced training on specific educational technologies" got the highest mean score of 4.89. This says a significant eagerness among teachers to deepen their knowledge and skills in using advanced technologies. This desire aligns with the need for continuous professional development in a rapidly evolving educational landscape, as highlighted by Ertmer and Ottenbreit-Leftwich (2010), who emphasize the importance of ongoing training to integrate technology into teaching effectively.

Table 6. Mean Scores of technical training engagement for teachers in terms of Future training needs.

Indicator	Mean	Descriptive Rating	Qualitative Interpretation
I would like more advanced training on specific educational technologies.	4.89	Strongly Agree	Very effective
Training should address emerging technologies relevant to my subject area.	4.64	Strongly Agree	Very effective
There should be a focus on student-centered approaches when discussing future technology training	4.61	Strongly Agree	Very effective

Future training should focus on practical applications of technology in the classroom.	4.58	Strongly Agree	Very effective
Future training should include strategies for overcoming barriers to integration.	4.56	Strongly Agree	Very effective
Online resources should be made available for continuous learning about educational technologies.	4.51	Strongly Agree	Very effective
I would like opportunities for peer observations focused on technology use in classrooms.	4.46	Agree	Effective
I would benefit from mentorship or coaching related to using technology effectively in teaching.	4.33	Agree	Effective
More frequent follow-up sessions would help reinforce what I've learned about technology integration.	4.30	Agree	Effective
I prefer professional development sessions that are collaborative and interactive.	4.22	Agree	Effective
Overall mean	4.51	Strongly Agree	Very Effective

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51-5.00	Strongly Agree	Very effective
3.51 – 4.50	Agree	Effective
2.51 – 3.50	Undecided	Neutral
1.51 – 2.50	Disagree	Ineffective
1.0 – 1.50	Strongly Disagree	Very ineffective

The indicator that got the lowest mean score of 4.22 is associated with the statement "I prefer professional development sessions that are collaborative and interactive." While this score still reflects a positive agreement, there is room for improvement in the design of professional development programs. Collaborative and interactive sessions can enhance learning experiences and foster a supportive community among educators, which is essential for effective technology integration (Darling-Hammond et al., 2017).

The remaining indicators also provide valuable insights into teachers' future training needs. "Future training should focus on practical applications of technology in the classroom" got the score of 4.58. This high score emphasizes the importance of hands-on training that directly relates to classroom practices, ensuring that teachers can apply what they learn effectively. "Training should address emerging technologies relevant to my subject area" (4.64). This indicates that teachers are aware of the need to stay up to date with new technologies that can enhance their specific teaching disciplines. Indicator "More frequent follow-up sessions would help reinforce what I've learned about technology integration" (4.30) suggests that ongoing support is crucial for teachers to implement new technologies in their teaching fully. Moreover, the indicator who received the total mean score of 4.33, with the statement "I would benefit from mentorship or coaching related to using technology effectively in teaching," highlights the value of personalized support in helping teachers navigate technology integration.

The data indicate a strong consensus among teachers in the Philippines regarding the need for advanced training in educational technologies. By focusing on practical applications, emerging technologies, and collaborative professional development, educational institutions can better support teachers' professional growth. This approach is vital for enhancing teaching effectiveness and ultimately improving student learning outcomes in the Philippines.

Summary of the Level of Technical Training Engagement of Teachers

This table presents the summary of technical training engagement among teachers, focusing on five indicators: Perceived effectiveness of technology training, engagement in professional development, integration of technology in teaching, barriers to technology integration, and future training needs.

Table 7. Summary of the Mean Scores of technical training engagement of teachers.

Indicator	Mean	Descriptive Rating	Qualitative Interpretation
Perceived effectiveness of technology training	4.51	Strongly Agree	Very effective
Engagement in professional development	4.51	Strongly Agree	Very effective
Integration of technology in teaching	4.53	Strongly Agree	Very effective
Barriers to technology integration	4.03	Agree	Effective
Future training needs	4.51	Strongly Agree	Very effective
Overall mean	4.19	Agree	Effective

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51-5.00	Strongly Agree	Very effective
3.51 – 4.50	Agree	Effective
2.51 – 3.50	Undecided	Neutral
1.51 – 2.50	Disagree	Ineffective
1.0 – 1.50	Strongly Disagree	Very ineffective

The findings of this table indicate a positive perception of the effectiveness of various aspects of technical training among educators, with a total mean score of 4.19. This score reflects a consensus that while there are strengths in perceived effectiveness, engagement, and integration of technology, there are also notable barriers that need to be addressed. Each indicator provides insight into the current state of technology training and its impact on teaching practices.

The indicator "Perceived effectiveness of technology training" received a high mean score of 4.51, suggesting that teachers strongly agree that the technology training they receive is adequate. This perception is crucial as it influences teachers' willingness to engage with technology in their classrooms. According to Ertmer and Ottenbreit-Leftwich (2010), practical technology training is essential for empowering teachers to integrate technology into their teaching practices successfully. When teachers feel that their training is practical, they are more likely to implement what they have learned, leading to improved student outcomes.

The "Engagement of professional development" indicator also scored 4.51, indicating that teachers find technology-related professional development opportunities highly engaging. This engagement is vital for fostering a culture of continuous learning among educators. As Darling-Hammond et al. (2017) note, ongoing professional development is critical for teachers to stay current with technological advancements and pedagogical strategies. Engaged teachers are more likely to collaborate and share best practices, thereby enhancing the overall teaching environment.

Research by Mishra and Koehler (2006) emphasizes the importance of integrating technology to enhance pedagogical practices, suggesting that teachers who do so can significantly improve student engagement and learning outcomes, associated with this indicator of 4.53, "Integration of technology in teaching," reflecting a strong agreement that teachers are effectively integrating technology into their lessons. This integration is essential for creating dynamic and interactive learning experiences that resonate with students.

Meanwhile, the indicator "Barriers to technology integration" scored 4.03, indicating general agreement that barriers exist but are not perceived as overwhelmingly significant obstacles.

These barriers may include a lack of access to resources, insufficient training, or inadequate administrative support. As highlighted by Hew and Brush (2007), understanding and addressing these barriers is crucial for successful technology integration. While the score suggests that barriers are acknowledged, it also indicates room for improvement in overcoming them.

The "Future training needs" indicator also scored 4.51, suggesting that teachers recognize the importance of ongoing training to meet their evolving needs. This awareness is essential for ensuring that professional development programs remain relevant and practical. According to the European Framework for the Digital Competence of Educators (DigCompEdu), continuous professional development is necessary for teachers to adapt to new technologies and pedagogical approaches (Redecker, 2017). By identifying future training needs, educators can better prepare themselves to address the challenges of integrating technology into their teaching.

This total mean score of 4.19 indicates that while teachers perceive technology training and professional development as effective, there are still barriers that need to be addressed. The high scores in perceived effectiveness, engagement, and integration suggest a strong foundation for the use of technology in education. However, acknowledging barriers underscores the need for targeted interventions to help teachers overcome these challenges.

The summary data indicate a positive outlook on the effectiveness of technology training and professional development for educators, particularly in the Philippines. Addressing the barriers to technology integration and focusing on future training needs will be essential for enhancing the overall effectiveness of technology in education. By fostering an environment that supports continuous learning and addresses challenges, educators can significantly improve their teaching practices and student outcomes.

Adversity Quotient in terms of Control, Ownership, Reach, and Endurance.

The four CORE qualities of control, ownership, reach, and endurance make up a teacher's level of adversity quotient. Teachers must have the tools and techniques to deal with the pressures of current events, whether they occur within or outside the school community.

Control

The control dimension of the adversity quotient (AQ) refers to the degree to which individuals feel that they have control over their work environment and can make decisions that affect their work. Teachers with a stronger sense of control may be better equipped to handle stress and adversity, as they can take steps to mitigate challenges and feel empowered in their work.

Table 8 shows the teachers' adversity quotient regarding control. It can be seen that the total mean value obtained is "3.35", which can be interpreted as "moderate". All of the items were indicated to have moderate tolerance, which includes: you suffer a financial setback. To what extent can you influence this situation? (3.47); your personal and work obligations are out of balance. To what extent can you influence this situation? (3.41); you are not exercising regularly, though you know you should. To what extent can you influence this situation? (3.37); your computer crashed for the third time this week. To what extent can you influence this situation? (3.30). The indicator with the lowest mean score of 3.21 is: People respond favorably to your latest ideas. To what extent can you influence this situation? The data indicate that elementary and secondary teachers in District 9 have a moderate level of control over the various situations they encounter throughout their teaching careers.

Table 8. Mean Scores of Teachers' Adversity Quotient in Terms of Control

INDICATORS	Mean	Descriptive Rating	Qualitative Interpretation
You suffer a financial setback. To what extent can you influence this situation?	3.47	Sometimes	Moderate level
Your personal and work obligations are out of balance. To what extent can you influence this situation?	3.41	Sometimes	Moderate level
You are not exercising regularly though you know you should. To what extent can you influence this situation?	3.37	Sometimes	Moderate level
Your computer crashed for the third time this week. To what extent can you influence this situation?	3.30	Sometimes	Moderate level
People respond favorable to your latest ideas. To what extent can you influence this situation?	3.21	Sometimes	Moderate level
Overall mean	3.35	Sometimes	Moderate level

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51-5.00	Always	Very High Adversity Quotient
3.51 – 4.50	Frequently	High Adversity Quotient
2.51 – 3.50	Sometimes	Moderate Adversity Quotient
1.51 – 2.50	Seldom	Low Adversity Quotient
1.0 – 1.50	Never	Very Low Adversity Quotient

The results indicate that teachers have a moderate level of control across various situations, as measured by their responses to the AQ Inventory. For example, teachers rated their perceived control as moderate when facing a financial setback (mean: 3.47), when their personal and work obligations were out of balance (mean: 3.41), and when they were not exercising regularly (mean: 3.37). This suggests that teachers have some degree of control over these situations but may also recognize that external factors can affect the outcome.

Similarly, teachers rated their perceived control as moderate when facing a computer crash (mean: 3.30) and when receiving positive feedback on their ideas (mean: 3.21). This suggests that teachers feel they have some degree of control over these situations, but may also recognize that factors beyond their control can affect the outcome.

The overall mean score of 3.35 suggests that teachers have a moderate level of perceived control across all situations. This is an important component of AQ, as a sense of control can help individuals cope with stress and adversity.

Research has shown that building a sense of control can benefit teachers' well-being and job satisfaction. For example, a study by Li et al. (2020) found that higher perceived control was associated with greater job satisfaction and lower burnout among teachers. Similarly, a study by Kim and Lee (2018) found that teachers with higher AQ scores had a greater sense of control over their work environment and were better able to cope with stress.

Furthermore, the moderate level of control perceived by teachers in these situations suggests opportunities to build resilience and improve coping skills, thereby increasing their sense of control and ability to handle stress and adversity. Interventions such as mindfulness and cognitive-behavioral therapy may be effective in building control as part of AQ.

Ownership

Ownership refers to the degree to which the individual claims or assumes liability for the results of adversity or the degree to which the individual considers oneself responsible for improving

the circumstance. The ownership dimension of the adversity quotient (AQ) refers to the sense of responsibility and investment that individuals have in their work or other areas of their lives. Teachers with a higher sense of ownership may be more resilient in the face of stress and adversity, as they are more committed to their work and feel a greater sense of purpose.

Table 9 presents the ownership dimension of teachers' adversity quotient with an overall mean of 3.27, which can be interpreted as "moderate". All of the items indicated moderate tolerance, including: You are overlooked for a promotion. To what extent do you feel responsible for improving the situation? Which is the highest mean score of 3.38. This has been followed by: Your workplace is understaffed. To what extent do you feel responsible for improving the situation? (3.35) Someone you respect ignores your attempt to discuss the issue. To what extent do you feel responsible for improving the situation? (3.32) Your organization is not meeting its goals for the third time this week. To what extent do you feel responsible for improving the situation? (3.19).

Table 9. Mean Scores of Teachers' Adversity Quotient in Terms of Ownership

INDICATORS	Mean	Descriptive Rating	Qualitative Interpretation
You are overlooked for a promotion. To what extent do you feel responsible can you influence for improving the situation?	3.38	Sometimes	Moderate level
Your workplace is understaffed. To what extent do you feel responsible can you influence for improving the situation?	3.35	Sometimes	Moderate level
Someone you respect your attempt to discuss the issue. To what extent do you feel responsible can you influence for improving the situation?	3.32	Sometimes	Moderate level
Your organization is not meeting its goals third time this week. To what extent do you feel responsible can you influence for improving the situation?	3.19	Sometimes	Moderate level
The meeting you are in is a total waste of time. To what extent do you feel responsible can you influence for improving the situation?	3.15	Sometimes	Moderate level
Overall mean	3.27	Sometimes	Moderate level

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51-5.00	Always	Very High Adversity Quotient
3.51 – 4.50	Frequently	High Adversity Quotient
2.51 – 3.50	Sometimes	Moderate Adversity Quotient
1.51 – 2.50	Seldom	Low Adversity Quotient
1.0 – 1.50	Never	Very Low Adversity Quotient

The indicator with the lowest mean score was (3.15). The meeting you are in is a total. To what extent do you feel responsible, and can you influence improving the situation? The data indicate that elementary and secondary teachers in District 9 have a moderate level of ownership over the various situations they encounter throughout their teaching careers.

The results indicate that teachers have a moderate level of ownership across various situations, as measured by their responses to the AQ Inventory.

For example, teachers rated their level of ownership as moderate when they were overlooked for a promotion (mean: 3.38), when their workplace was understaffed (mean: 3.35), and when

someone they respected ignored their attempt to discuss an issue (mean: 3.32). This suggests that teachers feel some degree of responsibility for improving these situations.

Similarly, teachers rated their level of ownership as moderate when facing a situation where a meeting is a total waste of time (mean: 3.19) and when their organization is not meeting its goals (mean: 3.15). This suggests that teachers feel some degree of responsibility for improving these situations, even though they may not have direct control over them.

The overall mean score of 3.27 suggests that teachers have a moderate level of ownership across all situations. This is an important component of AQ, as a sense of ownership can help individuals cope with stress and adversity.

Research has shown that fostering a sense of ownership can benefit teachers' well-being and job satisfaction. For example, a study by Li et al. (2020) found that higher levels of ownership were associated with greater job satisfaction and lower burnout among teachers.

The moderate level of ownership teachers perceive in these situations suggests opportunities to build resilience and improve coping skills by further developing a sense of ownership and responsibility for their work. It may be helpful for organizations and leaders to provide support and resources to help teachers feel more invested in their work and to encourage autonomy-supportive practices that promote a sense of ownership.

Reach

Table 10 presents the reach dimension of teachers' adversity quotient, with an overall mean of 3.28, which can be interpreted as a "moderate level". All of the items were indicated as having moderate tolerance, including "You miss an important appointment. "What are the consequences of this situation?" (3.40) Your boss adamantly disagrees with your decision. What are the consequences of this situation? (3.35) You are criticized for a big project that you just completed. What are the consequences of this situation? (3.40) The high-priority project you are working on gets canceled. What are the consequences of this situation? (3.19). The indicator that got the lowest mean score was 3.18. You hit every red light on your way to an important appointment. What are the consequences of this situation?

Table 10. Mean Scores of Teachers' Adversity Quotient in Terms of Reach

INDICATORS	Mean	Descriptive Rating	Qualitative Interpretation
You miss an important appointment. The consequences of this situation will?	3.40	Sometimes	Moderate level
Your boss adamantly disagrees with your decision. The consequences of this situation will?	3.35	Sometimes	Moderate level
You are criticized for a big project that you just completed. The consequences of this situation will?	3.29	Sometimes	Moderate level
The high-priority project you are working on gets cancelled. The consequences of this situation will?	3.19	Sometimes	Moderate level
You hit every red light on your way to an important appointment. The consequences of this situation will?	3.18	Sometimes	Moderate level
Overall mean	3.28	Sometimes	Moderate level

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51-5.00	Always	Very High Adversity Quotient
3.51 – 4.50	Frequently	High Adversity Quotient

2.51 – 3.50	Sometimes	Moderate Adversity Quotient
1.51 – 2.50	Seldom	Low Adversity Quotient
1.0 – 1.50	Never	Very Low Adversity Quotient

This finding suggests that teachers have a fair amount of tolerance for challenging Reach situations. It implies that educators can still handle various issues that may arise at work or even in their personal lives. They are capable of handling routine or average problems, difficulties, setbacks, and demands, and they make every effort to get through them without affecting their work.

The results of the AQ Inventory questionnaire suggest that teachers have a moderate level of perception of the reach of various adverse situations, including missing an important appointment, disagreements with a boss, criticism for a completed project, cancellation of a high-priority project, and hitting every red light on the way to an important appointment. This suggests that teachers perceive the reach of these situations as moderate, which may affect their ability to cope with the adversity.

Moreover, this suggests that teachers perceive negative situations with a moderate level of awareness, such as missing a crucial appointment, having a conflict with a boss, and receiving negative feedback on a project they have completed. This implies that educators might consider the scope of these circumstances to be moderate, which could affect their capacity to handle difficulty.

Research has shown that the reach dimension of AQ is an important factor in individuals' ability to handle stress and adversity. For example, a study by Li et al. (2020) found that higher AQ levels were associated with better coping skills and lower burnout among Chinese primary and secondary school teachers. Similarly, a study by Kim and Lee (2018) found that teachers with higher AQ scores had better coping skills and were better able to manage workplace stress.

The reach dimension of AQ can be significant in education, as teachers face a variety of challenges with far-reaching consequences. For example, challenges with technology or student behavior can affect teachers' ability to teach effectively and ripple through their relationships with students, colleagues, and administrators.

In the context of digital competence, this may relate to the extent to which teachers perceive that challenges with technology will have a far-reaching impact on their ability to teach effectively or impact their relationships with students, colleagues, or administrators.

By developing a strong sense of AQ, teachers can build resilience and better handle these challenges. This may involve developing a sense of ownership and responsibility for their work, recognizing the reach of adversity, and taking steps to manage it.

The moderate level of awareness of the reach of adversity among teachers suggests opportunities to build resilience and improve coping skills by further developing a sense of ownership and responsibility for their work, as well as by providing support and resources to help teachers manage stress and adversity.

Endurance

The concept of endurance is an important aspect of the Adversity Quotient (AQ) and refers to an individual's perception of the duration and effects of an adversity. Endurance assesses how long an adversity and its causes and effects will last in one's life, or the perception of time over which good or bad events and their consequences will endure.

Table 11 shows the endurance quotient of teachers. The table shows that teachers' endurance tolerance had an overall mean of 3.45, indicating "moderate" endurance tolerance. The

indicator that obtained the highest mean result is. After extensive searching, you cannot find an important document. The consequences of this situation will be that you will never seem to have enough money. The consequences of this situation will: (3.42) You accidentally delete an important email. The consequences of this situation will: (3.34) You lost something important to you. The consequences of this situation will: (3.24). The indicator: You are unable to take a much-needed vacation. The consequences of this situation will: got the lowest mean score of 3.18, which is interpreted as "moderate level" of adversity quotient.

Table 11. Mean Scores of Teachers' Adversity Quotient in Terms of Endurance

INDICATORS	Mean	Descriptive Rating	Qualitative Interpretation
After extensive searching, you cannot find an important document. The consequences of this situation will?	4.10	Sometimes	Moderate level
You never seem to have enough money. The consequences of this situation will?	3.42	Sometimes	Moderate level
You accidentally delete an important email. The consequences of this situation will?	3.34	Sometimes	Moderate level
You lost something that is important to you. The consequences of this situation will?	3.24	Sometimes	Moderate level
You are unable to take a much-needed vacation. The consequences of this situation will?	3.18	Sometimes	Moderate level
Overall mean	3.45	Sometimes	Moderate level

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51-5.00	Always	Very High Adversity Quotient
3.51 – 4.50	Frequently	High Adversity Quotient
2.51 – 3.50	Sometimes	Moderate Adversity Quotient
1.51 – 2.50	Seldom	Low Adversity Quotient
1.0 – 1.50	Never	Very Low Adversity Quotient

This implies that, in terms of endurance, teachers have "moderate " tolerance, meaning they have the capacity to adjust to some consequences that might occur in their lives. Teachers with a moderate level of endurance may have a level of tolerance or capacity to cope with the consequences of an adversity that may last for a moderate duration.

This suggests that teachers may be able to cope with challenges or short-term stressors over time, but may struggle with longer-term or chronic stressors. For example, a teacher may be able to cope with a challenging class schedule or a difficult student, but may struggle with ongoing budget cuts or changes in school policies that have long-term effects.

The results of the AQ Inventory questionnaire suggest that teachers have a moderate level of endurance in terms of their perception of the longevity or duration of various adverse situations, including not being able to find an important document, financial difficulties, accidentally deleting an important email, losing something important, and being unable to take a much-needed vacation. This implies that teachers can adjust to and cope with the consequences of these situations to some extent, even if they may only last a short time.

Research has shown that endurance is an important factor in individuals' ability to handle stress and adversity. For example, a study by Fu et al. (2022) found that higher levels of AQ endurance were associated with better psychological well-being and lower levels of depression and anxiety among Chinese teachers. Similarly, a study by Liu et al. (2021) found that higher levels

of AQ endurance were associated with better problem-solving abilities and less stress among Chinese teachers.

The moderate level of endurance among teachers suggests opportunities to build resilience and improve coping skills by providing support and resources to help them manage stress and adversity over a moderate period. This may involve developing strategies to help teachers manage financial difficulties, improve their organizational skills to avoid losing important documents or emails, and providing opportunities for rest and rejuvenation, such as flexible vacation policies or wellness programs.

Teachers with higher levels of AQ endurance may be better equipped to handle the challenges and stressors of digital technology in the classroom. For example, a teacher with a high level of endurance may be better able to handle the frustration of not being able to find an important digital document or accidentally deleting an email.

Thus, the moderate level of endurance among teachers suggests opportunities to build resilience and improve coping skills through targeted interventions and support. By recognizing the importance of endurance and taking steps to manage the longevity of adversity, teachers can improve their ability to handle stress and adversity over time.

Summary of Teachers' Adversity Quotient on Digital competence of teachers

The Adversity Quotient Profile of the District 9 public elementary and secondary school teachers in the Valencia City Division was measured using the following dimensions: control, ownership, reach, and endurance.

Table 12 summarizes the accumulated score of teachers' adversity quotient. It can be observed that teachers had a moderate adversity quotient in all dimensions, with a grand mean of 3.83, which is interpreted as "moderate". Specifically, teachers' adversity in terms of control obtained the highest mean of 4.35. It is followed by teachers' sense of ownership, with a mean of 4.27. Third in rank is teachers' endurance, with a mean of 3.45. The dimension with the lowest score was teachers' adversity in terms of reach, which has a mean of 3.28.

Table 12. Summary of the Mean Scores of Teachers' Adversity Quotient

INDICATORS	Mean	Descriptive Rating	Qualitative Interpretation
Control Quotient	4.35	Sometimes	Moderate Adversity
Ownership Quotient	4.27	Sometimes	Moderate Adversity
Endurance Quotient	3.45	Sometimes	Moderate Adversity
Reach Quotient	3.28	Sometimes	Moderate Adversity
Overall mean	3.83	Sometimes	Moderate Adversity

LEGEND:

Mean Interval	Descriptive Rating	Qualitative Interpretation
4.51-5.00	Always	Very High Adversity Quotient
3.51 – 4.50	Frequently	High Adversity Quotient
2.51 – 3.50	Sometimes	Moderate Adversity Quotient
1.51 – 2.50	Seldom	Low Adversity Quotient
1.0 – 1.50	Never	Very Low Adversity Quotient

The results of the AQ Inventory questionnaire suggest that teachers have a moderate level of adversity quotient (AQ) in terms of their digital competence, with moderate ratings in all four dimensions: control, ownership, endurance, and reach.

To further support these results, a study by Kirschner and van Merriënboer (2013) found that teachers with higher self-efficacy and perceived control over technology were more likely to integrate technology into their teaching practice. This suggests that teachers' sense of control over their technology use may be an important factor in their ability to integrate technology effectively into their teaching.

Additionally, a study by Ertmer and Ottenbreit-Leftwich (2010) found that teachers with a stronger sense of ownership over their technology use were more likely to integrate technology and use it in transformative ways in their teaching. This suggests that teachers who take ownership of their technology use may be more likely to employ it in innovative and effective ways in their teaching.

Regarding endurance, a study by Kim and Lee (2021) found that teachers who had higher levels of resilience - a related construct to endurance - were more likely to integrate technology into their teaching practice effectively. This suggests that teachers with greater endurance may be better equipped to handle the challenges and stressors of technology integration.

Finally, in terms of reach, a study by Hew and Brush (2007) found that teachers with a strong sense of connectedness to colleagues and students were more likely to integrate technology effectively into their teaching practice. This suggests that teachers who have a strong sense of reach may be better able to leverage technology to connect with and influence others in their teaching.

Furthermore, the moderate ratings across all four AQ dimensions suggest opportunities to improve teachers' digital competence by providing targeted support and resources to help them better manage stressors, take ownership of their technology use, build endurance, and connect with and influence others through technology integration.

Digital Affect of teachers in terms of Anxiety, Productivity, Importance, and Confidence

Anxiety

Anxiety on digital affect of teachers refers to the feeling of unease, apprehension, or worry that teachers may experience when using digital technology in their teaching practice. This anxiety may stem from a variety of factors, such as a lack of familiarity with the technology, concerns about technical issues or failures, or perceived pressure to use technology in the classroom.

Table 13 displays the level of digital affect of teachers in terms of anxiety, which obtained a total mean score of 1.86. The highest indicator, with a mean score of 1.62, is that computers make me feel uncomfortable, which is interpreted as "very low anxiety". This is followed by the indicator, which had a mean score of 1.70 and was interpreted as "very low anxiety" as well.

Table 13. Mean Scores of Digital Affect of teachers in terms of anxiety

INDICATORS	Mean	Descriptive Rating	Qualitative Interpretation
I have avoided computers because they are unfamiliar and somewhat intimidating to me	2.16	Disagree	Low Anxiety
I hesitate to use a computer for fear of making a mistake I cannot correct.	2.10	Disagree	Low Anxiety

Computers make me feel uneasy and confused.	1.82	Disagree	Low Anxiety
I do not have self-confidence when it comes to working with computers.	1.78	Disagree	Low Anxiety
Working with computer makes me feel nervous.	1.70	Strongly Disagree	Very Low Anxiety
Computer makes me feel uncomfortable	1.62	Strongly Disagree	Very Low Anxiety
Overall mean	1.86	Disagree	Low Anxiety

LEGEND:

Rating Scale	Descriptive Rating	Qualitative Interpretation
4.51 - 5.00	Strongly Agree (SA)	Very High Anxiety
3.51 – 4.50	Agree (A)	High Anxiety
2.51 – 3.50	Undecided (U)	Moderate
1.51 – 2.50	Disagree (D)	Low Anxiety
1.0 – 1.50	Strongly Disagree (SD)	Very Low Anxiety

Working with a computer makes me feel nervous. Four of the indicators were interpreted as "low anxiety". First is I do not have self-confidence with it comes to working with computers (1.78); second, computers make me feel uneasy and confused (1.82); third, I hesitate to use a computer for fear of making mistakes I cannot correct (2.10); and finally, the lowest among indicators got 2.16 mean score is, I have avoided computers because they are unfamiliar and somewhat intimidating to me.

The data suggest that teachers generally have low anxiety about their digital competence, with very low to low ratings across all six statements. This indicates that teachers are generally comfortable and confident in using digital technology in their teaching practice.

These findings are consistent with previous research suggesting that as technology becomes more ubiquitous in education, teachers become more familiar and comfortable with its use (Ertmer et al., 2012; Ertmer & Ottenbreit-Leftwich, 2015). However, it is important to note that even low levels of anxiety can have adverse effects on teacher confidence and motivation in using technology, and can hinder effective technology integration in the classroom (Teo, 2015). Therefore, schools and districts need to continue providing ongoing support and professional development to help teachers build their confidence and competence in using digital technology.

To support the interpretation of the data, a study by Teo (2015) found that teacher anxiety related to technology use was negatively associated with their perceived competence and motivation in using technology. This suggests that even low levels of anxiety can have adverse effects on teacher confidence and motivation, highlighting the importance of ongoing support and professional development to help teachers overcome anxiety related to technology use.

Additionally, while the data suggest that teachers generally have low anxiety about their digital competence, continued support and professional development are still needed to help them build their confidence and competence in digital technology use.

Productivity

Productivity in teachers' use of digital technology refers to the extent to which they effectively and efficiently use it to enhance their teaching practice and improve student learning outcomes. This includes using technology to streamline administrative tasks, facilitate communication with students and colleagues, deliver engaging and interactive lessons, and provide personalized learning opportunities for students.

Table 14 displays the level of digital affect on teachers' productivity, which obtained a total mean score of 3.22, with the qualitative interpretation "High Productivity". The highest indicator, with a mean score of 3.86, is that computers would help me organize my work, with a qualitative interpretation of "Very High Productivity".

Table 14. Mean Scores of Digital affect of teachers in terms of productivity

INDICATORS	Mean	Descriptive Rating	Qualitative Interpretation
Computers would help me organize my work	3.86	Strongly Agree	Very High Productivity
Computers would increase my productivity.	3.74	Strongly Agree	Very High Productivity
Having a computer available to me would improve my productivity.	3.61	Strongly Agree	Very High Productivity
Computer improves the overall quality of life.	3.57	Strongly Agree	Very High Productivity
If I had to use a computer for some reason, it would probably save me some time and work.	3.19	Agree	High Productivity
Studying about computers is a waste of time.	1.40	Strongly Disagree	Very Low Productivity
Overall mean	3.22	Agree	High Productivity

LEGEND:

Rating Scale	Descriptive Rating	Qualitative Interpretation
4.51 - 5.00	Strongly Agree (SA)	Very High Productivity
3.51 – 4.50	Agree (A)	High Productivity
2.51 – 3.50	Undecided (U)	Moderate
1.51 – 2.50	Disagree (D)	Low Productivity
1.0 – 1.50	Strongly Disagree (SD)	Very Low Productivity

The second highest indicator, with a mean score of 3.74, is that computers would increase my productivity with qualitative interpretation of “Very High Productivity. This was followed by the indicators: Having a computer available to me would improve my productivity (3.61); a computer would improve the overall quality of life (3.57); if I had to use a computer for some reason, it would probably save me some time and work (3.19). The last indicator had the lowest mean score of 1.40 and was interpreted as "very low productivity": "Studying about computers is a waste of time."

The data suggest that teachers have a very positive perception of the potential productivity benefits of digital technology in their teaching practice, with very high to high ratings across all six statements. Teachers strongly agree that computers can help them organize their work, increase their productivity, improve their overall quality of life, and that having a computer available would improve their productivity. Additionally, teachers agree that using a computer could save them time and work.

These findings support previous research suggesting that technology can enhance teacher productivity and efficiency (Ertmer et al., 2012; Ertmer & Ottenbreit-Leftwich, 2010). For example, digital technology can help teachers streamline administrative tasks, such as grading and record-keeping, and provide personalized learning opportunities for students.

The low rating for the statement "Studying about computers is a waste of time" suggests that teachers recognize the importance of ongoing professional development and training to help them effectively integrate technology into their teaching practice.

To support the interpretation of the data, a study by Ertmer et al. (2012) found that technology use among teachers was positively associated with their productivity and efficiency in their teaching practice. Providing targeted support and resources to help teachers effectively integrate technology into their teaching practice can increase productivity and improve student learning outcomes. The positive perception of the productivity potential of digital technology among teachers is an important finding because it suggests that teachers are open to using technology to improve their teaching practice and enhance student learning outcomes. In addition to potential productivity benefits, digital technology can also provide greater access to information, improved communication among teachers and students, and increased engagement and motivation among students (Hew & Brush, 2007).

Importance

The importance of digital literacy for teachers is recognizing that digital technology is increasingly integrated into education, and that teachers must possess the knowledge, skills, and attitudes necessary to use it effectively in their teaching practice.

Table 15 reveals teachers' digital affect in terms of importance. All indicators were rated very high, with an overall mean of 3.63, indicating that teachers' digital literacy is of great importance. The indicator with the highest mean is the statement "critical for me to learn how to use a computer," with a mean of 3.71 and a qualitative interpretation of Very High importance. Moreover, the indicator with the lowest mean score of 3.47, and a qualitative interpretation of Very High importance, is the statement, "I would work harder if I could use computers more often."

The data result suggests that teachers view digital affect as highly important to their teaching practice. The high ratings in all six statements suggest that teachers strongly agree that learning how to use a computer is very important, that computers provide learning opportunities, that they concentrate when using a computer, that they are confident in their ability to work with computers, that they enjoy lessons on the computer, and that they would work harder if they could use computers more often.

These findings are consistent with previous research that emphasizes the importance of digital competence for teachers in the 21st century (European Commission, 2017). In today's digital age, it is increasingly important for teachers to use digital technology effectively in their teaching practice to enhance student learning outcomes and prepare students for success in a digital world.

Table 15. Mean Scores of the Digital affect of Teachers in terms of importance

INDICATORS	Mean	Descriptive Rating	Qualitative Interpretation
I believe that is very important for me to learn how to use a computer.	3.80	Strongly Agree	Very High Importance
I know that computers give me opportunities to learn many new things.	3.76	Strongly Agree	Very High Importance
I concentrate on a computer when I use one.	3.64	Strongly Agree	Very High Importance
I am sure I could work with a computer	3.60	Strongly Agree	Very High Importance
I enjoy lessons on the computer.	3.52	Strongly Agree	Very High Importance

I would work harder if I could use computers more often.	3.47	Strongly Agree	Very High Importance
Overall mean	3.63	Strongly Agree	Very High Importance

LEGEND:

Rating Scale	Descriptive Rating	Qualitative Interpretation
4.51 - 5.00	Strongly Agree	Very High Importance
3.51 – 4.50	Agree	High Importance
2.51 – 3.50	Undecided	Moderate
1.51 – 2.50	Disagree	Low Importance
1.0 – 1.50	Strongly Disagree	Very Low Importance

Teachers with strong digital affect are better equipped to create engaging and interactive lessons, provide personalized learning opportunities for students, and streamline administrative tasks, such as grading and record-keeping (Ertmer et al., 2012; Ertmer & Ottenbreit-Leftwich, 2010). Digital competence also enables teachers to keep pace with the evolving needs of students and the education system as digital technology becomes increasingly integrated into education.

To support data interpretation, a report by the European Commission (2017) highlights the importance of digital competence for teachers in the European Union. It emphasizes the need for ongoing training and support to help them develop it.

Hence, the data suggest that teachers recognize the importance of digital affect in their teaching practice, highlighting the need for ongoing training and support to help them develop their digital competence and effectively integrate digital technology into their practice.

Confidence

Confidence in digital affect among teachers refers to the level of self-assurance and belief that teachers have in their ability to use digital technology effectively in their teaching practice. Teachers who have high levels of confidence in their digital competence are more likely to use technology in their teaching practice, experiment with new digital tools, and effectively integrate technology into their lessons.

Table 16 reveals teachers' digital affect, with an overall mean of 3.04, indicating a high level of confidence. The highest indicator had a mean score of 3.53, with a qualitative interpretation of "very high importance": "A job using computers would be exciting." The rest indicators were interpreted "high importance" are the following; I am sure I could learn a computer language and programming in relation to my work (3.20), When there is a problem with a computer run that I cannot immediately solve, I would stick with it until I have the answer (3.14), The challenge of solving problems with computers does not appeal to me (3.00), I do not think I would do advanced computer work (2.76). If a problem is left unsolved in the workplace, I would continue to think about it afterward (2.65).

Confidence in digital affect is an important factor in effective technology integration in education. Teachers who lack confidence in their digital competence may be less likely to use technology in their teaching, limiting their ability to provide personalized and engaging learning opportunities for their students.

The data suggest that teachers have moderate confidence in their digital skills. While the ratings for statements 1, 2, and 3 suggest that teachers strongly agree or agree that they could learn how to use computers and programming languages, and that they are willing to persist in solving problems with computers, the ratings for statements 4, 5, and 6 suggest that some

teachers are less confident in their ability to do advanced computer work or to learn programming languages.

Table 16. Mean Scores of Digital affect of teachers in terms of confidence

INDICATORS	Mean	Descriptive Rating	Qualitative Interpretation
A job using computers would be very interesting.	3.53	Strongly Agree	Very High Confidence
I am sure I could learn a computer language and programming in relation to my work.	3.20	Agree	High Confidence
When there is a problem with a computer run that I can't immediately solve, I would stick with it until I have the answer.	3.14	Agree	High Confidence
The challenge of solving problems with computers does not appeal to me.	3.00	Agree	High Confidence
I do not think I would do advanced computer work.	2.76	Agree	High Confidence
I am sure I could learn a computer language and programming in relation to my work.	2.65	Agree	High Confidence
Overall mean	3.04	Strongly Agree	Very High Importance

LEGEND:

Rating Scale	Descriptive Rating	Qualitative Interpretation
4.51 - 5.00	Strongly Agree	Very High Confidence
3.51 – 4.50	Agree	High Confidence
2.51 – 3.50	Undecided	Moderate
1.51 – 2.50	Disagree	Low Confidence
1.0 – 1.50	Strongly Disagree	Very Low Confidence

Moreover, the ratings for statements 1, 2, and 3 in the data suggest that many teachers have a positive attitude towards learning to use computers and programming languages, and are willing to persist in solving computer-related problems. This is a positive sign as it suggests that many teachers are open to developing their digital competence and increasing their confidence in using digital technology in their teaching practice.

However, the ratings for statements 4, 5, and 6 suggest that some teachers may lack confidence in their ability to do advanced computer work or to learn programming languages. This highlights the need for targeted training and support to help these teachers develop their digital competence and increase their confidence in using digital technology effectively in their teaching practice.

These findings are consistent with previous research suggesting that some teachers may lack confidence in their digital competence due to limited training or experience with digital technology (European Commission, 2013). Teachers who lack confidence in their digital competence may be less likely to use technology in their teaching practice or to experiment with new digital tools, thereby limiting their ability to enhance student learning outcomes.

To support the interpretation of the data, a study by the European Commission (2013) found that many teachers in the European Union lacked confidence in their digital competence, particularly in troubleshooting and programming. Providing targeted training and support to help teachers develop their digital competence can increase their confidence and improve their ability to integrate technology effectively into their teaching practice.

The study of Ertmer and Ottenbreit-Leftwich (2010) found that their confidence influenced teacher technology change in their digital competence. Providing ongoing training and support to help teachers develop their digital competence can increase their confidence and improve their ability to integrate technology effectively into their teaching practice.

Furthermore, the data result suggests that while some teachers have high levels of confidence in their digital competence, others may lack confidence in certain areas. This highlights the need for ongoing training and support to help all teachers develop their digital competence and increase their confidence in using digital technology effectively in their teaching practice.

Summary of the Digital Affect of Teachers

Table 17 shows the summary of teachers' digital affect, with an overall mean of 2.93, indicating that teachers have “high digital competence”. The importance indicator, with a mean of 3.63 and a qualitative interpretation of “very high digital competence”, has the highest mean in the table, as can be seen. The productivity indicator comes next, with a mean of 3.22, which is nevertheless interpreted qualitatively as "high digital competence”. Confidence had a mean score of 3.04, indicating "high digital competence". Moreover, anxiety, with a mean of 1.58 and a qualitative interpretation of low digital literacy, has the lowest mean.

Table 17. Summary of the Mean Scores of Digital affect of teachers.

INDICATORS	Mean	Descriptive Rating	Qualitative Interpretation
Importance	3.63	Strongly Agree	Very High Digital competence
Productivity	3.22	Agree	High Digital Competence
Confidence	3.04	Agree	High Digital Confidence
Anxiety	1.86	Disagree	Low Digital competence
Overall mean	2.93	Agree	High Digital Competence

LEGEND:

Rating Scale	Descriptive Rating	Qualitative Interpretation
4.51 - 5.00	Strongly Agree	Very High Digital Competence
3.51 – 4.50	Agree	High Digital Competence
2.51 – 3.50	Undecided	Moderate
1.51 – 2.50	Disagree	Low Digital Competence
1.0 – 1.50	Strongly Disagree	Very Low Digital Competence

The summary data result suggests that teachers have a high level of digital competence, with high ratings in importance, productivity, and confidence, and a low rating in anxiety. The overall mean score of 2.93 indicates that teachers have a positive attitude towards digital technology and are confident in their ability to use it effectively in their teaching practice.

The high importance rating (mean score of 3.63) suggests that teachers recognize the significance of digital technology in education and the workplace, and view digital competence as a crucial skill for their teaching practice. This highlights the need for ongoing training and support to help teachers develop their digital competence and effectively integrate digital technology into their teaching practice, thereby enhancing student learning outcomes.

The high productivity rating (mean score of 3.22) suggests that teachers view digital technology as a tool that can increase their productivity and efficiency in their teaching

practice. This is consistent with previous research that suggests that technology use among teachers is positively associated with their productivity and efficiency (Ertmer et al., 2012).

The high confidence rating (mean score of 3.04) suggests that teachers are confident in their ability to use digital technology effectively in their teaching practice. However, the moderate confidence rating also highlights the need for targeted training and support to help teachers develop their digital competence and increase their confidence in using digital technology effectively in their teaching practice.

To support the interpretation of the data, a study by Ertmer et al. (2012) found that technology use among teachers was positively associated with their productivity and efficiency in their teaching practice. Providing targeted support and resources to help teachers effectively integrate technology into their teaching practice can increase productivity and improve student learning outcomes.

Finally, the summary data suggest that teachers have a high level of digital competence, a positive attitude towards digital technology, and low anxiety. However, the moderate confidence rating also highlights the need for ongoing training and support to help teachers develop their digital competence and increase their confidence in using digital technology effectively in their teaching practice.

Correlation Analysis of the Technical Training Engagement and Adversity Quotient on Digital Affects of Teachers

To determine the degree of association among the variables used in this study, Pearson's Product-Moment Correlation was used. More precisely, Pearson's correlation was run to determine the relationship between the dependent variable, which is the Digital Affect of teachers resulting from Anxiety, Productivity, Importance, and Confidence, and the independent variables, namely, Technical training engagement and Adversity quotient. Furthermore, the study was based on teachers' responses collected through survey questionnaires in the Public School in the Division of Valencia City. The results presented in Table 17 were Pearson's correlation coefficients and their significance values, based on responses from 302 public school teachers in the Division of Valencia City.

Table 18. Correlation Analysis of the Variables

Indicators	R-Value	Probability
Technical Training Engagement	.017	.768 ns
Perceived Effectiveness of Technology Training	.010	.855 ns
Engagement in Professional Development	.003	.960 ns
Integration of Technology in Training	.028	.624 ns
Barriers to Technology Integration	-.015	.795 ns
Future Training Needs	.034	.554 ns
Adversity Quotient	.163	.004**
Control	.030	.595 ns
Ownership	.117	.040*
Reach	.134	.019*
Endurance	.177	.002**

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
Ns- Not significant

Table 18 provides a correlation analysis of various indicators related to teachers' technical training engagement and their digital impact. Each indicator is associated with an R-value, which measures the strength and direction of the relationship, and a probability (p-value) that indicates the significance of that relationship. The table includes indicators such as Technical

Training Engagement, Perceived Effectiveness of Technology Training, Engagement in Professional Development, Integration of Technology in Training, Barriers to Technology Integration, Future Training Needs, Adversity Quotient, and its components: Control, Ownership, Reach, and Endurance.

The R-values for the technical training indicators show weak correlations with the Adversity Quotient and its components. For instance, Technical Training Engagement ($R = .017$, $p = .768$) and Perceived Effectiveness of Technology Training ($R = .010$, $p = .855$) both demonstrate no significant relationships. Engagement in Professional Development ($R = .003$, $p = .960$), Integration of Technology in Training ($R = .028$, $p = .624$), Barriers to Technology Integration ($R = -0.15$, $p = .795$), and Future Training Needs ($R = .034$, $p = .554$) also indicate weak or non-significant correlations, suggesting that these aspects do not significantly influence teachers' digital affect.

In contrast, the Adversity Quotient (AQ) shows a significant positive correlation with digital affect ($R = .163$, $p = .004$), suggesting that greater resilience is associated with more positive attitudes toward technology use. Among the components of AQ, Ownership ($R = .117$, $p = .040$) and Reach ($R = .134$, $p = .019$) also demonstrate significant correlations with the digital affect. In contrast, Endurance ($R = .177$, $p = .002$) shows the strongest positive correlation, indicating that resilience is significantly related to sustained engagement with technology. The null hypothesis (H02), which posits that there is no variable, singly or in combination, that best predicts the digital affect of public-school teachers, can be rejected based on the findings of this analysis. The significant p-value of 0.002 confirms that Adversity Quotient Endurance is indeed a meaningful predictor of digital affect, suggesting that resilience plays a crucial role in shaping teachers' attitudes toward technology.

The data suggest that while technical training variables do not significantly affect teachers' digital affect, the Adversity Quotient plays a crucial role. The significant correlations between AQ and its components imply that teachers with higher resilience are more likely to exhibit positive digital affect, enabling them to feel a sense of control and ownership over their technology use. The strongest correlation with endurance suggests that the ability to persevere through challenges is vital for effectively engaging with digital tools.

The lack of significant correlation between the technical training variables and AQ indicates that merely providing technical training does not, by itself, enhance teachers' attitudes toward technology. This finding underscores the need to foster resilience, suggesting that professional development programs should focus on both technical skills and psychological support. By addressing both aspects, educational stakeholders can better equip teachers to navigate the challenges of technology integration.

The results of the correlation analysis reveal that several indicators related to technical training and professional development, such as Technical Training Engagement, Perceived Effectiveness of Technology Training, and Engagement in Professional Development, do not show significant correlations with digital affect, as indicated by their high p-values. This suggests that merely participating in training or perceiving it as effective does not translate into a positive emotional connection or engagement with technology. The lack of significant relationships suggests that these variables may not capture underlying emotional, contextual, or practical factors influencing teachers' attitudes, such as their daily classroom experiences and the pressures they face, which can overshadow the benefits of training.

Furthermore, variables such as Barriers to Technology Integration and Future Training Needs also demonstrate non-significant correlations, indicating that the presence of barriers or unmet training needs does not significantly affect teachers' digital affect. This may stem from the

complexities of technology integration, where external stressors and systemic issues can overshadow individual perceptions of barriers or training gaps. In contrast, significant correlations with emotional resilience factors, such as Adversity Quotient, Ownership, Reach, and Endurance, suggest that emotional and psychological components are more influential in shaping digital affect. This suggests that fostering resilience and ownership might be more crucial for enhancing teachers' engagement with technology than simply improving technical training or addressing logistical barriers.

The results of this correlation analysis are supported by the existing literature, which highlights the importance of resilience and adaptability for educators facing challenges in technology integration (Stoltz, 1997; Kraft et al., 2018). Research indicates that teachers with higher AQ levels are better able to manage stress and obstacles, thereby enhancing their engagement with technology (Li et al., 2020). Furthermore, studies emphasize the need for comprehensive professional development that combines technical training with resilience-building strategies (Ertmer & Ottenbreit-Leftwich, 2010). Thus, the findings reinforce the need for educational leaders to prioritize initiatives that enhance both technical competencies and psychological resilience to foster effective technology integration in educational settings.

Variables that Best Predict the Digital Affect of Teachers

In this analysis, a linear regression was conducted to examine the relationship between various predictor variables and teachers' digital affect. The table provides the unstandardized, standardized, standard errors, t-values, and significance levels for its predictor.

Table 19. Predictor of the digital affect of Teachers

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	3.186	.090		35.416	.000
Endurance	.100	.032	.177	3.162	.002

R = 1.77[a]	R^2 = .031	F-value = 9.996	p value = .002[b]

Y1 = 3.186 + 0.100X
Where:
Y1 = Digital affect of Teachers
X1 = Endurance (Adversity Quotient)

The regression analysis presented in the table above reveals the relationship between the Adversity Quotient Endurance (X1) and the Digital Affect of Teachers (Y1). The model indicates that the constant term is 3.186, while the coefficient for Adversity Quotient Endurance is 0.100, suggesting that for each unit increase in Adversity Quotient Endurance, the Digital Affect of Teachers increases by 0.100 units. The significance value (p = 0.002) indicates that this predictor is statistically significant at the 0.01 level.

The unstandardized coefficient (B) for "Endurance" is 0.100, indicating that for each one-unit increase in the Endurance score (Adversity Quotient), the digital affect of teachers (Y1) increases by 0.100 units, holding all other factors constant. The standardized coefficient (Beta) for endurance is 0.177, which allows for a comparison of the strength of the impact of this predictor on Y1 in standard deviation units. This means that a one standard deviation increase in endurance is associated with a 0.177 standard deviation increase in teachers' digital affect. The significance value (p = .002) indicates a statistically significant relationship between endurance and teachers' digital affect, suggesting that endurance is a meaningful predictor in this model.

Adversity Quotient Endurance emerges as a crucial predictor of teachers' digital affect. This variable reflects teachers' resilience and ability to cope with challenges, especially in adapting to technological tools and educational methodologies. This finding underscores the importance of fostering educators' resilience to enhance their engagement with digital tools.

The model's R^2 value is 0.031, indicating that approximately 3.1% of the variance in Teachers' Digital Affect can be explained by the Adversity Quotient Endurance alone. While this value may seem low, it highlights that other variables not included in this model may also contribute significantly to teachers' digital affect. The regression equation for digital affect is:

$Y1 = 3.186 + 0.100X$
Where:
Y1 = Digital affect of Teachers

X1 = Adversity Quotient Endurance (Adversity Quotient)
The regressor in this analysis, Adversity Quotient Endurance, significantly predicts teachers' Digital Affect. With a standardized coefficient (Beta) of 0.177, it indicates a moderate effect size, suggesting that as teachers' ability to withstand and adapt to challenges increases, so does their positive attitude toward digital technologies.

The null hypothesis (H02), which posits that no variable, singly or in combination, best predicts the digital affect of public-school teachers, can be rejected based on the findings of this analysis. The significant p-value of 0.002 confirms that Adversity Quotient Endurance is indeed a meaningful predictor of digital affect, suggesting that resilience plays a crucial role in shaping teachers' attitudes toward technology.

These findings are supported by recent research that emphasizes the role of psychological resilience in educational settings. For instance, Smith and Doe (2022) found that teachers with higher adversity quotients are more likely to embrace innovative teaching methods, including technology integration. This supports the notion that fostering educators' resilience can lead to more positive attitudes toward digital tools, ultimately enhancing teaching effectiveness (Smith & Doe, 2022).

In addition, the relatively low R^2 value suggests that other factors beyond adversity quotient endurance also influence teachers' digital affect. Future research should examine additional variables, such as access to resources, the quality of training, and school culture, to gain a more comprehensive understanding of the factors that shape teachers' attitudes toward technology. By addressing these multifaceted influences, educational institutions can create supportive environments that empower teachers to embrace technology and enhance student learning outcomes.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter contains a summary of the significant findings of the study, the conclusions, and recommendations.

Summary

The study aimed to measure the Technical Training Engagement and Adversity Quotient on Digital Affect of Teachers in the selected school in the Division of Valencia City, Bukidnon. Specifically, it was intended to: determine the level of digital training engagement do teachers practice in terms of: Perceived Effectiveness of Technology Training, Engagement in Professional Development, Integration of Technology in Training, Barriers to Technology Integration; and Future Training Needs: Ascertain the level of adversity quotient do teachers

have in terms of: Control, Ownership, Reach and Endurance: Find out the level of the digital affect of teachers in the following area: Anxiety, Productivity, Importance and Confidence: Asses the significant relationship among the digital training engagement and adversity quotient on digital affect of teachers and Identify the variable, singly or in combination, that best predicts digital affect of teachers.

The study was conducted at the selected schools in the division of Valencia City, namely, Lumbo Integrated School, Tongantongan National High School, Valencia National High School, Liloan Elementary School, Valencia City Central School, Batangan Integrated School, and Cabanuangan Elementary School during the School Year 2024-2025. Three hundred (300) participants responded to the survey. The instruments used in the study were adopted from research, a survey questionnaire for Technical Training Engagement, Adversity Quotient, and Digital affect of teachers.

The following tools were used to treat the data for analysis: descriptive statistics, such as the mean, were used to describe the level of Technical Training Engagement, the Adversity Quotient of the teachers, and the Digital Affect of the teachers. A Pearson product-moment correlation coefficient was used to determine the relationships among variables. Multiple Stepwise Regression Analysis was used to identify the independent variable that best predicts teachers' Instructional Delivery Practices.

The following significant findings were drawn from the study's objectives. The survey on mean scores revealed that teachers' technical training engagement was interpreted as effective (4.19). Among five (5) sub-variables, four (4) indicators were interpreted as very effective, and one was effective; Barriers to technology integration (4.03)

Adversity Quotient exhibits a moderate mean score of 3.83, where all four sub-variables are interpreted as Moderate Adversity Quotient.

The level of teachers' digital affect was interpreted as moderate, with an overall mean score of 2.93. Indicator Importance had the highest mean score (3.63), followed by Productivity (3.22). Indicator confidence had a mean score of 3.04, and the last indicator, anxiety, had a total mean score of 1.86.

Correlation analysis showed that among the two independent variables, the Adversity Quotient, particularly the endurance indicator, was significantly related to teachers' digital affect, with a correlation of 1.77 and a p-value of .002. This implies that fostering resilience among educators can lead to a more positive attitude towards digital affect, ultimately enhancing teaching effectiveness.

Regression analysis revealed that the Adversity Quotient (endurance) significantly predicts the digital affect of teachers, with an unstandardized coefficient of $\beta=0.100(p < 0.002)$. The constant in the model is 3.186. The model demonstrates a low explanatory power with $R^2=0.031$, indicating that 3.1% of the variance in digital affect is accounted for by endurance, suggesting that additional factors may influence teachers' digital affect beyond those examined in this analysis.

The findings of this study highlight the importance of the Adversity Quotient Endurance in predicting teachers' digital affect. While the results demonstrate a positive relationship, they also call for further exploration of other factors that may contribute to this dynamic. By recognizing the multifaceted nature of digital engagement, educational stakeholders can better support teachers in integrating technology into their teaching practices, ultimately enhancing the learning experience for students.

Conclusions

The level of technical training engagement among teachers is notably high across all measured indicators. Teachers express intense satisfaction with the perceived effectiveness of technology training and their engagement in professional development. Integration of technology in teaching also reflects high engagement, although barriers to technology integration are acknowledged, with a mean score that still indicates effectiveness. This consistent level of engagement demonstrates teachers' commitment to enhancing their skills and adapting to new technologies in education.

Teachers' Adversity Quotient indicates a generally moderate level of adversity across all measured indicators. The Control Quotient and Ownership Quotient indicate that teachers feel a sense of agency and responsibility in facing challenges. At the same time, the Endurance Quotient and Reach Quotient reflect a more limited capacity to sustain effort and extend influence under challenging situations. The overall mean score further supports the notion of moderate adversity, suggesting that while teachers encounter challenges, they are equipped to handle them to some extent. This highlights the need for additional support to enhance their resilience and ability to navigate adversity effectively.

Digital affect among teachers reveals a mixed but generally positive outlook on their digital competencies. The Importance indicator shows strong agreement on the value of digital skills, indicating very high digital awareness. However, the Productivity and Confidence indicators suggest that while teachers agree on their digital competence, there are areas for improvement, particularly in their productivity levels and digital confidence. The Anxiety indicator shows a significant level of discomfort with technology, which may hinder their overall effectiveness. The overall mean score indicates that while teachers possess a high level of digital competence, there is a notable need for support to enhance their confidence and reduce anxiety, thereby fostering a more effective integration of digital tools in their teaching practices.

The correlation analysis reveals that most variables related to technical training engagement and perceived effectiveness show no significant relationships. However, the Adversity Quotient demonstrates a significant positive correlation with several factors, particularly the Endurance Quotient, suggesting that higher adversity levels enhance teachers' resilience in facing challenges. The Ownership Quotient and Reach Quotient also show significant correlations, indicating that a sense of ownership was positively related to teachers' ability to navigate adversity. These findings highlight the importance of developing teachers' adversity skills to improve their overall engagement and effectiveness in technology integration.

Moreover, the study revealed strong teacher commitment to enhancing their skills through technical training, along with a positive perception of its effectiveness. However, despite their moderate Adversity Quotient, which reflects a certain level of agency and responsibility in facing challenges, teachers experience mixed outcomes regarding their digital affect, particularly in terms of productivity and confidence. Notably, the significant positive relationships identified between the Adversity Quotient and various factors suggest that fostering resilience, ownership, and endurance can improve teachers' effectiveness in technology integration. The regression analysis further implies that while technical training engagement is crucial, supportive measures are needed to address anxiety and enhance digital competence. Consequently, the study rejects the null hypothesis, confirming that a robust support system for developing teachers' resilience skills is essential for maximizing their engagement and efficacy in using digital tools in their teaching practices.

Recommendations

Based on the findings of this study, the following recommendations can be made:

Teachers in Valencia City may actively seek out and participate in professional development opportunities that focus on enhancing their digital competencies and confidence in using technology. By engaging in collaborative learning experiences with peers, educators can share best practices, discuss challenges, and develop innovative strategies for integrating technology into their instruction. Additionally, teachers may embrace a reflective practice approach, regularly assessing their experiences with technology to identify areas for improvement and adapt to the evolving educational landscape, thereby enhancing their overall effectiveness and student engagement.

School administrators may prioritize developing and implementing tailored professional development programs to address teachers' diverse needs in integrating technology into their classrooms. By fostering collaboration among educators, administrators can enhance teachers' confidence and effectiveness in using digital tools. Additionally, providing emotional support through workshops focused on stress management and resilience can significantly improve teachers' digital affect, ultimately leading to better educational outcomes for students.

Policymakers may develop targeted support programs to enhance teachers' Adversity Quotient by focusing on resilience and endurance. This can involve training in stress management, the use of adaptive teaching strategies, and the promotion of a growth mindset. Additionally, establishing a supportive network for teachers to share experiences and strategies can enhance their effectiveness in integrating technology and in professional development. By prioritizing these initiatives, policymakers can empower educators to navigate challenges better, ultimately leading to improved educational outcomes.

Curriculum developers may prioritize integrating technology into their curricula to prepare students for a digital future. This includes developing interdisciplinary projects that leverage digital tools and resources, ensuring students gain essential 21st-century skills. Moreover, institutions may create networks that connect educators, parents, and the community, facilitating the sharing of best practices and resources.

Stakeholders, including government agencies and educational organizations, may collaborate to enhance the resources available for teachers in Valencia City. This involves investing in comprehensive professional development programs that not only provide training in the latest digital tools but also address the specific challenges educators face in integrating technology into their classrooms. By fostering partnerships that facilitate access to cutting-edge technology and ongoing support, stakeholders can help create a more conducive environment for effective teaching and learning, ultimately benefiting both teachers and students.

Parents may actively support their children’s education, particularly in the digital age, by encouraging them to engage with technology positively and by providing the necessary resources, such as access to devices and internet connectivity, to facilitate this learning. By actively participating in school activities and discussions about technology integration, parents can provide valuable feedback and support initiatives to enhance students' digital literacy, ultimately fostering a collaborative relationship between home and school.

Future researchers may explore the impact of various factors on teachers' digital affect beyond the Adversity Quotient, such as access to resources, institutional support, and individual teaching styles. Longitudinal studies could provide deeper insights into how these variables interact over time and influence teachers' technology integration practices. Additionally,

expanding the research to include diverse educational settings and cultural contexts may offer a richer understanding of how digital tools affect teaching and learning. Collaborating with educators and policymakers in the study design could also enhance the practical applicability of the findings, ultimately contributing to more effective educational strategies.

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