21ST CENTURY TEACHING, DIGITAL READINESS, AND MOTIVATION OF TEACHING OF FILIPINO SUBJECT IN THE NEW NORMAL: AN EXPLANATORY SEQUENTIAL DESIGN

ABSTRACT

Aims: The aim of this study is to investigate the teachers' live experiences in teaching Filipino in senior high school in region 12, utilizing the mix method focusing on the explanatory sequential design for analyzing the relationships between the level of teachers in the 21st century of teaching, digital readiness and motivation in teaching Filipino among senior high school teachers.

Study design: An explanatory sequential mixed method design was employed for this study.

Place and Duration of Study: The study was conducted at the public senior high school of region 12, using a stratified random sampling technique to select 400 teachers for the academic year 2024-2025.

Methodology:400 teachers were selected, and data was collected through e-surveys using three questionnaires. The mean, Pearson correlation coefficient (r), regression and thematic analysis were utilized for data analysis. Purposive sampling is the method used to select participants in the qualitative design using a guided questionnaire to gather data from In-depth interviews and focus group discussions. The 21st century teaching and digital readiness of senior high school teachers were found to have a significant relationship with teachers' motivation in teaching Filipino.

Results:It has been discovered that teaching motivation of teachers got highest level while the two variables are at a high level, meaning that the respondents frequently exhibit them. The 21st century teaching and digital readiness of the teachers have a significant relationship with their motivation in teaching Filipino. Choosing the digital citizenship, dispositions, planning blended activities, and planning blended assessmentin 21st century teaching. The participation of teachers with digital tool application, using digital application, digital media awareness, information search skill and information sharing behavior are indicators of digital readiness. This simply indicates that the 21st century teaching, digital readiness, and participation of teachers play an important role in the motivation in teaching Filipino in the secondary schools of region 12.

Conclusion:The study showed a positive relationship between 21st century teaching, digital readiness, and motivation in teaching in Filipino among senior high school teachers. The high mean scores (21st Century Teaching: 4.17; Digital Readiness: 4.08; Motivation: 4.32) and low standard deviation indicate a high level of knowledge and skills among teachers in using technology. The quantitative results revealed a significant correlation (r-value: .647, p-value: .000) between the mentioned variables, suggesting that highknowledge of digital tools leads to increased motivation in teaching. The F-value of 231.833, R-value of .734, and R² of .539 demonstrate that 21st Century Teaching and Knowledge in Digital Readiness have a 54% impact on teachers' motivation.

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Keywords: education, 21st century teaching, digital readiness, motivation in teaching Filipino, new normal, explanatory sequential mix method design, Philippines.

- (Note: 1. <u>Case Reports</u> should follow the structure of Abstract, Introduction, Presentation of Case, Discussion, Conclusion, Acknowledgements, Competing Interests, Authors' Contributions, Consent (where applicable), Ethical approval (where applicable), and References plus figures and/or tables. Abstract (not more than 250 words) of the Case reports should have the following sections: Aims, Presentation of Case, Discussion and Conclusion. Only Case Reports have word limits: Papers should not exceed 2000 words, 20 references or 5 figures. Other Type of papers have no word limits.
- 2. <u>Review papers</u> may have different headings of the sections and are exempted from following these suggestions.
- 3. Research Papers and Short Notes should follow the structure of Abstract, Introduction, Methodology, Results and Discussion, Conclusion, Acknowledgements, Competing Interests, Authors' Contributions, Consent (where applicable), Ethical approval (where applicable), and References plus figures and/or tables.)

1. INTRODUCTION (ARIAL, BOLD, 11 FONT, LEFT ALIGNED, CAPS)

One possible reason for the failure and decline in student motivation is the use of ineffective teaching methods. One of the reasons for the failure in teaching foreign languages in Turkey is the loss of motivation in teaching. Similarly, in Indonesia, there is a low level of proficiency in Mathematics due to unengaging learning experiences and lack of motivation. (Yilmaz et al., 1-13; Andrian et al., 259-272). This serves as evidence that if teachers lack motivation in teaching a lesson, it results in poor outcomes, and students are also not very interested in learning their subjects. (Tambunan, 42-47; Yilmaz et al., 1-13; Andrian et al., 259-272).

The motivation of teachers is one of the key elements of learning and teaching. They are the individuals who constantly interact with students, implement the curriculum, direct the teaching process, and evaluate both students and teaching. The success of the education system truly depends on the qualifications of the teachers who will operate and implement the learning system (Yildiz 119-131; Almaiah et al. 3197).

The importance of motivation in teaching, according to Jumaboyeva (84–88) and Bardach (283–297), is that students learn by engaging in the teaching process, and self-confidence and self-esteem can be pathways to encouragement, which may be key to effective learning. Evidence from the study shows that the mechanics of incentives motivated more engineering students to engage in higher-quality activities that are beneficial to their studies (Rincon-Flores et al. 49).

On the other hand, Hossein-Mohand (341-352), Lalima (129-136), and Holmes (21-34) have confirmed the relationship between motivation and teaching the Filipino subject in the 21st century, particularly regarding student performance. The use of technology in secondary education for mathematics learning has been found to be influential and beneficial for their studies and the improvement of their academic performance. Evidence has established a significant correlation between the use of ICT for educational purposes and the academic level of students, as well as the time spent on the Internet for educational purposes. The study by Qasem and Viswanathappa (11 vol.) further supports that a positive perception of teachers towards the integration of ICT aids in the rapid advancement of technology and teaching. Ahmadi (115-125), Ryn (99-119), and De Villa (44-154) also emphasized that the use of technology indicates an improvement in students' language learning skills.

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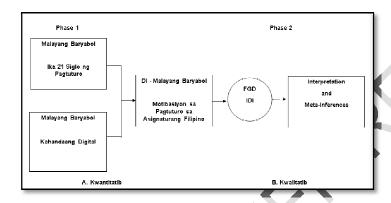
Motivation in teaching and digital readiness are closely related because the preparation of students for online classes becomes significant, as well as the methods of using technological tools. Technology is one of the most important sources of knowledge for students today, through cellphones, laptops, computers, and projectors. Research shows that technology helps in finding the information sought. In short, technology aids people by

- 71 speeding up various tasks in daily life, as noted in the 1989 Filipino Language Dictionary,
- which was referenced in the study by Albano.
- 73 In a study on digital readiness, it was found that less than 1% of students had no access to a
- 74 personal computer, and self-reported skills in using digital tools, as well as behaviors related
- 75 to information sharing, were at a moderate level. However, university administrators should
- 76 be aware that a rapid shift to digital learning may result in digital inequality, according to the
- journal by Beaunoyer et al. (106424) and Turkoglu (765-772).
- 78 On the other hand, teachers serve as one of the most important elements of our educational
- 79 system, providing motivation in teaching the Filipino subject to make it beneficial for students
- 80 (Comighud et al. 1-15). Teachers are encouraged to perform their duties, and in addition,
- 81 they aim to achieve positive evaluation results to contribute to a better school organization
- and administration in education. The study also revealed that the three motivating factors
- 83 have a direct positive relationship with the level of teacher motivation, indicating that health
- and safety yield the highest emphasis on the level of teacher instruction (Revilla et al. 96-
- 85 108). The study by Salayo (74-95) demonstrated that the participants remained positive and
- 86 resilient in facing the academic challenges brought about by the sudden shift in learning
- modalities due to the COVID-19 pandemic.
- 88 The most important theory regarding motivation in teaching is based on the Self-
- 89 Determination Theory (SDT) by Deci and Ryan (1985). According to this theory, a teacher's
- 90 motivation is divided into two main categories: Intrinsic Motivation and Extrinsic Motivation.
- 91 This is supported by Porter and Lawler's model (1968), as well as Vroom's theory (1964)
- and other expectancy-valence formulations, which propose a model of intrinsic and extrinsic
- 93 work motivation. This theory focuses on how an individual's motivation depends on their
- 94 expectations of the outcomes of their actions.
- 95 One of the supporting theories is the Goal-Setting Theory, which emphasizes the importance
- 96 of goal setting in enhancing motivation and performance. Educators who set specific,
- 97 challenging goals for their teaching practices are likely to be more motivated and effective in
- 98 their professional roles (Locke et al., 103-116). The third theory is Maslow's Hierarchy of
- 99 Needs, which supports and suggests that individuals are driven by a hierarchy of needs,
- ranging from basic physiological needs to self-actualization. Teachers who have their basic
- 101 needs met are more likely to experience higher motivations such as self-fulfillment and
- personal growth in their teaching careers (Maslow, 10-30).
- Zou et al. (272-286) demonstrated and agreed that teachers' intrinsic motivation for teaching
- and students' intrinsic motivation for learning are significant contributors to effective teaching
- 105 and learning. The results showed that teachers' intrinsic motivation for teaching is
- significantly positively related to students' intrinsic motivation for learning.
- 107 This is also based on the Technology Acceptance Model (TAM) (Davis, 1989), which
- 108 pertains to 21st-century teaching with two factors determining whether a computer system
- will be accepted by potential users: (1) perceived usefulness, and (2) perceived ease of use.
- 110 The main feature of this model is its emphasis on the perspectives of potential users. This
- model asserts that the use of technology in teaching is effective if the teacher believes it is
- 112 helpful to their students.
- 113 TPACK represents Technological, Pedagogical, and Content Knowledge. This framework
- 114 examines the interplay of three grouped components: Content Knowledge (CK), Pedagogy
- 115 (PK), and Technology (TK), and explores ways in which these areas intersect. While it is
- often compared to SAMR, these are relatively different models, with TPACK offering a less

linear approach to thinking about the integration of technology into teaching (Mishra, 1017-118 1054).

The findings of the study indicated that TPACK serves as an important tool for assessing teachers' knowledge in the field of technology integration, with teachers' ICT knowledge being above average in both groups, and a significant difference noted between the experimental and control groups on the ICT knowledge scale. Recommendations were made for future research on online collaboration activities to raise awareness of factors related to online group work and to determine the in-service training needs of teachers in utilizing ICT for follow-up support and to ensure the successful use of new technologies (Albeta, 44-59).

In the diagram, the relationship between 21st century teaching, digital readiness, and motivation in teaching Filipino can be seen.



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Figure 1. Conceptual Model Showing the Direct Relationship of Latent Exogenous Variables.

However, this study examined the relationship between the free variables of 21st-century teaching and digital readiness, alongside the non-free variable of motivation in teaching Filipino among senior high school teachers, under phase one of quantitative research. 21stcentury teaching is assessed through indicators such as technical literacy, digital citizenship, planning and managing blended activities and assessments, personalizing instruction, and facilitating interactions between teachers and students, as well as between students and content. Digital readiness is evaluated based on indicators including digital tool application, the use of digital applications, awareness of digital media, skills in information retrieval, and behavior in information sharing. Lastly, motivation in teaching is measured through indicators of personal efficacy (context), personal competence (general), effort, teaching excellence, and the effectiveness of outcomes. Under phase two are the focus group discussions (FGDs) and in-depth interviews (IDIs) are qualitative research methods that facilitate rich, nuanced understanding of participants' experiences and perspectives. When conducting these methods, it is crucial to gather comprehensive data that captures the complexity of the participants' views. After collecting the information, careful interpretation of the findings is essential to identify key themes and patterns. This interpretation allows researchers to draw meta-inferences, which involve synthesizing insights across multiple data sources to uncover overarching trends and insights. By integrating the responses from FGDs and IDIs, researchers can develop a holistic understanding of the subject matter, ultimately enriching the research findings and contributing to informed decision-making or policy development.

This research aims is to determine the level of 21st century teaching based on the indicators of:technical literacy, digital citizenship, planning and managing blended activities and

assessments, personalizing instruction, and facilitating interactions between teachers and students, as well as between students and content. To measure the level of knowledge in digital readiness for learning among senior high school teachers through digital tool application, the use of digital applications, awareness of digital media, skills in information retrieval, and behavior in information sharing. To ascertain the level of knowledge on teacher motivation in high school teaching through: personal efficacy: context, personal competence; general effort, teaching competence, and the effectiveness of the outcome. To identify the significant relationship between: 21st-century teaching, digital readiness, and motivation in teaching the Filipino. What are the experiences of teachers in 21st-century teaching and digital readiness that shape their perspectives and beliefs regarding motivation in teaching the Filipino subject? And how can the qualitative data be validated against the results of quantitative data?

Although there have been studies mentioned and to the knowledge of the researcher, there have not been many local studies conducted to determine whether there is indeed a relationship between 21st-century teaching, digital readiness, and motivation in teaching the Filipino. Thus, the researchers were encouraged to conduct a study to help raise awareness about the various motivations in teaching Filipino among senior high school teachers and to achieve the goal of providing quality and high-level education, as well as to enhance the outcomes of its academic programs. Accordingly, this study aims to address the mentioned gaps.

The enhancement of teacher motivation and professional development is essential for improving teacher performance, especially in vocational education. Studies show that professional development not only enhances skills but also serves to recognize teachers with a high level of competence (Tonga et al., 88-104; Zeng, 1-6). This study is important worldwide as it will serve as a foundation for future research related to motivation in teaching Filipino. The leadership of Region XII and the teachers greatly contribute to creating programs that develop teachers' skills in motivation in teaching Filipino to inspire and spark students' interest in learning the Filipino through the help of technologies.

Through this study, students will be helped to be better understand themselves, especially in terms of motivation in teaching Filipino through technology. The leadership of the Department of Education of Region XII should implement methods or training to assist Filipino teachers in motivating students to learn through the help of technology. Through this, students will develop an interest in learning the Filipino as our national language. In other researchers related to this type of study, this could serve as a basis for their ongoing research. The results of this study can be used for the development of their research.

2. MATERIAL AND METHODS

2.1. Research Design

In this research, a mixed-method model focusing on explanatory sequential design was used. In this model, the researcher combined quantitative and qualitative data to provide a comprehensive analysis of the research problem (Creswell, 2013). A mixed-methods study would be beneficial for this research as it utilizes the strengths of both quantitative and qualitative approaches to support the research questions. The quantitative and qualitative methods should be considered as complementary approaches that, when integrated, offer broader options for investigating a range of important educational topics.

- 201 The results will be analyzed, and then the findings will be developed and explained in more 202 detail using qualitative research. This is considered explanatory because the initial results 203 from the quantitative data are further explained alongside qualitative data. Both types of data 204 will be collected, analyzed, compared, and interpreted (Gay &Airasian, 2003, p. 20). The 205 researcher used a structured questionnaire for the quantitative part and interview quide 206 questions for the qualitative part during interviews with the participants. The use of interview 207 guide questions ensures consistency in the questions posed to all interviewees. 208 Furthermore, this instrument is essential to ensure that no important points are forgotten 209 during the interviews conducted by the researcher.
- The research process comprised two distinct stages for the collection, analysis, and interpretation of data. In the first stage, the researcher obtained permission from five secondary schools in Region XII to conduct the study, administered survey questionnaires, and collected responses. The necessary information and instructions were provided with the questionnaires, and data collection and tabulation followed the receipt of all responses. Outlier effects were addressed through data scrubbing, and the cleaned data was sent to a statistician for analysis.
- In the second stage, the researcher focused on the experiences of teachers who graduated with a Bachelor of Secondary Education (BSED) in Filipino. Thematic analysis was employed to analyze interview responses, allowing for interpretation of key themes. The researcher reviewed interview transcripts multiple times to capture the participants' thoughts, perceptions, and emotions, highlighting significant statements related to their experiences in teaching the Filipino subject using blended modality.
- Throughout the study, the researcher adhered to ethical standards concerning voluntary participation, confidentiality, informed consent, and various ethical practices to ensure the integrity of the research.
- The researcher adhered strictly to ethical standards, including ensuring voluntary participation, maintaining privacy and confidentiality, and following necessary guidelines during the study.
- 229 For a broader and more meaningful interpretation and study of the data, the researcher 230 utilized the following statistics: Mean, Pearson correlation coefficient (r), Regression, and 231 Thematic Analysis. The researcher also employed Key Informant Interviews (KII) to gather 232 data for this study. Prior to conducting the interviews with the participants, the researcher 233 presented a consent letter to inform them of the research's purpose. They were required to 234 sign this consent form as proof of their agreement to participate in the interview. 235 Furthermore, the researcher explained that all information obtained from them would remain 236 confidential, especially their identities.
- On the day of the interview, participants were allowed to ask questions and seek clarification on the researcher's inquiries. Subsequently, the researcher ensured that the participants' responses were accurately recorded through audio recording to maintain the validity and appropriateness of the responses noted. Participants were also given the opportunity to add to or modify their answers. After recording the participants' responses, they signed the transcript as proof of their agreement with what the researcher recorded. Finally, after interviewing all participants, the researcher proceeded to transcribe the recorded interviews.
- In this study, the appropriate research guidelines are important to complete the conducted research. It was submitted to the University of Mindanao Ethics Reviewer Committee (UMERC). The necessary attachments for the submission of the questionnaire and forms

were well-organized, and ethical considerations regarding data confidentiality, consent, and participant protection were taken into account for the conducted study. The review by the researcher of the manuscript was based on the suggestions and recommendations of the University of Mindanao Ethics Review Committee before a certificate was issued as UMERC -2023-450.

2.2. Research Respondents

The respondents of this study are 400 senior high school teachers from various secondary schools in Region 12 who officially teach the subject of Filipino during the Academic Year 2023-2024. They come from the School Division Offices of Tacurong City, General Santos City, Sarangani, and Koronadal City. To determine the 400 participants, the researcher followed the rules and advice of Parsons, 1-11, and utilized stratified random sampling. Only teachers officially teaching in senior high school were included in the stratified sampling technique. Regarding the number of participants, there are several arguments from experts. Ismael (5) explained that there should be 400 participants to establish that there is a connection. This sample size is generally sufficient to identify significant differences or trends, especially in large populations and moderate effects. This scope provides a 95% level of confidence and a 5% margin of error, which is considered the standard in most studies. This means there is a 95% probability that the results are correct and accurate, and the error does not exceed 5% from the actual value (Hsu, 1-15; Cramer et al., 633-647; Krejcie, 607-610). According to Frankel et al. (429), the minimum acceptable sample size is 400, and any sample size below this may result in inaccurate results or misinterpretation of the data.

The participation of respondents in the research study was approved by Region XII and involved five divisions. Participation was voluntary, with teachers required to attend an orientation to understand the information needed. Primary participants included teachers with five or more years of experience teaching Filipino, permitted by school administrators in Region XII. Teachers who were absent during data collection could still participate; however, those who do not teach Filipino or have less than five years of experience were excluded from the study.

The study focuses on teachers with five or more years of experience teaching Filipino in public secondary schools within Region XII. Only these teachers, approved by school administrators, will serve as primary participants. Those not present during the data collection can still participate, while teachers who do not teach Filipino or have less than five years of experience will be excluded. Participation is voluntary, allowing teachers to withdraw without penalties and retaining their rights and benefits.

The qualitative section will include demographic information, using pseudonyms to ensure confidentiality. A total of 15 participants will be involved: 10 will undergo in-depth interviews (IDI), and 5 will participate in a focused group discussion (FGD). Participants were selected through purposive sampling to ensure they possess relevant experience for the study's objectives. This research was conducted in various cities within Region XII.

2.3. Research Instrument

This study utilized downloaded questionnaires from web sources. The instrument used to analyze 21st-century teaching competencies was adapted from "Teachers' Competencies in Educational Technology Integration on Instructional Methodologies in the New Normal" by Jayson L. De Vera of the Philippine Normal University. It includes indicators such as technical literacy, digital citizenship, dispositions, planning blended tasks, planning blended

assessments, personalizing instruction, managing teacher-student interactions, managing student-content interactions, implementing blended assessments, reflection and evaluation, managing blended learning environments, and managing blended learning activities, comprising a total of sixty-five (65) questions.

302 The instrument used to analyze digital readiness was adapted from "Digital Readiness, 303 Academic Motivation, and Learning Strategies: A Structural Approach to Motivation in 304 Writing Performance of Freshmen College Students." It aims to measure the level of 305 knowledge in digital tool applications, digital usage, awareness of digital media, information 306 retrieval skills, and information-sharing behavior. Modifications were made to the items to 307 tailor them to the present study, with indicators such as digital tool applications, digital 308 application usage, awareness of digital media, information retrieval skills, and information-309 sharing behavior, totaling seventeen (17) questions. The responses for each item related to digital knowledge were measured using descriptive equivalents and interpretations. 310

The third part focuses on motivation for teaching the Filipino subject, derived from an instrument adapted from "Teachers' Motivation for Teaching in Higher Education: Portuguese Validation of a Questionnaire." This instrument consists of six sections comprising twenty-three (23) questions with indicators such as personal relevance: context, personal excellence: general, effort, teaching effectiveness, and outcome effectiveness. The responses for each item related to motivation for teaching Filipino will utilize specific measurement scales, descriptive equivalents, and interpretations.

The three questionnaires used a 5-Point Likert Scale, The range of means starts from 1.00 to 5.00, with levels from lowest to highest and corresponding interpretations for each number. The mean range of 1.00-1.79 corresponds to the lowest level with an interpretation of "never demonstrated," 1.80-2.59 as low, 2.60-3.39 as moderate, 3.40-4.19 as high, and 4.20-5.00 as the highest. All mentioned questions and descriptive scales underwent rigorous validation by a panel of six (6) qualified experts, achieving an average score of 4.5.

324 The researcher conducted a pilot test to assess the effectiveness of the instruments. The 325 distribution of the instruments was followed by the analysis of the Cronbach Alpha from the 326 pilot testing. The 21st-century teaching competencies had a Cronbach Alpha on 327 standardized items of .97, digital readiness had .95, and motivation for teaching the Filipino 328 subject had a reliability statistic result of .95. Overall, the pilot testing received a Cronbach 329 Alpha of 0.90 – 1.00, indicating excellent internal consistency. The researcher coordinated 330 with the program heads or coordinators of each school to facilitate data distribution and 331 collection. A group chat was created by the researcher to streamline and economize the 332 data gathering and collection process.

3. RESULTS AND DISCUSSION

3.1. 21st Century Teaching of Teachers in Senior High School

Table 1 illustrates that the Level of 21st Century Teaching among Teachers in Senior High School has a standard deviation of 0.61 and an impressive mean score of 4.17. This indicates a descriptive level categorized as 'high,' signifying that the principles of 21st century teaching are frequently exhibited and effectively managed through meaningful pedagogical approaches that incorporate modern technology.

Table 1.Levels of 21st Century Teaching

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Indicators	SD	Mean	Descriptive Level
Technical Literacy	0.67	4.02	High
Digital Citizenship	0.61	4.36	Highest
Disposition	0.56	4.41	Highest
Planning Blended Activities	0.64	4.24	Highest
Planning Blended Assessment	0.65	4.22	Highest
Personalizing Instructions	0.68	4.12	High
Managing Student Interaction	0.74	4.11	High
Managed the Teacher-Student Interaction	0.68	4.18	High
Manage the Student-Knowledge Interaction	0.75	4.11	High
Implementation of Blended Assessment	0.72	4.12	High
Analysis and Reflection	0.73	4.12	High
Management of Blended Learning Context	0.76	4.09	High
Management of Blended Learning Activities	0.76	4.12	High
Total	0.61	4.17	High

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360 361 The study highlights key indicators of effective blended learning, showing high mean scores and varying standard deviations. Notable indicators include **Dispositions** (4.41, SD: 0.56), indicating effective blended teaching in Filipino instruction; **Digital Citizenship** (4.36, SD: 0.61), reflecting teachers' skills in online knowledge sharing; and **Planning of Blended Assessment** (4.24, SD: 0.64), which signifies the efficiency and accessibility of online assessments. Additionally, **Planning of Blended Activities** (4.22, SD: 0.65) enhances online and personal skills, while **Managed Interactions between Teacher and Student** (4.18, SD: 0.68) reveals improved communication via online platforms. Other important indicators include **Management of Blended Learning Activities** (4.12, SD: 0.76), and **Evaluation and Remediation** (4.12, SD: 0.73), emphasizing the use of varied assessment methods. With scores of 4.11, additional indicators related to managed student interactions showcase opportunities for collaborative learning. Finally, the **Managed Blended Learning Environment** (4.09, SD: 0.76) and **Technical Literacy** (4.02, SD: 0.67) highlight the ongoing integration of technology in education, reinforcing their positive impact on student development. Overall, the analysis demonstrates the effective implementation of blended learning strategies and educators' dedication to enhancing student engagement and achievement.

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This finding is supported by the studies conducted by Purba (1486-1497), Esman (46-62), and Del Mundo (2643-9876), which collectively reveal that senior high school teachers exhibit high proficiency in 21st-century digital skills and technology integration. Furthermore, Despojo (316) corroborates this assertion in his research, indicating that senior high school teachers demonstrate advanced competencies in 21st-century skills, media literacy, digital literacy, as well as essential life and professional skills. This underscores the teachers'

readiness to effectively engage in modern educational practices and prepare students for a rapidly evolving digital landscape.

3.2. Digital Readiness of Senior High School Teacher

Table 2 reveals that the level of knowledge concerning digital readiness for learning among senior high school teachers is characterized by a total standard deviation of 0.75 and a mean score of 4.08, categorizing it within the descriptive level of "high." This finding signifies a robust foundation of knowledge and a strong consensus among educators regarding the integration of technology in both teaching and learning processes. The high mean score further reflects the educators' confidence and proficiency in utilizing digital tools to enhance instructional effectiveness and student engagement.

Table 2.Levels of Digital Readiness

Indicators	SD	Mean	Descriptive Level
Digital Tool Application	0.88	3.91	High
Use of Digital Applications	0.76	4.29	Highest
Awareness of Digital Media	0.87	4.02	High
Information Retrieval Skills	0.81	4.06	High
Information-sharing Behavior	0.78	4.13	High
Total	0.75	4.08	High

The indicator for the use of digital applications has a standard deviation of 0.76 and a mean score of 4.29, indicating that teachers in senior high school possess a very high level of knowledge due to seminars, workshops, and other activities that help them develop their skills using modern technology. The indicator for the behavior of sharing information received a high response from the participants, with a standard deviation of 0.78 and a mean score of 4.13. This means that teachers have a high level of knowledge in using modern technology, regardless of their age, as skills are acquired and utilized in teaching due to their

consistent participation in training programs intended for such skills.

The skill in information searching has a standard deviation of 0.81 and a mean score of 4.06, awareness of digital media has a standard deviation of 0.87 and a mean score of 4.02, while the use of digital tool applications has a standard deviation of 0.88 and a mean score of 3.91. All of these indicators show a high tendency for the integration of technology in teaching and learning, considering that there are times when teachers face challenges and exert personal effort to share knowledge with students and make daily lessons meaningful.

According to the research conducted by Anh (3), Rahmania (95-104), and Porque (60-76), senior high school teachers exhibit a high level of digital readiness. The findings reveal that English teachers have successfully equipped themselves with robust skills in both pedagogy and technology. However, as the landscape of modern, rapidly evolving technology presents new challenges, it is essential for educators to continually refine and enhance their technological competencies to effectively engage and educate their students. This ongoing pursuit of professional development is crucial in navigating the complexities of integrating

technology into teaching practices and ensuring that educators remain adaptable in an everchanging digital environment.

3.3. Teacher Motivation in Senior High School

Table 3 illustrates that the level of knowledge regarding motivation among senior high school teachers is characterized by a standard deviation of 0.58 and an overall mean score of 4.32. This score falls within the 'very high' descriptive level, signifying that these educators consistently exhibit a strong motivation in their teaching of the Filipino subject.

Table 3.Level of Knowledge on Teacher Motivation in Senior High School

Indicators	SD	Mean	Descriptive Level
Personal Efficacy: Context	0.75	4.18	High
Personal Efficacy: General	0.59	4.36	Highest
Effort	0.60	4.51	Highest
Teaching Efficacy	0.73	4.23	Highest
Outcome Efficacy	0.69	4.32	Highest
Total	0.58	4.32	Highest

The indicator of effort reveals a standard deviation of 0.60 and a mean score of 4.51, suggesting that teachers consistently strive to make daily discussions engaging and impactful, thereby enhancing their effectiveness as educators for their students. In examining the indicator of personal excellence, the overall standard deviation is 0.59, accompanied by a mean score of 4.36. The effectiveness of outcomes, measured by a standard deviation of 0.69 and a mean score of 4.32, highlights the positive impact of their efforts. Additionally, the indicator for teaching excellence shows a standard deviation of 0.73 with a mean score of 4.23, while the personal relevance context displays a standard deviation of 0.75 and a mean score of 4.18. Collectively, these findings provide strong evidence that the participants exhibit exceptionally high levels of self-motivation, recognizing it as their sworn duty to commit wholeheartedly to the growth and development of their students, thereby ensuring that their teaching remains meaningful and transformative in the students' daily lives.

Research conducted by Onyefulu (37-65), Halimahturrafiah (362-369), and Gautam (1-56) reveals that the majority of teachers possess a strong knowledge base and skill set in utilizing ICT tools, including computers, laptops, mobile phones, multimedia applications, social media platforms, social networking, and mobile-assisted language learning technologies. The integration of ICT in English Language Teaching (ELT) has significantly enriched the teaching and learning experience, enabling educators to master new technologies, thereby refining their technical competencies and enhancing the overall quality of the instructional process. This transition from traditional pedagogical methods to modern approaches has been instrumental in fostering a more engaging learning environment. Additionally, workplace motivation plays a critical role in influencing teacher performance, as evidence suggests that increased job motivation correlates positively with improved performance among public school teachers in senior high schools.

Table 4.1 shows a significant relationship between 21st Century Teaching and Knowledge in Motivating Senior High School Teachers, with an r-value of .725 and a probability value of .000, which is much lower than the .05 level of significance set in this study. Therefore, the null hypothesis is rejected, and it supports the alternative hypothesis that there is a significant relationship between 21st Century Teaching and Knowledge in Motivating Senior High School Teachers.

The results of this table indicate that there is a significant connection between the 21st Century Teaching of teachers and the Motivation of Senior High School Teachers. This means that when the 21st Century Teaching skills of teachers are high, their knowledge in motivation is also high. This implies that 21st Century Teaching plays an important role in teachers' ability to understand motivation in teaching, particularly regarding all the indicators of 21st-century teaching. A teacher's success in teaching is significantly related to how well they can engage students in learning. Research has shown that in 21st Century Teaching, to avoid student boredom and lack of interest or motivation, teachers should effectively plan and manage blended learning activities.

Table 4.1 Significant Relationship between 21st Century Teaching and Knowledge on Teacher Motivation

a st a	Knowledge of Motivation						
21 st Century Teaching	Personal Efficacy: Context	Personal Efficacy: General	Effort	Teaching Efficacy	Outcome Efficacy	Total	
Technical Literacy	.578**	.551 ^{**}	.428**	.454**	.487**	.577**	
roommoar Energoy	.000	.000	.000	.000	.000	.000	
Digital Citizenship	.543**	.553**	.479**	.450**	.475**	.575 ^{**}	
Digital Onizoriomp	.000	.000	.000	.000	.000	.000	
Disposition	.500**	.574**	.521**	.506**	.562**	.611 ^{**}	
2 iopooition	.000	.000	.000	.000	.000	.000	
Planning Blended	.579**	.616 ^{**}	.535**	.496**	.545**	.636 ^{**}	
Activities	.000	.000	.000	.000	.000	.000	
Planning Blended	.588**	.625**	.522**	.513**	.569**	.647**	
Assessment	.000	.000	.000	.000	.000	.000	
Personalizing	.602**	.619 ^{**}	.491**	.544**	.582**	.654 ^{**}	
Instructions	.000	.000	.000	.000	.000	.000	
Managing Student	.615**	.601**	.495**	.493**	.544**	.633 ^{**}	
Interaction	.000	.000	.000	.000	.000	.000	
Managed the Teacher-Student Interaction	.599**	.634**	.527**	.512**	.575**	.655 ^{**}	
	.000	.000	.000	.000	.000	.000	
Manage the Student-	.582**	.589**	.455**	.511**	.553**	.621 ^{**}	
Student- Knowledge	.000	.000	.000	.000	.000	.000	

	.000	.000	.000	.000	.000	.000
Total	.673**	.687**	.570 ^{**}	.582 ^{**}	.637**	.725 ^{**}
Activities	.000	.000	.000	.000	.000	.000
Management of Blended Learning	.637**	.651**	.553**	.575**	.618 ^{**}	.699**
Context	.000	.000	.000	.000	.000	.000
Management of Blended Learning	.628**	.625**	.517**	.538**	.596**	.669**
Reflection	.000	.000	.000	.000	.000	.000
Analysis and	.642**	.643**	.532**	.540**	.617**	.685**
Assessment	.000	.000	.000	.000	.000	.000
Interaction Implementation of Blended	.623**	.617**	.511 ^{**}	.549**	.591**	.667**

According to the study by Dewaele et al. (922-945), providing students with the opportunity to select tasks encourages them to express their knowledge and abilities more authentically. This notion is further reinforced by Lumpkin (32-43), who asserts that establishing a strong interaction with tasks and effectively managing these interactions leads to teaching that is organized, straightforward, meaningful, and highly efficient. Such an approach significantly enhances self-confidence in both students and teachers, as it offers clear direction in the teaching and learning process. Furthermore, teachers benefit from increased engagement and experience smoother, more systematic instruction. In the context of 21st-century education, this methodology proves to be particularly innovative and resourceful, ensuring that both professors and students have a well-defined roadmap for successful teaching and learning experiences.

3.5. Significant Relationship between Digital Readiness for Learning and Teachers' Motivation Knowledge in Senior High School

Table 4.2 illustrates a significant correlation between knowledge of digital readiness for learning and the understanding of teachers' motivation in Senior High School. The analysis yielded a correlation coefficient (r-value) of .647, accompanied by a probability value of .000, which is substantially lower than the predetermined significance level of .05 established for this study. Consequently, the null hypothesis is rejected in favor of the alternative hypothesis, which confirms a meaningful relationship between these two variables. This finding suggests that a greater proficiency in digital readiness is associated with an increased understanding of teachers' motivation in the Senior High School context.

Through comprehensive analysis, the study uncovers significant correlations between various digital readiness skills and the knowledge of teachers' motivation in Senior High School. Among the key findings, digital readiness for learning demonstrates a robust relationship (r-value of .647, p-value of .000), alongside noteworthy correlations with digital tool application skills (r-value of .539, p-value of .000), information sharing behavior (r-value of .631, p-value of .000), and information searching skills (r-value of .624, p-value of .000). Furthermore, both digital media awareness (r-value of .578, p-value of .000) and the effective use of digital tool applications (r-value of .575, p-value of .000) significantly

contribute to enhancing teachers' motivation knowledge. Most strikingly, the analysis identifies personal ability—framed within the context of digital knowledge—as the strongest correlating factor, boasting an r-value of .716 and a p-value of .000, while the weakest correlation is linked to effort, represented by an r-value of .451 and a p-value of .000. These findings suggest the critical role of digital readiness in fostering a motivated teaching environment in Senior High Schools.

Table 4.2Significant Relationship between Digital Readiness for Learning and Teachers' Motivation Knowledge in Senior High School

Digital	Knowledge of Motivation						
Readiness for Learning	Person al Efficacy : Context	Personal Efficacy: General	Effort	Teaching Efficacy	Outcome Efficacy	Total	
Digital Tool	.597**	.489**	.331**	.446**	.453**	.539 ^{**}	
Application	.000	.000	.000	.000	.000	.000	
Use of Digital	.623**	.552**	.463**	.384**	.475**	.575**	
Applications	.000	.000	.000	.000	.000	.000	
Awareness of Digital	.674**	.557**	.406**	.408**	.450**	.578**	
Media	.000	.000	.000	.000	.000	.000	
Information Retrieval	.654**	.595**	.421**	.496**	.527**	.624**	
Skills	.000	.000	.000	.000	.000	.000	
Information- sharing	.713**	.581 ^{**}	.442**	.465**	.520**	.631**	
Behavior	.000	.000	.000	.000	.000	.000	
Total	.716**	.609**	.451 ^{**}	.484**	.532 ^{**}	.647**	
	.000	.000	.000	.000	.000	.000	

 The study conducted by Porque et al, 60-76, highlights that the integration of digital tool applications stands as one of the most crucial resources for educators and students in today's educational landscape. Utilizing devices such as smartphones, laptops, computers, and projectors, these tools allow users to effectively search for and access information with remarkable ease. This contrasts sharply with earlier methods that necessitated the use of physical books to find essential information—a process that was often time-consuming. In essence, technology has significantly streamlined many daily tasks, enhancing efficiency for everyone involved.

Moreover, the incorporation of ICT applications and digital literacy within the classroom has fundamentally altered the roles of both students and teachers. It has also transformed the types of materials utilized by educators and the pedagogical approaches they adopt. As a result, teachers face a wide array of responsibilities to ensure the successful implementation of these changes. This includes not only improving their own knowledge and skills related to technology usage but also fostering a deeper understanding and endorsement of effective teaching methods and curricular content (Tomczyk, 471-486).

3.6. Significant Influence of 21st Century Teaching and Digital Readiness for Learning on Teachers' Motivation in Senior High School

Table 5 highlights the significant influence of 21st Century Teaching and Digital Readiness for Learning on Teachers' Motivation in Senior High School. The analysis yields an F-value of 231.833, an R-value of 0.734, an R² of 0.539, and a p-value of 0.000, all of which indicate a strong statistical significance well below the 0.05 threshold established for this study. Notably, the adjusted R² of 0.539 signifies that 54% of the total variance in Teachers' Motivation in Senior High School can be explained by the regression model. This suggests a substantial relationship between the variables studied. Conversely, the remaining 46% of the variance may be influenced by other factors that are not accounted for within the scope of the current research. This finding underscores the complexity of teacher motivation and suggests areas for further investigation.

In summary, the influence of 21st Century Teaching and Digital Learning Preparation significantly affects Teachers' Motivation in Senior High School. This finding indicates that the exogenous variables contribute meaningfully to our understanding of what motivates teachers at this educational level. The results underscore the importance of integrating modern teaching methodologies and digital resources, as they are crucial factors in enhancing teacher motivation and, ultimately, the educational experience.

Table 5. Significant Influence of 21st Century Teaching and Digital Readiness for Learning on Teachers' Motivation in Senior High School

Knowledge of Motivation								
Variables	4	В	β	t	Sig.			
Constant		1.434		10.472	.000			
21 st Century Teaching		.547	.574	10.194	.000			
Digital Readiness for Learning		.148	.189	3.361	.001			
R	.734							
R ²	.539							
ΔR	.536							
F	231.833							
ρ	.000							

One of the most daunting challenges teachers face is figuring out how to motivate their students to engage in their studies. This understanding is crucial because unmotivated students struggle to learn effectively. Moreover, they often fail to retain information, are less likely to participate actively, and some may even disrupt the learning environment (Reeve and Shin, 150-161). Ahmadi (115-125) emphasizes that motivation is the driving force behind people's decision to engage in an activity, whether they will persist, the perceived difficulty of the task, and how long they are committed to it. In essence, "motivation propels you forward and defines the direction you wish to take." This dynamic underscores the pivotal role students' play in their own learning and in achieving academic success.

The data gathered from interviews and focus group discussions underwent comprehensive analysis. Following this analysis, several themes emerged, each accompanied by specific categories and indicators that offer valuable insights into the experiences and perspectives of teachers instructing Filipino subjects in senior high schools within Region 12.

The organized responses revealed the following key themes: the integration of Information and Communication Technology (ICT) enhances student engagement; ICT streamlines the teaching and learning processes; and being a "technologically savvy" teacher is a significant advantage in the educational landscape. These findings highlight the importance of embracing modern teaching tools and strategies to foster a more engaging and effective learning environment.

3.7. How can the findings from qualitative data be validated to align with the results from quantitative data?

In this study, the qualitative results align closely with the quantitative findings, which demonstrate that the level of 21st-century teaching among senior high school teachers has a Standard Deviation of 0.6 and a Mean of 4.17, categorized as high. This is further supported by insights from interview participants, the majority of whom emphasized that students exhibit greater engagement during ICT-based lessons and activities. Students eagerly compete to respond using their laptops and smartphones, and the utilization of these online platforms significantly boosts their involvement. There is a palpable excitement among students that arises from 21st-century teaching methods, while teachers' motivation during class hours enhances the overall student experience through technology integration. As a result, students become increasingly active and participative, facilitating their comprehension of the subject matter. The following responses from teachers illustrate this point: IDI R1, IDI R2, IDI R10, IDI R3, FGD T2, and FGD T3.

Additionally, the qualitative results are in harmony with the quantitative data concerning the high level of digital preparedness for teaching among senior high school teachers, which shows a Standard Deviation of 0.75 and a Mean of 4.08, also categorized as high. Participants in interviews noted that accessing information has become more straightforward; they can receive links—such as Google Forms—to enhance their understanding and resource maximization. Digital preparedness is particularly beneficial for teaching, especially when teachers participate in seminars and training that can be applied in the classroom. Exposure to various technologies—such as Google platforms, Schoology, links, and PowerPoint—equips teachers with the necessary skills to effectively convey subject matter. The responses from teachers support this observation: FGD T1, FGD T3, FGD T2, and FGD T1.

Furthermore, the qualitative findings align with the quantitative results regarding teacher motivation in senior high schools, which reveal a Standard Deviation of 0.58 and a Mean of 4.32, categorized as very high. Interview participants reaffirmed that tools and apps 596 significantly streamline the teaching process, including music resources. For instance, 597 although I may not have a strong inclination toward music, the presentation of musical 598 lessons was noted to enhance students' understanding. The incorporation of smart TVs, 599 PowerPoint presentations, smartphones, and videos accelerates learning and simplifies the 600 teaching experience. Students are also more likely to complete tasks promptly when 601 technology is integrated, easing the overall workload for educators. This observation is 602 further illustrated by the following responses: IDI R4, IDI R5, IDI R6, IDI R7, IDI R2, and 603 FGD T1.

4. CONCLUSION AND RECOMMENDATIONS

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This section summarizes the findings, conclusions, and recommendations of a study examining the relationship between 21st Century Teaching, Digital Readiness, and Teacher Motivation among Senior High School educators. The study reports high mean scores and low standard deviations for 21st Century teaching (4.17), Digital Readiness (4.08), and Teaching Motivation (4.32), indicating strong teacher proficiency in using technology and a high level of motivation to teach. Interview participants confirmed the positive impact of digital tools like Google Forms and PowerPoint on their teaching practices.

- Quantitative analyses reveal a significant correlation between teachers' knowledge of 21st Century Teaching and their motivation, with an r-value of .647 and a p-value of .000. This
- 614 Century Teaching and their motivation, with an r-value of .647 and a p-value of .000. This suggests that higher digital competency among teachers' leads to increased motivation and
- readiness for teaching. Additionally, 21st Century Teaching and Digital Readiness influence
- Teacher Motivation significantly, accounting for 54% of its variance.
- The results align with the Technology Acceptance Model (TAM), indicating that teachers find
- 619 technology useful and easy to use. They also relate to TPACK theory, which evaluates the
- 620 integration of content, pedagogy, and technology in teaching. Teachers' ICT knowledge was
- 621 reported to be above average, with recommendations for further research on online
- 622 collaboration and in-service training for effective ICT use.
- 623 Moreover, findings support the Self-Determination Theory (SDT), which categorizes
- 624 motivation as intrinsic and extrinsic, and highlights the role of expected outcomes in
- 625 motivating teachers. The study also emphasizes the importance of Goal-Setting Theory and
- 626 Maslow's Hierarchy of Needs in understanding teacher motivation and personal
- 627 development in the educational context.

Based on the results of the study, the researcher recommends the following: Teachers should strengthen their use of modern technology to enhance their technical literacy and

- 630 provide more training on the effective use of digital tools. It is also essential to design
- activities and projects that connect technology to real-world applications to broaden the
- technical literacy skills of Senior High School teachers. Teachers should continue to expand
- their knowledge in digital readiness for learning and utilize modern technology to improve the
- quality of teaching and learning for students. This can be achieved through regular training,
- 635 workshops, and collaboration in sharing strategies. It is important to allocate resources,
- 636 platforms, and mentorship to assist teachers in using digital tools, resulting in a more
- engaging, effective, and meaningful learning experience for students.
- 638 Support for Senior High School teachers should continue through regular training and
- 639 programs that enhance their contextual skills and motivation to teach. Platforms for sharing
- experiences and strategies should be established to help them grow their skills. In this way,
- their capacity to provide quality education and foster personal and professional growth will
- be strengthened. Senior High School teachers should continue to develop their skills in 21st

- Century teaching to increase student motivation. Regular training in blended learning and other technologies should be provided, activities aligned with student interests should be designed, and mentorship from experts should be offered. They should promote collaborative learning and conduct evaluations and audits of the teaching system to improve methodologies.
- 648 Senior High School teachers need to continue expanding their knowledge in 21st Century 649 Teaching and Digital Readiness for learning to enhance their motivation and teaching 650 effectiveness. Regular training and workshops focused on modern technology and 651 methodologies should be allocated, while also considering other factors that may influence 652 their motivation to ensure holistic development and higher quality education for students. 653 Efforts should be continuously strengthened to provide training and support for Senior High 654 School teachers to maintain and enhance their high level of skills in 21st Century Teaching. 655 digital readiness for learning, and motivation. Regular workshops and seminars focused on 656 modern technologies and teaching methodologies should be organized to improve their 657 capabilities and sustain high levels of motivation and effective teaching. Furthermore, it is 658 vital to pay close attention to aspects of personal and professional development for teachers 659 to ensure ongoing improvement in education quality.

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COMPETING INTERESTS

Declaration of competing interest should be placed here. All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential conflicts of interest include

employment, consultancies, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. <u>If no such declaration has been made by the authors, SDI reserves to assume and write this sentence: "Authors have declared that no competing interests exist."</u>

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Authors may use the following wordings for this section: "'Author A' designed the study, performed the statistical analysis, wrote the protocol, andwrote the first draft of the manuscript. 'Author B' and 'Author C' managed the analyses of the study. 'Author C' managed the literature searches..... All authors read and approved the final manuscript."

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DEFINITIONS, ACRONYMS, ABBREVIATIONS

Here is the Definitions section. This is an optional section.

Term: Definition for the term

APPENDIX

