

# 21<sup>ST</sup> CENTURY ATTRIBUTES, FINANCIAL LITERACY, AND INNOVATIVE WORK BEHAVIOR OF PUBLIC SCHOOL TEACHERS

Roxan B. Lawas-Piana <sup>1</sup>, Aprell L. Abellana, PhD <sup>2</sup>

<sup>1</sup>Teacher, San Roque Elementary School, Don Carlos Bukidnon, Philippines

<sup>2</sup>Associate Professor, Central Mindanao University, Musuan, Maramag, Bukidnon, Philippines

## ABSTRACT

*The study examined the 21st century attributes, financial literacy and innovative work behavior of public school teachers in the Department of Education, Don Carlos I and III Districts, Division of Bukidnon for S.Y. 2024-2025. It determined the teachers' level of 21st century attributes in terms of professional and personal attributes, their level of financial literacy in terms of financial knowledge, financial behavior, financial attitude, and financial training, and their level of innovative work behavior in terms of critical thinking, creativity, social skills, and ICT skills.*

*A descriptive-correlational research design was employed. Means and weighted means were used to describe the levels of the variables, while Pearson product-moment correlation and multiple regression analysis were used to test the hypotheses and identify significant predictors of innovative work behavior. Results revealed that teachers' 21<sup>st</sup> century attributes were manifested to a very great extent (overall mean = 4.62), both in professional attributes (M=4.63) and personal attributes (M=4.61). Financial literacy was oftentimes manifested (overall mean = 4.31) across financial knowledge, attitude, behavior and training. Innovative work behavior was rated very highly competent (overall mean = 4.60) in creativity, social skills, Information, ICT skills, and critical thinking.*

*Personal attributes showed a significant relationship with innovative work behavior, while financial knowledge, financial attitude, financial training, and financial behavior were all significantly correlated with innovative work behavior. Regression analysis indicated that financial training, financial knowledge, personal attributes, and financial behavior significantly influenced innovative work behavior, with financial training emerging as the strongest predictor. These findings highlight the importance of financial empowerment and holistic personal development to sustaining a highly motivated and innovative teaching force.*

**Keyword:** *Financial capability, Innovative instructional practices, Public school teachers, Teacher professional competencies, 21<sup>st</sup> century teaching skills*

## 1. INTRODUCTION

In the dynamic and rapidly evolving landscape of the 21st century, the fundamental role of teachers has undergone a paradigm shift. Instruction is no longer merely about the transmission of static facts; rather, it has expanded significantly beyond traditional pedagogy and classroom management into the realms of mentorship, digital curation, and socio-emotional leadership. Today's educators are expected to possess a diverse and sophisticated set of competencies that allow them to thrive in a technology-driven, knowledge-based, and innovation-focused society. As the primary architects of a nation's human capital, teachers must navigate an era defined by

volatility, uncertainty, complexity, and ambiguity (VUCA). However, despite these high expectations, the teaching profession continues to face systemic challenges—ranging from bureaucratic saturation to economic instability—that place heavy and often unsustainable demands on its workforce. Therefore, it is essential to examine the current condition of teachers to gain a comprehensive understanding of their Innovative Work Behavior (IWB). Investigating teachers' 21st-century attributes and financial literacy is equally critical, as contemporary studies highlight these factors not as secondary traits, but as significant determinants of an educator's capacity for classroom innovation.

The significance of Innovative Work Behavior (IWB) among educators is vital for the long-term success of any academic institution and the broader societal progress it fuels. According to Kanya (2021), various factors must be considered to support teacher performance, with innovation being a key metric for instructional excellence in the post-pandemic era. Teachers who demonstrate high IWB do not merely follow pre-packaged curricula; they actively generate, promote, and implement original ideas to improve learning outcomes and solve localized educational problems. Furthermore, Adibah et al. (2023) concluded that such creativity is a fundamental skill needed to develop a country's human capital, particularly within the complex social environments of the modern day where "one-size-fits-all" teaching is increasingly obsolete. Recent research by Martinez and Lacson (2021) further asserts that Innovative Work Behavior (IWB) is a cornerstone in achieving national educational objectives, suggesting that without a culture of innovation at the grassroots level, national reforms often fail to take root in the classroom.

Despite its recognized importance, public school teachers—particularly those in developing regions—face significant structural and psychological barriers to innovation. Simbulan (2021) noted that heavy administrative burdens, coupled with limited resources and rigid standardized testing requirements, often stifle a teacher's natural inclination to experiment with new methodologies. When the primary focus of an educator is shifted toward compliance rather than creativity, the educational experience becomes stagnant. Similarly, Shakespeare et al. (2018) highlighted that disruptive classroom environments and systemic stress can lead to emotional exhaustion, a state that effectively shuts down the "innovation engine" of the brain. If these assertions hold true, a chronic lack of innovation could jeopardize the future quality of education and leave students ill-equipped for the rigorous demands of the global market. Cruz and Dela Peña (2024) revealed that while many teachers express a strong willingness to adopt innovative methods, a lack of clear institutional guidance and a fear of professional "failure" often hinders their efforts. The Organisation for Economic Co-operation and Development (OECD, 2019) emphasized that sufficient institutional support and continuous professional development are non-negotiable for fostering innovation. Without these, performance

pressures and the struggle to balance personal responsibilities can lead to burnout, declining teaching quality, and a sense of professional stagnation that echoes through entire school districts (Skaalvik & Skaalvik, 2017; Kleysen & Street, 2018).

Complementary to this, innovation does not occur in a vacuum; it is fundamentally shaped and catalyzed by the presence of 21st-century attributes. According to Saheed and Fatoki (2020), critical thinking empowers educators to look beyond traditional textbooks and redesign instructional practices to suit diverse learners. Furthermore, digital literacy significantly expands their capacity to transform traditional, paper-based learning environments into immersive digital landscapes (Tang et al., 2019). In the Philippine context, where the Department of Education (DepEd) has pushed for "Digital Rise," these skills are no longer optional. Muhammad (2019) asserts that collaboration and effective communication are indispensable for cultivating an empowering classroom atmosphere where innovative practices can flourish through shared knowledge. Teachers who possess high levels of technological proficiency are better equipped to integrate digital tools—such as Artificial Intelligence, Gamification, and Collaborative Platforms—that facilitate deep learning and instructional adaptability. In the same vein, Loughland and Alonzo (2019) observed that adaptable teachers are more proficient at recalibrating their practices to meet the evolving needs of their students, thereby fostering a culture of continuous improvement. Collectively, these attributes bolster a teacher's readiness to design and sustain highly responsive and engaging learning environments that mirror the complexities of the real world.

In addition to teachers' 21st century attributes, financial literacy has emerged as a critical, yet often overlooked, determinant of professional performance and innovation. According to Lusardi and Mitchell (2014), financial literacy is more than just basic money management; it is a fundamental life skill that mitigates personal stress and enhances overall psychological well-being. This stability is particularly crucial for public school teachers in the Philippines, who are frequently cited in literature as facing high debt-to-income ratios and "over-borrowing" patterns (Tajonera, 2019). When an educator is preoccupied with the

"scarcity mindset" brought about by financial instability, their cognitive resources are depleted. Educators who are financially literate and secure possess the mental 'bandwidth' and emotional resilience necessary to commit to creative and innovative professional tasks. Conversely, financial distress serves as a significant cognitive distractor, diverting a teacher's focus from classroom innovation toward basic personal survival. Consequently, financially literate teachers are better positioned to adopt creative solutions and engage in proactive instructional practices because they are operating from a place of security rather than survival (Aboagye & Jung, 2021). Such financial acumen allows educators to think strategically about their careers and their classrooms, contributing not only to their individual well-being but also to a flourishing, stable culture of innovation within the school system (Singh & Kumar, 2023).

Empirical evidence suggests that the synergy between personal competencies (21st-century attributes) and personal wellness (financial literacy) creates a holistic foundation for educational excellence. As noted by Urbano (2020), a teacher's capacity to innovate is deeply tied to their overall sense of security and their mastery of contemporary professional tools. When these three variables—Innovative Work Behavior (IWB), 21st-century attributes, and financial literacy—intersect, they create a "thriving" educator who is capable of leading the next generation through the challenges of the modern era. However, much of the existing research treats these variables in isolation or focuses on urban centers, leaving a gap in understanding how they interact in rural or semi-urban districts where resources may be scarcer.

Based on these considerations, the researcher was inspired to undertake a study examining the relationship between 21st-century attributes, financial literacy, and innovative work behavior among public school teachers. By focusing specifically on the Department of Education Don Carlos I and III District for the academic year 2024–2025, this study seeks to provide localized evidence that can inform district-level policies and professional development programs. Ultimately, this research aims to champion the holistic development of teachers—not just as employees, but as innovative, financially secure professionals

capable of transforming the lives of Filipino learners.

### **1.1. Statement of the Problem**

This study aimed to find out the 21st-century attributes, financial literacy, and innovative work behavior of teachers in the Department of Education, Don Carlos I and III District, Division of Bukidnon, for the academic year 2024–2025.

Specifically, it sought to answer these questions:

1. What is the level of the teachers' 21st-century attributes in terms of:
  - a. Professional Attributes, and
  - b. Personal Attributes?
2. What is the level of the financial literacy of teachers in the following aspects:
  - a. Financial Knowledge,
  - b. Financial Behavior,
  - c. Financial Attitude, and
  - d. Financial Training?
3. What is the level of the innovative work behavior of teachers in the following domain:
  - a. Critical Thinking,
  - b. Creativity,
  - c. Social Skill, and
  - d. ICT Skills?
4. Is there a significant relationship between innovative work behavior and:
  - a. Teachers' 21st Century Attributes, and
  - b. Financial Literacy?
5. Which variable, singly or in combination, best predict teachers' innovative work behavior?

### **1.2. Objective of the Study**

This study aimed to examine the 21st-century attributes, financial literacy, and innovative work behavior of public-school teachers. Specifically, this study sought to:

1. Examined the extent of the teachers' 21st-century in terms of:
  - a. Professional Attributes, and
  - b. Personal Attributes?
2. Assessed the extent of the financial literacy among teachers in the following aspects:
  - a. Financial Knowledge,
  - b. Financial Behavior,
  - c. Financial Attitude, and
  - d. Financial Training?

3. Determined the teachers' innovative work behavior in the following domain
  - a. Critical Thinking,
  - b. Creativity,
  - c. Social Skill, and
  - d. ICT Skills?
4. Correlate the teachers innovative work behavior with:
  - a. Teachers' 21<sup>st</sup> Century Attributes and;
  - b. Financial Literacy
5. Identify the variables, singly or in combination, which best predict teachers' innovative work behavior.

### **1.3. Significance of the Study**

This study examined the relationship between 21st-century attributes, financial literacy, and innovative work behavior of public-school teachers. The findings provided meaningful insights that increased awareness and informed improvements in educational practices across various sectors.

This study provided the Department of Education (DepEd) with empirical data on the status and needs of public-school teachers in critical areas that impacted educational quality and teacher well-being. Understanding teachers' financial literacy levels and innovative behaviors informed policy-making, program development, and resource allocation to improve teacher support systems. The findings guided the design of training programs and holistic interventions to enhance teacher competencies and financial stability, ultimately fostering a more effective and motivated teaching workforce.

For school administrators, this study highlighted the challenges and strengths of their teaching staff in adapting to 21st-century demands, managing financial matters, and embracing innovation in teaching. The insights helped administrators tailor professional development, create supportive environments, and implement strategies that encouraged innovative work behaviors and financial literacy. This led to improved teacher performance, collaboration, and morale within schools.

Teachers benefited from the study's identification of gaps in financial literacy and innovative practices relevant to their professional growth. The study's recommendations enhanced teachers' financial management skills and their ability to

innovate in instructional approaches. This supported teachers' personal financial well-being and professional effectiveness, enabling them to better meet the diverse needs of students and maintain high teaching standards.

Learners were the primary beneficiaries of a well-equipped and competent teaching workforce. Understanding teachers' 21st-century attributes, financial literacy, and innovative work behavior directly impacted student learning experiences, academic success, and future readiness. By ensuring that teachers were competent, financially literate, and innovative, this research contributed to the development of better learning environments, improved student outcomes, and a more prepared generation of future professionals.

The undertakings provided researchers in the field of educational research with advanced knowledge of teachers' 21st-century traits, financial literacy, and creative work practices. This study made a substantial contribution to educational research. It strengthened the larger conversation on teacher effectiveness and professional development in contemporary education, supported evidence-based policymaking, and offered a solid basis for further research.

By addressing these areas, this study generated valuable knowledge and practical recommendations that assisted the Department of Education, school administrators, teachers, and learners by addressing financial literacy and innovation in teaching as key elements of educational improvement and teacher empowerment.

### **1.4. Scope and Delimitation of the Study**

This research determined the levels of Teachers' 21st-century Attributes, Financial Literacy, and Innovative Work Behavior, along with their interrelationships, among public school teachers in the Department of Education (DepEd), Division of Bukidnon, specifically Don Carlos Municipality, for S.Y. 2024-2025. The study focused on Don Carlos I and III District, covering 17 public schools: Embayao Elementary School, San Roque Elementary School, Buyot Integrated School, Kasigkot Elementary School, MarayMaray Elementary School, San Nicolas Central Elementary School, San Nicolas National High School, CalaoCalao Elementary School, Old

Nongnongan Elementary School, Old Nongnongan National High School, Pualas Elementary School, San Antonio East Elementary School, Sinangguyan Elementary School, Minsalagan Elementary School, Don Carlos Norte Elementary School, Kibatang Elementary School, and Kibatang National High School.

These schools were purposively selected based on the researcher's proximity and logistical feasibility for efficient questionnaire distribution and retrieval. Respondents comprise elementary and secondary public-school teachers from these schools, with data collected exclusively through self-reported survey questionnaires during the specified academic year.

This study is delimited to public school teachers within Don Carlos Districts I and III and does not include private school educators or teachers from other municipalities in Bukidnon. Only teachers who are actively teaching during the School Year 2024–2025 were included, while retired, on-leave, or non-teaching personnel were excluded. The study relies solely on self-reported survey questionnaires, which may limit the depth of responses and the ability to capture qualitative insights into teachers' experiences, practices, or institutional challenges. Additionally, the research focuses specifically on three variables—21st-century attributes, financial literacy, and innovative work behavior. The findings are therefore applicable primarily to the selected public schools in Don Carlos and may not be generalized to other districts, provinces, or regions with differing educational contexts.

### **1.5. Definition of Terms**

For the purpose of this study, the following terms are defined as follows to ensure clarity and consistent understanding:

Creativity is a teachers' capacity to produce novel and original ideas in lesson planning, problem-solving, and instructional design, thereby engaging students actively and elevating learning outcomes. It entails divergent thinking beyond traditional paradigms to tackle educational challenges and nurture innovative classroom environments, directly underpinning innovative work behavior through the generation and application of creative teaching strategies.

Critical thinking ability to analyse, evaluate, and synthesize information through logical reasoning and reflective judgment, facilitating problem-solving, informed decision-making, and refinement of teaching practices. It underpins innovative work behavior by empowering teachers to craft evidence-based solutions, adapt strategies dynamically, and elevate instructional efficacy in diverse classroom contexts.

Financial attitude denotes individual's underlying mindset, beliefs, and values shaping money management and financial decision-making, characterized by responsibility, discipline, and a long-term orientation. Within financial literacy, a positive financial attitude steers teachers toward prudent choices in saving, spending, investing, and borrowing, fostering sustainable behaviors and enhanced well-being

Financial behavior represents teachers' observable actions and patterns in personal finance management, encompassing budgeting, consistent saving, debt avoidance, timely bill payments, and informed investing. It operationalizes financial knowledge and attitudes into practical habits, promoting resource stewardship and long-term stability.

Financial knowledge pertains individual's grasp of core financial concepts—such as budgeting, saving, investing, credit, interest rates, inflation, and risk diversification—and their adept application in decision-making. For public school teachers, it denotes the cognitive foundation enabling informed, responsible personal finance management

Financial training consists of structured educational programs or interventions—such as seminars, workshops, or modules on budgeting, saving, investing, credit management, and financial planning—aimed at bolstering individuals' knowledge, skills, and competencies in finance management. In this study, it captures public school teachers' engagement in such activities to elevate financial literacy and decision-making prowess

ICT (Information and Communication Technology) Skills encompass teachers' proficiency in leveraging information and communication technologies within education, including computer operation, software application, internet navigation, and seamless integration of digital tools into pedagogy. These

competencies propel innovative work behavior among public school teachers by facilitating technology-driven innovations, interactive learning designs, and enhanced student engagement.

Personal attributes represent teachers' intrinsic characteristics—such as responsibility, adaptability, communication, emotional intelligence, and intrinsic motivation—that shape their professional behaviors and interpersonal dynamics. As pivotal 21st-century skills, these attributes equip educators to navigate evolving demands, collaborate effectively, and cultivate collaborative learning environments

Professional attributes denote qualities tied to teachers' vocational roles, encompassing subject expertise, ethical conduct, commitment to lifelong learning, collegial collaboration, and dedication to educational objectives. As core 21st-century skills, these enable high-calibre instruction, adaptation to dynamic demands, and substantive contributions to student growth and institutional advancement

Social skills indicate teachers' interpersonal competencies for effective engagement with students, colleagues, parents, and communities, including communication, teamwork, empathy, conflict resolution, and relationship-building. These skills amplify innovative work behavior by promoting idea exchange, collaboration, and supportive learning ecosystems.

## 2. RESEARCH METHODOLOGY

This section outlined the research design, research locale, respondents and sampling procedure, research instrument, data gathering procedure, statistical treatment, and ethical considerations employed in the study.

### 2.1 Research Design

This investigation utilized a quantitative research approach to examine the relationship between 21st-century attributes, financial literacy, and innovative work behavior of teachers. Data were collected through a survey method, and the results were analyzed using appropriate statistical techniques. Findings were presented clearly through tables, figures, and descriptive narratives.

The descriptive research design was employed to determine the levels of professional education,

curriculum assessment practices, and teacher self-efficacy. The correlational research design was used to examine the relationships between the independent variables (21st-century attributes and financial literacy) and the dependent variable (teachers' innovative work behavior). Additionally, a predictive research design, utilizing multiple regression analysis, was conducted to determine the extent to which professional education and curriculum assessment practices predicted teacher innovative work behavior.

This approach ensured that the study systematically measured, analysed, and interpreted data to provide meaningful insights into the factors that influenced teacher confidence, instructional competence, and effectiveness in the classroom.

### 2.2. Locale of the Study

This study was conducted in the schools within the Division of Bukidnon in the Philippines, specifically in the District I and III of Don Carlos. These schools are located in Don Carlos, Bukidnon, and will serve as the setting for the research. The schools are public and will provide access to a diverse population of students. The locale will be selected due to its accessibility to the researcher and its unique educational environment, which will offer valuable insights into the interplay of 21<sup>st</sup> century attributes, financial literacy and, innovative work behavior of public-school teachers. Data will be collected through structured surveys administered to teachers in the selected schools.

### 2.3 Map of the Locale of the Study



Source: [https://en.wikipedia.org/wiki/Don\\_Carlos\\_I\\_District\\_of\\_Bukidnon#/media/File:Bukidnon\\_carlos.png](https://en.wikipedia.org/wiki/Don_Carlos_I_District_of_Bukidnon#/media/File:Bukidnon_carlos.png)


Legend  Schools as the research locale

Figure 2 contains the map of the locale of the study showing the school.

### 2.4 Respondents of the Study

The respondents of this study consisted of public-school teachers employed under the Department of Education in Don Carlos I and III Districts, Division of Bukidnon, during the academic year 2024–2025. To identify the respondents, eighteen (18) public schools were selected through random sampling. Subsequently, total enumeration sampling was used, which included all 259 teachers from the selected schools.

### 2.5 Research Instruments

The teachers' 21st century attributes, financial literacy, and their innovative work behavior were measured in this study. Each of the variables had a distinct instrument. This research utilized the questionnaire as the main tool in gathering the needed data and information.

The first part of the instrument focused on 21st-century attributes and was adapted from the study of Asio and Riego de Dios (2018) entitled "21st Century Attributes and Skills of a Teacher in the Perspective of College Students." This section comprised statements assessing two components: Professional Attributes and Personal Attributes. The questionnaire underwent reliability testing, yielding the following results: Professional Attributes (15 items,  $\alpha = 0.90$ ), Personal Attributes (15 items,  $\alpha = 0.84$ ), and Skills (25 items,  $\alpha = 0.94$ ). All Cronbach's alpha coefficients indicated high reliability. The instrument was also pilot-tested with respondents who were not participants in the main study. Respondents rated each item using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), reflecting their perceived professional competencies according to the established scoring procedure:

Numerical Rating	Range	Descriptive Rating	Qualitative Interpretation
5	4.51-5.00	Strongly Agree	Very Great Extent
4	3.51-4.50	Agree	Great Extent

3	1.51-2.50	Neutral	Moderate Extent
2	1.51-2.50	Disagree	Less Extent
1	1.0-1.50	Strongly Disagree	Not at All

The second instrument assessed financial literacy and was adapted from the study of Altaf (2014). The instrument measured financial literacy across four key indicators: financial knowledge, financial behavior, financial attitude, and financial training. To ensure reliability and internal consistency, the instrument was pre-tested using Cronbach's alpha, which yielded a high reliability coefficient of 0.960 for all variables. Respondents provided their answers using a five-point Likert scale, ranging from 1 (Never) to 5 (Always), reflecting the frequency or extent of their financial literacy practices.

Numerical Rating	Range	Descriptive Rating	Qualitative Interpretation
5	4.51-5.0	Strongly Agree	Financial Literacy manifested at all times
4	3.51-4.50	Agree	Financial Literacy oftentimes manifested
3	2.51-3.50	Neutral	Financial Literacy sometimes manifested
2	1.51-2.50	Disagree	Financial Literacy rarely manifested
1	1.0-1.50	Strongly Disagree	Financial Literacy not manifested

Finally, to measure teachers' innovative work behavior, the instrument was adapted from the study of Rustico Y. Jerusalem (2020) titled "Teachers' Innovative Teaching Strategies: Scale Development Using Exploratory Factor Analysis." Jerusalem's instrument identified key indicators that reflected how teachers implemented innovative strategies and behaviors in their professional practice. The exploratory factor analysis conducted in the study revealed four factors for measuring innovative teaching strategies: Critical Thinking (Factor 1), Creativity

(Factor 2), Social Skills (Factor 3), and ICT Skills (Factor 4). The reliability of each factor was assessed using Cronbach’s alpha coefficients, which indicated high reliability: Factor 1 ( $\alpha = 0.813$ ), Factor 2 ( $\alpha = 0.802$ ), Factor 3 ( $\alpha = 0.796$ ), and Factor 4 ( $\alpha = 0.790$ ). These results demonstrated that all constructs were both valid and reliable. Therefore, the scale was considered an acceptable and robust measure of teachers’ innovative work behavior. Respondents rated each item using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), reflecting their perceived professional competencies according to the established scoring procedure:

Numerical Rating	Range	Descriptive Rating	Qualitative Interpretation
5	4.20-5.00	Strongly Agree	Very Highly Competent (VHC)
4	3.40-4.19	Agree	Highly Competent (HC)
3	2.60-3.39	Undecided	Moderate Competence (LC)
2	1.80-2.59	Disagree	Incompetent(I)
1	1.0-1.79	Strongly Disagree	Not at All

### 2.6. Data Gathering Procedure

The data collection process followed a systematic and ethical protocol to secure permissions, ensure voluntary participation, and maintain confidentiality among public school teachers in the Don Carlos III District. The researcher first obtained formal approval from the Schools Division Superintendent, followed by the Schools District Supervisor of the Don Carlos District. Subsequently, formal letters were sent to school heads and principals of selected public basic education schools requesting teacher participation. Upon receiving approval, respondents were provided with a comprehensive briefing on the study’s purpose, procedures, voluntary nature, and right to withdraw at any time. Measures were also established to protect anonymity and confidentiality in accordance with RA 10173 (Data Privacy Act of 2012). Questionnaires were personally delivered to

teachers who consented to participate, with a one-week period allotted for completion to accommodate their schedules. The researcher offered clarifications when needed, ensuring understanding without influencing responses. All completed questionnaires were retrieved in person, resulting in a high response and retrieval rate. Responses were numerically coded to preserve anonymity, carefully checked for completeness, and systematically tabulated using SPSS for analysis. Throughout the process, all data were securely stored and handled ethically, ensuring adherence to research integrity and participants’ privacy.

### 2.7 Statistical Techniques

The following statistical techniques were employed to analyze the data:

To assess the levels of teachers’ 21st-century attributes, financial literacy, and innovative work behavior, descriptive statistics were employed. Specifically, means and standard deviations were used to determine the extent of 21st-century attributes in terms of professional and personal competencies; financial literacy in terms of financial knowledge, financial behavior, financial attitude, and financial training; and innovative work behavior in terms of critical thinking, creativity, social skills, and ICT skills.

To examine the relationships among teachers’ 21st-century attributes, financial literacy, and innovative work behavior, the Pearson product-moment correlation coefficient was utilized, providing a measure of the strength and direction of associations between variables.

Finally, to determine which variables—individually or in combination—significantly predicted teachers’ innovative work behavior, multiple regression analysis was conducted. This statistical approach allowed the researcher to identify key predictors and assess the extent to which the independent variables contributed to variations in innovative work behavior among teachers.

### 2.8. Ethical Considerations

This study, involving 259 respondents, was conducted in strict compliance with established ethical standards to ensure the protection and well-being of all participating teachers. Prior to participation, each respondent was provided with

comprehensive information detailing the study's purpose, procedures, potential benefits, and risks, ensuring transparency and informed decision-making. Written informed consent was obtained from all participants, affirming their voluntary agreement to participate and their right to withdraw at any time without penalty. To maintain confidentiality, all personal identifiers were removed, and data were anonymized to ensure that individual responses could not be traced back to participants. Data were securely stored in password-protected and encrypted electronic databases, accessible only to the principal investigator and authorized research team members, in compliance with data protection laws. Additionally, hard copies of consent forms and other documents were stored in locked filing cabinets. These measures reflected the ethical principles of respect for autonomy, confidentiality, and non-maleficence, as outlined in the Belmont Report (1979), ensuring the ethical integrity of the research process. The researcher encouraged adherence to these practices to uphold ethical standards and foster trust in the research community.

### 3. PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

This section discussed the analysis and interpretation of the data gathered to address the problem statements in the first chapter. The order of the presentation followed the sequence of the problems identified in the study. It further presented the important knowledge and understanding necessary for drawing the conclusions and recommendations.

#### 21st Century Attributes of Teachers

Table 1 presents teachers' 21st-century attributes, encompassing both professional and personal dimensions. The results show a composite average mean of 4.62, which is qualitatively interpreted as being manifested to a very great extent. Among the sub-variables, "professional attributes" obtained the highest rating with a mean of (4.63) while "personal attributes" followed closely with a mean of 4.61. Both indicators received a descriptive rating of "strongly agree," signifying that teacher possess these essential 21st-century qualities to a "very great extent."

The result on the high rating in professional attributes signifies that teacher are deeply committed to their vocation and have

successfully integrated 21st-century skills into their practice. This is possible because the Department of Education (DepEd) has continuously integrated the Philippine Professional Standards for Teachers (PPST) into the performance appraisal system, ensuring that educators maintain high standards of pedagogy, ethics, and professional leadership. The government's focus on the "Digital Rise" program and various ICT integration initiatives has further empowered teachers to become technologically savvy, allowing them to facilitate learning in digital and hybrid environments. According to Urbani et al. (2017), 21st-century teachers must be collaborative and culturally sensitive to meet the diverse needs of contemporary learners. Furthermore, the implementation of the Results-Based Performance Management System (RPMS) provides a structured framework that encourages teachers to demonstrate consistent professional growth and accountability. As noted by Pawilen (2019), the alignment of teacher competencies with global 21st-century standards is essential for the success of the K-12 curriculum, as it ensures that educators are equipped to produce locally responsive yet globally competitive learners.

Variable	Mean	Descriptive Rating	Qualitative Interpretation
Professional Attributes	4.63	Strongly Agree	Very Great Extent
Personal Attributes	4.61	Strongly Agree	Very Great Extent
Overall Mean	4.62	Strongly Agree	Very Great Extent

Table 1. Teachers' 21<sup>st</sup> Century Attributes

#### Legend Range

Scale	Rating Scale	Descriptive Rating	Qualitative Interpretation
5	4.51-5.00	Strongly Agree	Very Great Extent
4	3.51-4.50	Agree	Great Extent
3	2.51-3.50	Neutral	Moderate Extent
2	1.51-2.50	Disagree	Less Extent
1	1.0-1.50	Strongly Disagree	Not at All

The results further show that teachers obtained a high rating in personal attributes, highlighting their resilience, emotional intelligence, and ethical grounding. This suggests

that teachers possess the internal fortitude necessary to navigate the complexities of the modern educational landscape, serving as moral compasses who model integrity and adaptability. The finding aligns with Bialik and Fadel (2015), who identify "character" as a fundamental pillar of 21st-century education that allows educators to embody the traits they instill in students. This is especially relevant in the Philippines, where core values like "Maka-Diyos" and "Maka-Tao" are emphasized, and where Reyes and Villanueva (2023) found that resilience significantly predicts job satisfaction amidst heavy workloads. Furthermore, Castro et al. (2021) noted that the personal attributes of Filipino teachers, such as *malasakit* (compassion) and dedication, became the backbone of education continuity during the transition to distance learning, while research by Santos and Garcia (2022) highlighted that ethical grounding and emotional stability allow teachers to maintain a positive school culture that directly impacts student well-being. In general, these strong personal attributes indicate that teachers are not only academically prepared but also humanistically equipped to handle the socio-emotional demands of 21st-century learners, ensuring a holistic and supportive learning environment.

In general, this study's result point out a balanced integration of "skill" and "will." The high scores across both domains imply that teachers are not only technically proficient and knowledgeable in their subject matter but also deeply motivated by a sense of service and student-centeredness. This synergy is crucial for modern educators who must navigate the complex demands of the 21st-century classroom, where high academic standards must be met with emotional intelligence and ethical leadership. This finding is supported by Fidalgo et al. (2025), who argued that the modern educator's efficacy is no longer defined solely by content knowledge but by the intersection of professional competence and personal adaptability. Furthermore, Garcia et al. (2024) highlighted that when professional ethics are paired with high personal commitment, teachers exhibit greater resilience and are more likely to implement transformative educational practices. Similarly, the OECD (2025) reports that high-performing education systems are characterized by teachers who maintain strong professional identities while fostering deep personal connections with their learners. Lastly,

Santos and Rivera (2025) emphasized that a holistic approach to teacher development—one that nurtures both the "expert" and the "individual"—is essential for achieving sustainable improvements in student learning outcomes and school-wide performance.

### Financial Literacy of Teachers

Table 2 presents the level of financial literacy of teachers across four sub-variables: financial knowledge, financial behavior, financial attitude, and financial training. The data yielded an overall average mean of 4.25, which is described as "agree" and qualitatively interpreted as "oftentimes manifested." Among the sub-variables, "financial knowledge" obtained the highest rating with a mean of 4.46, while "financial behavior" followed with the lowest mean of 4.23. All indicators received a descriptive rating of "agree," signifying that teacher possess these financial literacy components to an extent that is "oftentimes manifested" in their daily lives.

Variable	Mean	Descriptive Rating	Qualitative Interpretation
Financial Knowledge	4.46	Agree	Financial Literacy oftentimes manifested
Financial Attitude	4.31	Agree	Financial Literacy oftentimes manifested
Financial Training	4.25	Agree	Financial Literacy oftentimes manifested
Financial Behavior	4.23	Agree	Financial Literacy oftentimes manifested
Overall Mean	4.31	Agree	Financial Literacy oftentimes manifested

Table 2. Teachers' level of Financial Literacy

#### Legend Range

Scale	Rating Scale	Descriptive Rating	Qualitative Interpretation
-------	--------------	--------------------	----------------------------

5	4.51- 5.00	Strongly Agree	Financial Literacy manifested at all times
4	3.51- 4.50	Agree	Financial Literacy oftentimes manifested
3	2.51- 3.50	Neutral	Financial Literacy sometimes manifested
2	1.51- 2.50	Disagree	Financial Literacy rarely manifested
1	1.0- 1.50	Strongly Disagree	Financial Literacy not manifested

Financial Knowledge and Financial Attitude emerged with the highest mean scores, indicating a "High" descriptive rating. These results imply that teachers place significant importance on the theoretical and psychological foundations of money management, possessing a strong conceptual understanding of fiscal matters and a positive mindset toward financial security. This proficiency signifies that educators are well-informed about economic principles—such as inflation and interest rates—and value the long-term planning essential for making sound decisions in a modern economy. This high level of literacy is likely driven by the integration of financial wellness programs within the Department of Education (DepEd), specifically those mandated by DepEd Order No. 022, s. 2021, which aims to enhance the financial well-being of both teachers and learners. According to Lusardi and Mitchell (2017), financial literacy is an essential tool for navigating the modern economic landscape, as it empowers individuals to plan for retirement and avoid excessive debt. Furthermore, the systematic promotion of savings and investment options through the GSIS and various teachers' cooperatives provides a structured environment that encourages educators to demonstrate financial responsibility. As noted by Remund (2020), the alignment of financial education with practical application is vital for long-term economic stability, ensuring that professionals are not only knowledgeable but also proactive in their financial planning. A positive financial attitude, characterized by a growth mindset and future-oriented planning, serves as a vital internal motivator that helps individuals maintain resilience during economic volatility (Aprea et al., 2020). In the Philippine

cultural context, teachers often balance their roles as educators with significant responsibilities as family breadwinners, which deeply influences their financial outlook and necessitates a high level of psychological readiness to manage resources (Bantasan et al., 2023).

On the other hand, the lower mean scores for financial behavior and financial training suggest that while teachers value financial literacy, practical implementation remains a challenge. Specifically, areas such as consistent debt management and active participation in specialized seminars show room for improvement. These results indicate that effective financial literacy depends on more than just cognitive knowledge; it requires the disciplined application of information through consistent fiscal habits. This disparity highlights a "knowledge-action gap," where teachers possess the necessary theoretical understanding and positive attitude but struggle to translate them into practice. Such challenges are often driven by external pressures, including rising inflation, significant family obligations, and limited disposable income. This finding aligns with the research of Amagir et al. (2018), who noted that theoretical knowledge does not guarantee behavioral changes without continuous, practical training. Consequently, the lower rating in financial training highlights the need for accessible, hands-on workshops that move beyond theory to help educators navigate daily socio-economic complexities (Chen & Volpe, 2022). Even individuals with high cognitive scores may struggle with the "knowledge-action gap" due to systemic pressures like high living costs or lack of liquid savings (Goyal & Kumar, 2021). Therefore, institutionalized financial wellness programs are pivotal; research in the Philippines shows that when school administrations provide structured training, teachers are more likely to achieve long-term financial stability and improved personal performance (Casingal & Ancho, 2022).

In general, this study highlights teachers' commitment to financial literacy as a means to ensure economic stability and professional competence. These findings parallel Arceo (2021), who emphasized that educators recognize the importance of financial mastery for future security. Likewise, Potane (2019) noted that high financial knowledge and positive attitudes equip teachers to better manage financial stress through responsible budgeting and consistent saving. Furthermore, teachers actively engage in financial

growth endeavors, such as debt management programs, investment exploration, and retirement planning, consistent with the findings of Sevilla and Pajares (2020).

### Innovative Work Behavior of Teachers

Table 3 presents the level of innovative work behavior among teachers. The data obtained an overall mean of 4.60, described as "Strongly Agree" and qualitatively interpreted as "Very Great Extent." The sub-variable "Creativity" obtained the highest rating of 4.64, followed by "Social Skills" (4.59), "ICT Skills" (4.58), and "Critical Thinking" (4.57), all of which received a qualitative interpretation of "Very Great Extent." These results indicate that teachers exceptionally manifest innovative behaviors in their professional practice, particularly in generating original ideas and creative solutions for the classroom.

Variable	Mean	Descriptive Rating	Qualitative Interpretation
Creativity	4.64	Strongly Agree	Very Highly Competent
Social Skills	4.59	Strongly Agree	Very Highly Competent
ICT Skills	4.58	Strongly Agree	Very Highly Competent
Critical Thinking	4.57	Strongly Agree	Very Highly Competent
Overall Mean	4.60	Strongly Agree	Very Highly Competent

Table 3. Teachers' level of Innovative Work Behavior

#### Legend Range

Scale	Rating Scale	Descriptive Rating	Qualitative Interpretation
5	4.51-5.00	Strongly Agree	Very Highly Competent
4	3.51-4.50	Agree	Highly Competent
3	2.51-3.50	Undecided	Moderately Competent
2	1.51-2.50	Disagree	Slightly Competent
1	1.0-1.50	Strongly Disagree	Incompetent

The result means that teachers consistently demonstrate a high level of innovation in their professional roles. The high rating in creativity suggests that teachers are proactive in finding new ways to engage students and solve classroom challenges. It indicates that teachers are highly proactive in developing novel instructional materials and adapting teaching methods to meet diverse learner needs. This is possible due to the Department of Education's (DepEd) push for localization and indigenization of the curriculum, which empowers educators to be resourceful and imaginative. This is complemented by strong social skills, which are essential for collaborating with colleagues and stakeholders to implement innovative practices. Teachers possess the emotional intelligence and communicative competence necessary to build strong professional networks and collaborative learning communities. Furthermore, Research highlights that teacher innovative work behavior significantly affects student engagement, learning outcomes, and classroom effectiveness. Teachers who demonstrate high levels of creativity and social skills foster learner-centered and collaborative environments, which directly enhance student motivation and participation (Delos Santos, 2019). This aligns with the findings of Runco and Beghetto (2019), who posited that creative behavior in the classroom is a primary driver of student engagement and pedagogical evolution. Furthermore, these behaviors are most effective when supported by a culture of collaborative professionalism (Hargreaves & O'Connor, 2018), which is essential for sustaining school-wide innovation and collective efficacy.

However, the slightly lower mean for critical thinking suggests that while teachers demonstrate strong problem-solving and reflective skills, there may be opportunities to further strengthen structured decision-making, evaluation of learner needs, and application of higher-order thinking strategies in the classroom. It further suggests that while teachers are excellent at generating new ideas, they may face more challenges when it comes to the technical implementation or the deep analytical evaluation of those ideas. Teachers sometimes prioritize the "action" of innovation—trying new things—over the systematic analysis of whether those innovations are achieving the desired pedagogical outcomes. Moreover, ICT Skills, though still very high, reflects the ongoing journey of digital transformation in education. Even as teachers embrace technology, the rapid

pace of software updates and the digital divide can create a "ceiling" for technical skill sets. This indicates that while teachers are proficient, the rapid pace of technological change and limited access to high-end infrastructure may occasionally hinder the seamless integration of advanced digital tools. According to Tondeur et al. (2021), the effective use of technology in education requires not just basic literacy but continuous, specialized support to move from traditional usage to truly transformative digital pedagogy. Similarly, the score for critical thinking suggests that while teachers are highly analytical, the heavy administrative workload and standardized curriculum constraints may limit the time available for deep, reflective problem-solving and systemic critique of educational practices. As noted by Heong et al. (2020), fostering high-level critical thinking among educators requires institutional autonomy and a school culture that encourages questioning and evidence-based experimentation. Reflective and critical thinking practices allow teachers to assess student needs, adapt instruction, and implement effective problem-solving strategies (Reyes, 2021). Moreover, the Philippine educational context, characterized by large class sizes and resource variability, influences how teachers apply innovative practices. Educators must navigate these challenges to sustain high-quality instruction (Torres, 2021).

In general, this study's result points out teachers' strong commitment to innovation and professional excellence. Teachers are dedicated to improving their craft by integrating new technologies, applying critical problem-solving, and collaborating with peers to provide quality education. This finding is parallel to the study of Thurlings et al. (2015), which highlighted that teachers with high levels of innovative behavior are more likely to implement effective changes in their teaching practices. Likewise, Widmann et al. (2022) emphasized that supportive school environments and professional autonomy encourage teachers to engage in creative and collaborative initiatives. Additionally, research by Lambriex-van Hoof et al. (2021) showed that teachers who demonstrate strong ICT and social skills are better positioned to lead school-wide innovations, ensuring that education remains relevant and adaptive to the changing needs of society.

### Correlation Analysis of Teachers' 21st Century Attributes, Financial Literacy and Innovative Work Behavior

In order to assess the degree or strength of relationship between continuous variables explored in this research, Pearson Product-Moment Correlation was used. More specifically, Pearson correlation was analyzed to find out the relationship between the dependent variables which is the teachers' innovative work behavior and the independent variables namely: teachers' 21st century attributes, financial literacy.

The result is presented in matrix of Table 4 are the Pearson correlation coefficients and the significance value as reflected on scores reported by the public-school teachers as research participants in the Don Carlos District, Division of Bukidnon as shown in the table, significant relationships between teachers' innovative work behavior, 21st attributes, and financial literacy. Table 4 reveals the relationship of teachers' innovative work behavior with 21st century attributes and financial literacy.

#### Teachers' 21st Century Attributes

Correlation results indicate that 21st Century Attributes show a significant but weak positive correlation ( $r = .180$ ,  $p < .01$ ) relative to teachers' innovative work behavior. This implies that as teachers' modern attributes and competencies increase, there is a corresponding, albeit modest, increase in their tendency to engage in innovative practices. This is to say that the capacity for innovative work behavior depends partly on the presence of these 21st-century traits in the academic setting. A closer analysis of the sub-component variables reveals a notable distinction in statistical significance. Personal Attributes ( $r = .220$ ,  $p = .000$ ) were found to be statistically significant relative to innovative work behavior. In contrast, Professional Attributes ( $r = .078$ ,  $p = .213$ ) did not show a significant relationship. This implies that a teacher's internal character traits—such as adaptability, resilience, and curiosity—are more influential drivers of innovation than their formal professional qualifications or technical designations. When teachers possess strong personal attributes, they are more likely to navigate the complexities of a modern classroom with creative solutions, regardless of their professional tenure or rank. The significant relationship between Personal Attributes and

innovative behavior suggests that schools should move beyond traditional, technical professional development. Instead, there is a clear need for programs that nurture psychological empowerment, resilience, and adaptability, as these internal traits are the true catalysts for creative problem-solving in the classroom.

Independent Variable	Correlation Coefficient(R)	Probability
21 <sup>st</sup> Century Attributes	.180	.004**
Professional Attributes	.078	.213
Personal Attributes	.220	.000**
Financial Literacy	.461	.000**
Financial Knowledge	.361	.000**
Financial Behavior	.293	.000**
Financial Attitude	.197	.002**
Financial Training	.433	.000**

Table 4. Correlation Analysis of 21<sup>st</sup> Century Attributes, Financial Literacy and Innovative Work Behavior of teachers

\*\* Correlation is significant at the 0.01 level (2-tailed).

#### Teachers' Financial Literacy

Correlation results indicate that Financial Literacy shows a significant moderate positive correlation ( $r = .461, p < .01$ ) relative to teachers' innovative work behavior. This implies that as teachers' level of financial literacy increases, there is a corresponding and substantial increase in their capacity to engage in innovative practices. This is to say that the teachers' innovative work behavior is significantly influenced by their financial stability and literacy within the professional environment. A closer analysis of the sub-component variables reveals consistent statistical significance across all dimensions. Financial

Training ( $r = .433, p = .000$ ) and Financial Knowledge ( $r = .361, p = .000$ ) were found to be the most influential factors, followed by Financial Behavior ( $r = .293, p = .000$ ) and Financial Attitude ( $r = .197, p = .002$ ). This implies that structured financial education and the acquisition of technical financial concepts are more powerful drivers of innovation than individual attitudes alone. When teachers are equipped with sound financial management skills, they experience a reduction in personal economic stress, which empowers them to devote more cognitive energy and creative effort toward classroom improvements and organizational problem-solving. When educators are equipped with financial knowledge and training, it reduces the "cognitive load" and stress associated with personal financial insecurity. This "economic confidence" frees up mental energy, allowing teachers to shift from a survival mindset to one of professional exploration and innovation. Ultimately, the study implies that financial wellness programs are not just personal benefits—they are essential strategic investments that directly fuel the modernization and innovative capacity of the educational system.

However, as with any correlation, it's important to note that correlation does not imply causation. While there may be a relationship between teachers' 21st-century attributes, financial literacy, and their innovative work behavior, other factors could also influence their innovative work behavior. Therefore, the null hypothesis which stated that there is no significant relationship between teachers' innovative work behavior and: 21st-century attributes, financial literacy was rejected.

Educators achieve financial stability, they demonstrate higher levels of productivity and a greater commitment to their professional duties, providing teachers with the "economic confidence" to improve their instructional methods (Arroyo and Bayani 2024). Furthermore, Nerona (2025) noted that financially literate educators exhibit higher levels of "vigor" and "dedication"—core components that fuel the desire to innovate. The idea that financial literacy programs are not merely personal aids but essential professional development tools that "free up" a teacher's mental energy, allowing them to move beyond daily survival and toward creative contribution.

Regression Analysis of Teachers' 21st Century  
 Attributes, Financial Literacy and  
 Innovative Work Behavior

Multiple regression allows this study to model, explain, and examine the relationship between multiple independent or predictor variables and a dependent or criterion variable. As such, the predictor variables included in the investigation were the following: a.) Financial Training; b.) Financial Knowledge; c.) Personal Attributes; and d.) Financial Behavior. Table 16 gives information about the regression model of the study, estimating the impact of various simultaneous influences upon a single dependent variable.

Indicators	Unstandardized		Standard		t
	Coefficients		Coefficients		
Sig.	B	Std.Error	Beta		
Constant	2.538	.275	9.235	.000	
Financial Training	.192	.035	.318	5.517	.000
Financial Knowledge	.118	.034	.207	3.473	.001
Personal Attributes	.133	.053	.136	2.486	.014
Financial Behavior	.062	.029	.125	2.132	.034
R=528 R <sup>2</sup> =278 F=24.118 Sig.= .000					

Table 5. Regression Analysis of Teachers' 21<sup>st</sup> Century Attributes, Financial Literacy and Innovative Work behavior

Dependent Variable: Innovative Work Behavior

Clearly, teachers' Innovative Work Behavior was significantly affected by all four variables, namely: Financial Training  $\beta=.318$ ,  $t=5.517$ , ( $p<.01$ ); Financial Knowledge  $\beta=.207$ ,  $t=3.473$ , ( $p<.01$ ); Personal Attributes  $\beta=.136$ ,  $t=2.486$ , ( $p<.05$ ); and Financial Behavior  $\beta=.125$ ,  $t=2.132$ , ( $p<.05$ ). The model yields an R-value of .528 and an R-squared of .278, suggesting that 27.8% of the variation in teachers' innovative work behavior is accounted for by these financial and personal factors.

More precisely, the predicted scores for particular values of the independent variables are

indicated by the beta weights ( $\beta$ ), which means that each additional unit accounted for by the four measured variables would imply an increase in teachers' Innovative Work Behavior, holding other variables constant.

Consequently, this suggests that the higher the scores prompted by Financial Training, Financial Knowledge, Personal Attributes, and Financial behavior, the better the teachers' innovative work behavior.

The R<sup>2</sup>, a measure of the total variation of the dependent variable, consists of 27.80%, which reflects the amount of variance explained by teachers' innovative work behavior, while 72.20% of the variance can be credited to other factor variables apart from the regression model.

From the foregoing analysis, the equation that is useful in predicting the percentage of teachers' innovative work behavior (Y1) as indicated by the F-value (24.118) with its corresponding probability value (.000) is significant at ( $p<.01$ ) This model is illustrated:

$$Y1=2.538 + 0.192 (X1) + 0.118 (X2) + 0.133 (X3) + 0.062(X4)$$

Where:

- 2.538 is constant
- X1=Financial Training
- X2= Financial Knowledge
- X3= Personal Attributes
- X4= Financial Behavior

Therefore, the null hypothesis that there are no independent variables, singly or in combination, that best predict teachers' innovative work behavior was rejected.

The variables of financial training, financial knowledge, personal attributes, and financial behavior play crucial roles in shaping teachers' innovative work behavior. Studies have consistently shown that these factors directly contribute to enhanced professional performance, increased job satisfaction, and a higher capacity for creative problem-solving in the classroom (Estojero et al., 2025).The financial literacy of teachers is a critical predictor of their innovative behavior; financially secure educators tend to possess greater "cognitive bandwidth" and focus, which directly influences their ability to develop and implement novel teaching strategies

(Manatad & Labitad, 2026). When teachers are equipped with sound financial foundations and 21st-century attributes, they are better positioned to pursue the mission, vision, and goals of the department, ensuring that learners remain at the center of the curriculum.

#### 4. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This section contained the summary of the findings, the conclusions drawn from the findings, and the recommendations based on the conclusions of the study.

##### 4.1. Conclusion

The following conclusions were drawn based from the analysis of data and results of the study:

Teachers in the Division of Bukidnon exhibit an exceptionally high level of 21st-century attributes. They consistently demonstrate excellence in both their professional and personal dimensions. They also maintain a deep commitment to the high standards required for modern education.

Similarly, the financial literacy of teachers in selected public schools of the Don Carlos I and III District Division Bukidnon is high. Financial knowledge and financial attitude are particularly strong. However, there is a moderate level of financial behavior.

Teachers in the Division of Bukidnon possess a uniformly strong capacity for innovative work behavior. They are highly proficient in multiple dimensions of innovation, particularly excelling in creativity. While they demonstrate these attributes at an outstanding level of mastery, they maintain a focus on further deepening their critical thinking processes and ICT skills to support ongoing instructional evolution.

The innovative work behavior of teachers is significantly influenced by their 21st-century attributes and their level of financial literacy. This professional innovation is also strongly related to the teachers' professional and personal competencies, as well as their financial knowledge, behaviors, and attitudes.

The best predictors of the innovative work behavior of public school teachers are their participation in financial training, their level of

financial knowledge, their personal attributes, and their financial behavior. Among these factors, financial training is the strongest predictor of their ability to innovate within the educational sector.

##### 4.2. Recommendation

Based on the findings and conclusions, the following recommendations are proposed:

Teachers would refine their exceptionally high 21st-century attributes by consistently immersing themselves in advanced professional and personal development. They are encouraged to lead and participate in high-level research initiatives, pursue postgraduate studies, and pioneer community extension programs. By actively engaging in these scholarly and civic pursuits, teachers would further solidify their professional competence, ensure their pedagogical practices remain at the forefront of modern education, and serve as benchmarks for excellence in the teaching profession.

Key officials of the Department of Education, school administrators, and financial institutions are encouraged to prioritize the enhancement of teachers' practical financial habits to match their high levels of knowledge. They would invest in comprehensive financial wellness programs that move beyond theory to focus on debt management, investment strategies, and retirement planning. Educational stakeholders are further encouraged to establish support systems, such as low-interest credit facilities and automated savings schemes, while providing digital platforms for personal budgeting and asset tracking to ensure that teachers' high financial literacy translates into long-term economic security and professional peace of mind.

Teachers would consistently refine their innovative work behaviors by integrating advanced creative strategies and digital tools into their instructional delivery. They are encouraged to deepen their critical thinking processes and master sophisticated ICT applications to support the continuous evolution of their teaching practices. Furthermore, teachers would actively seek opportunities to model these innovative dimensions, fostering an environment where creativity and technological proficiency are seamlessly embedded in the learning experience to ensure sustained professional excellence.

Policymakers, educators, and key stakeholders are encouraged to design and implement integrated professional development frameworks that simultaneously address teachers' pedagogical competencies and their personal well-being. They would review current training programs to ensure a holistic alignment with teachers' aspirations, particularly by incorporating financial empowerment initiatives alongside 21st-century skill-building. DepEd officials and government leaders are encouraged to provide sustained support through scholarship programs for advanced academic studies and the provision of modern school resources, including robust ICT infrastructure. By ensuring teachers have access to necessary digital tools and encouraging an environment of financial security, stakeholders would foster a culture of professional innovation where educators are empowered to experiment with diverse digital platforms and model excellence in the modern classroom.

Parents, students, and community members are encouraged to advocate for the implementation of comprehensive financial literacy and professional development programs for teachers to ensure the delivery of high-quality 21st-century education. They would mobilize support for initiatives that prioritize teacher well-being and specialized training, recognizing that a teacher's personal stability directly fuels classroom innovation. Community stakeholders are further encouraged to collaborate with local government units and private organizations to sponsor financial wellness workshops and professional growth grants. By fostering a supportive environment that values the holistic development of educators, the community would help secure the necessary resources and expertise to elevate the standards of excellence within the school system.

To Future Researchers, future investigations may be undertaken to confirm the findings of this research, particularly in the following areas: (1) explore other potential predictors of Innovative Work Behavior not covered in this study to further explain the remaining variance; (2) conduct qualitative or longitudinal research to provide deeper insights into how specific Financial Training programs directly translate into classroom innovation over time; and (3) replicate this study in different geographical regions or educational levels to validate whether these

findings remain consistent across diverse teaching populations.

## 5. ACKNOWLEDGEMENT

I would like to express my profound gratitude to all those who made the successful completion of this research study possible.

First and foremost, to the immeasurable and fathomless God, the father, the giver of life and wisdom. He has shown and guided the researcher spiritually to carry on despite the fact that sometimes she was about to surrender.

I extend my deepest appreciation to my research advisor, Ma'am Aprell L. Abellana, PhD. His exemplary leadership, insightful guidance, and steadfast support have been invaluable throughout every stage of this study. Ma'am Aprell's dedication to academic excellence and his encouragement inspired me to persevere and strive for the highest standards in my work. His expertise and thoughtful advice were instrumental in shaping both the direction and the quality of this research.

I am also sincerely grateful to the faculty and staff of the College of Education/Professional Education for their unwavering support, encouragement, and collaborative spirit. Their shared knowledge, camaraderie, and generosity enriched my academic journey and contributed significantly to my growth as a researcher.

My heartfelt thanks are extended to Ma'am Victoria V. Gazo, Schools Division Superintendent, and to the Division of Bukidnon for their support and for granting permission to conduct this study. Their cooperation and commitment to educational advancement made this research possible.

To the school principal, school heads, district In-Charge, School Supervisors and to all the basic education teachers who preciously shared their valuable time. I thank you for the warm support in this study.

Finally, I wish to thank my family and friends for their steadfast encouragement and understanding throughout this journey. Their belief in me provided strength and motivation during challenging times.

To all who have contributed in ways both great and small, I am deeply grateful.

### REFERENCES

- [1]. Aboagye, J., & Jung, J. Y. (2021). Financial literacy and its impact on innovative work behavior among professionals. *Journal of Financial Capability*, 5(2), 45–60.
- [2]. Adibah, N., Rahman, A., & Sulaiman, T. (2023). Innovative work behavior and human capital development in modern education systems. *International Journal of Educational Development*, 93, 102–115.
- [3]. Altaf, A. (2014). Financial literacy among working professionals: A study of knowledge, behavior, and attitude. *International Journal of Research in Commerce and Management*, 5(6), 45–50.
- [4]. Amagir, A., Groot, W., Maassen van den Brink, H., & Wilschut, A. (2018). A review of financial literacy education programs for children and adolescents. *Citizenship, Social and Economics Education*, 17(1), 56–80.  
<https://doi.org/10.1177/2047173417719555>
- [5]. Aprea, C., Wuttke, E., Breuer, K., Koh, N. K., Davies, P., Greimel-Fuhrmann, B., & Lopus, J. S. (2020). *International handbook of financial literacy*. Springer.  
<https://doi.org/10.1007/978-981-10-0360-8>
- [6]. Arceo, C. (2021). Financial literacy among educators: Basis for financial management programs. *Journal of Educational Research and Practice*, 11(1), 45–60.
- [7]. Arroyo, M. P., & Bayani, R. L. (2024). Financial well-being and work productivity among public school teachers in the Philippines. *Philippine Journal of Educational Management*, 15(1), 45–62.
- [8]. Asio, J. M. R., & Riego de Dios, E. E. (2018). 21st-century attributes and skills of a teacher in the perspective of college students. *International Journal of Advanced Research in Education and Society*, 1(2), 21–30.
- [9]. Bantasan, F. M., Calderon, J. M., & Cruz, R. A. (2023). Financial literacy and well-being of public school teachers in the Philippines. *Philippine Journal of Social Sciences*, 28(2), 45–60.
- [10]. Bautista, M. L. (2024). Professional development and innovative teaching practices among public school teachers. *Asia Pacific Journal of Education*, 44(1), 78–92.
- [11]. Bialik, M., & Fadel, C. (2015). *Skills for the 21st century: What should students learn?* Center for Curriculum Redesign.
- [12]. Casingal, J. S., & Ancho, I. V. (2022). Financial wellness programs for teachers: Basis for policy development in Philippine schools. *International Journal of Educational Management*, 36(5), 789–803.
- [13]. Castro, M., et al. (2021). Teacher resilience and adaptability during distance learning in the Philippines. *Asian Journal of Distance Education*, 16(1), 45–60.
- [14]. Chen, H., & Volpe, R. P. (2022). An analysis of personal financial literacy among college students. *Financial Services Review*, 31(1), 1–20.
- [15]. Cruz, M. D., & Dela Peña, J. R. (2024). Barriers to innovation among public school teachers in the Philippines. *Philippine Journal of Education*, 98(1), 23–41.
- [16]. Delos Santos, M. (2019). Innovative teaching practices and student engagement in Philippine classrooms. *Asia Pacific Journal of Multidisciplinary Research*, 7(3), 120–128.
- [17]. Estojero, M. T., Villanueva, R. S., & Cruz, J. D. (2025). Predictors of innovative work behavior among teachers: A structural model approach. *International Journal of Educational Research*, 118, 102–115.
- [18]. Fidalgo, P., et al. (2025). Teacher competence and adaptability in 21st-century education. *Teaching and Teacher Education*, 130, 104123.
- [19]. Fidalgo, P., Thormann, J., Kulyk, O., & Lencastre, J. A. (2025). Students' and teachers' perceptions of innovative teaching practices in higher education. *Education Sciences*, 15(1), 1–15.
- [20]. Garcia, L. M., Ramos, P. D., & Flores, E. R. (2024). Professional ethics and teacher resilience: A framework for sustainable teaching. *Journal of Educational Research and Practice*, 14(2), 112–126.
- [21]. Garcia, L., et al. (2024). Professional ethics and teacher resilience:

- Implications for educational transformation. *Journal of Educational Change*, 25(2), 233–250.
- [22]. Goyal, K., & Kumar, S. (2021). Financial literacy: A systematic review and bibliometric analysis. *International Journal of Consumer Studies*, 45(1), 80–105.
- [23]. Goyal, K., & Kumar, S. (2021). Financial literacy: A systematic review and bibliometric analysis. *International Journal of Consumer Studies*, 45(1), 80–105. <https://doi.org/10.1111/ijcs.12605>
- [24]. Hargreaves, A., & O'Connor, M. T. (2018). *Collaborative professionalism: When teaching together means learning for all*. Corwin Press.
- [25]. Heong, Y. M., et al. (2020). The role of critical thinking in improving teaching practices. *International Journal of Instruction*, 13(2), 123–138.
- [26]. Jerusalem, R. Y. (2020). Teachers' innovative teaching strategies: Scale development using exploratory factor analysis. *International Journal of Educational Research and Innovation*, 14, 85–98.
- [27]. Kanya, S. (2021). Teacher performance and innovation in post-pandemic education. *Asian Journal of Educational Research*, 9(3), 112–125.
- [28]. Kleysen, R. F., & Street, C. T. (2018). Toward a multi-dimensional measure of individual innovative behavior. *Journal of Intellectual Capital*, 2(3), 284–296.
- [29]. Lambriex-van Hoof, A., et al. (2021). Teachers as innovators: The role of ICT and collaboration. *Educational Technology Research and Development*, 69(4), 2105–2125.
- [30]. Loughland, T., & Alonzo, D. (2019). Teacher adaptability and professional learning in changing educational contexts. *Teaching and Teacher Education*, 83, 132–142.
- [31]. Lucas, M., & Moreira, A. (2018). Digital competence of educators: A systematic review. *Educational Technology & Society*, 21(4), 1–15.
- [32]. Lusardi, A., & Mitchell, O. S. (2023). Financial literacy and economic decision-making: Recent evidence and implications. *Journal of Economic Perspectives*, 37(2), 1–24.
- [33]. Manatad, J. P., & Labitad, S. M. (2026). Financial literacy and cognitive bandwidth: Implications for teacher innovation and performance. *Asia Pacific Journal of Multidisciplinary Research*, 14(1), 25–39.
- [34]. Martinez, R. L., & Lacson, M. P. (2021). Innovative work behavior as a predictor of educational reform success. *Journal of Educational Policy and Innovation*, 6(1), 67–81.
- [35]. Muhammad, F. (2019). Communication and collaboration skills for 21st-century teachers. *International Journal of Instruction*, 12(4), 45–60.
- [36]. Nerona, A. G. (2025). Work engagement and financial literacy among educators: Basis for intervention programs. *Journal of Educational Psychology and Development*, 9(2), 88–104.
- [37]. Organisation for Economic Co-operation and Development. (2019). *Supporting teacher professionalism: Insights from TALIS 2018*. OECD Publishing. <https://doi.org/10.1787/9789264248601-en>
- [38]. Pawilen, G. T. (2019). Teacher education and the K–12 reform in the Philippines. *Philippine Journal of Teacher Education*, 25(1), 1–15.
- [39]. Potane, J. (2019). Financial literacy and stress management among teachers. *Journal of Financial Counseling and Planning*, 30(2), 200–210.
- [40]. Remund, D. L. (2020). Financial literacy explicated: The case for a clearer definition. *Journal of Consumer Affairs*, 44(2), 276–295.
- [41]. Reyes, J. T. (2021). Critical thinking and reflective teaching practices among educators. *Journal of Educational Psychology Research*, 13(2), 65–78.
- [42]. Runco, M. A., & Beghetto, R. A. (2019). Primary and secondary creativity. *Current Directions in Psychological Science*, 28(3), 260–265.
- [43]. Saheed, Z. S., & Fatoki, O. (2020). Critical thinking and teaching effectiveness in the 21st century. *Journal of Educational Studies*, 15(2), 89–101.

- [44]. Santos, D., & Garcia, P. (2022). Ethical leadership and school culture in Philippine basic education. *Asia Pacific Education Review*, 23(3), 455–468.
- [45]. Santos, R. P., & Rivera, M. L. (2025). Holistic teacher development and student outcomes in modern education. *International Journal of Educational Development*, 102, 102–118.
- [46]. Sevilla, C., & Pajares, F. (2020). Financial behavior and planning among educators. *Journal of Behavioral Finance*, 21(4), 345–356.
- [47]. Shakespeare, T., Ndagire, F., & Seketi, Q. (2018). Educational inclusion and teacher stress: Implications for classroom innovation. *International Journal of Inclusive Education*, 22(5), 567–580.
- [48]. Simbulan, N. (2021). Administrative workload and its impact on teacher innovation in public schools. *Philippine Educational Research Journal*, 12(2), 101–119.
- [49]. Singh, K., & Kumar, R. (2023). Financial well-being and workplace innovation: Evidence from developing economies. *Journal of Behavioral Finance*, 24(1), 55–70.
- [50]. Skaalvik, E. M., & Skaalvik, S. (2017). Motivation and burnout among teachers: The role of school environment. *Teaching and Teacher Education*, 67, 152–160.
- [51]. Tajonera, R. (2019). Financial literacy among public school teachers in the Philippines: A basis for intervention programs. *Asia Pacific Journal of Education*, 39(3), 345–360.
- [52]. Tang, C. M., Chaw, L. Y., & Yusoff, N. M. (2019). Digital literacy and its role in transforming teaching practices. *Educational Technology Research and Development*, 67(4), 1–15.
- [53]. Thurlings, M., Evers, A. T., & Vermeulen, M. (2015). Toward a model of explaining teachers' innovative behavior. *Review of Educational Research*, 85(3), 430–471.
- [54]. Tondeur, J., et al. (2021). Developing teachers' ICT competencies: A systematic review. *Educational Technology & Society*, 24(2), 1–15.
- [55]. Torres, E. G. (2021). Challenges in implementing innovative teaching practices in Philippine public schools. *Asia Pacific Journal of Multidisciplinary Research*, 9(3), 55–63.
- [56]. Urbani, J. M., et al. (2017). The twenty-first century skills of teachers. *Journal of Teacher Education*, 68(4), 353–364.
- [57]. Urbano, D. (2020). Teacher innovation and professional competence in the 21st century. *Journal of Education and Practice*, 11(5), 78–90.
- [58]. Widmann, A., et al. (2022). School environment and teacher innovation. *Teaching and Teacher Education*, 110, 103592