E-Literacy of School Heads in The First Congressional District of Samar

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Abstract — In the First Congressional District of Samar, this study examines the E-literacy levels among School Heads, stressing the integration of technology for effective educational leadership. Through an evaluation of demographic profiles, professional characteristics, and e-literacy proficiency, it exposes comprehensions into the challenges and opportunities in optimizing technology for school management. The findings reveal a various demographic profile, with a majority of relatively young and female school heads, indicating a shift towards more inclusive leadership. School leaders show meaningful leadership practices and advanced education, emphasizing the significance of constant professional development for adapting to educational changes. Robust choices for laptops and Google Classroom underscore an assurance of technological innovation in administration and teaching. While school heads exhibit high e-literacy, specific skill gaps exist, highlighting the essentiality for targeted training. The absence of significant relationships between demographic and e-literacy levels highlights the basic requirement for training initiatives. Identified challenges include limited device access, inadequate teacher training, and resistance to change, necessitating specific plans for overcoming barriers. Recommendations aim to overcome the disparity, enhance e-literacy, and generate a technologically inclusive educational environment. Through tailored programs and strategic resource allocation, the study predicts empowering school heads to navigate the technological landscape effectively, improving educational outcomes and fostering a dynamic learning atmosphere.

Keywords — E-Literacy, Educational Leadership, Technological Innovation, School Heads

I. Introduction

In the modern age of technology, school principals must adopt e-literacy to lead effectively and foster technologically advanced learning. This study aims to explore the e-literacy of school heads in the First Congressional District of Samar. The main purpose is to make sense of and understand their digital skills and competencies and to foster training initiatives to enhance their e-literacy. By investigating their experiences, the research endeavors to present important valuable insights for augmenting educational leadership in the cyber age.

Literature Review

Conceptual. In a period fostered by technology due to innovations, school leaders nowadays need digital connections in establishing their organization towards a better future of education. According to Çizer (2023), E-literacy refers to the degree of skill required to effectively use electronic materials, tools, and resources while navigating an online learning environment. Developing from the definition, it can be said that school heads must know how to employ digital technology for them to be fully equipped with the necessary competence that needs e-literacy integration in their instructional and administrative functions. Others defined *E-literacy* as a relatively new term, created to attempt to capture the converging and emerging literacies necessary to function in the digital age, including information and computer literacy (Kope, 2018). This required school heads to be aware of the digital trends in initiating their roles as administrative and instructional leaders by employing electronic materials, tools, and resources.

On the other hand, others give almost all relevant meanings to digital literacy. This aligns with the idea that digital literacy means having the skills to effectively use technology and the knowledge and skills to do so safely and responsibly. It refers to technology, ranging from computers and the internet to technological objects and programs such as cellphones, smart home systems, check-in kiosks at airports, and more. Literacy refers to the ability to use this technology—and to use it well (LcomTeam, 2023).

This notion tells that school heads must be acquainted with and be responsible for encompassing their ability to effectively use technology. For them to be proficient, a wide range of knowledge about digital tools and technologies is essential for their administrative and instructional skills. School heads' expertise in dealing with e-literacy ensures that administration, teaching, and students can get benefits from their technological advancement.

II. Methodology

Research Design

The study utilized a descriptive-correlational research approach. It is quantitative in nature as it identifies the characteristics of elementary school leaders regarding age, gender, marital

status, highest educational qualification, duration of administrative experience, and relevant seminars and training attended; the effectiveness level of the technology-based program; and the degree of outcomes achieved. Furthermore, this research is correlational as it examines the connections between and among the specified variables. The researchers requested approval from the office head where the study took place and submitted a transmittal letter to the Division Superintendent of the school to obtain permission for the research. The researchers issued, managed, and collected the questionnaire from the participants. The responses were compiled, examined, and understood through different statistical methods, such as percentage, simple average, and rank summation.

Sample of the study

These people are actively engaged in routine administrative duties and decision-making activities, rendering them important sources of information to evaluate the effect of technology on school administration. The sample might consist of principals, administrative aides, and essential teachers tasked with using technology-driven tools for communication, record maintenance, scheduling, and additional administrative duties. By choosing participants with various roles and responsibilities, the study can obtain a comprehensive perspective on the program's effectiveness in the district.

The sample size must accurately reflect the entire population of school administrators and Congressional Districts, guaranteeing that the findings are both dependable and valid. A targeted sampling method could be used to concentrate on people who have firsthand experience with the technology-driven program, allowing for a more precise evaluation of its efficacy. This sample will facilitate the gathering of qualitative and quantitative data via surveys, interviews, and potentially direct observation, offering insights into the program's impact on productivity, communication, and overall school management.

Procedures

Initially, a survey questionnaire was created to evaluate the viewpoints of school administrators and teachers on the efficacy of the technology-driven program. The survey evaluated different elements, including administrative effectiveness, enhancements in communication, and the simplicity of obtaining information. A purposive sampling technique was used to choose the respondents from various schools in the Congressional District. Data gathering took place during a designated timeframe, and answers were noted for examination.

After gathering the data, statistical methods like frequency distribution, mean, and standard deviation were employed to examine the quantitative data and assess the program’s effect on school administration. To explore the qualitative dimension, discussions were held with important stakeholders, such as school leaders and IT staff, to obtain more in-depth understanding of the difficulties and advantages of the technology-driven initiative. The collected data were

subsequently triangulated to offer a thorough assessment of the program's success in improving the administrative operations within the district.

Data Processing

This research, titled "E-Literacy of School Leaders in the First Congressional District of Samar," utilized a quantitative methodology. Data gathering began with the dissemination of organized questionnaires to potential school leaders. A census was conducted to survey every school principal in the district, guaranteeing full representation. A purposive sampling method was employed to select participants for the research.

Prior to conducting the online survey, the questionnaires were initially reviewed and validated by the researcher's advisor and specialists familiar with technological leadership and ICT integration in educational settings. They participated in pilot testing and a validity assessment of the instrument. Subsequently, the researcher drafted a letter of intent and authorization signed by the researcher, the adviser, the Associate Dean for Extension and Graduate Programs, the Coordinator for Graduate Studies Extended Program, EQC, Inc. in Gumaca, along with the endorsement from the Schools Division Superintendent via the ICT Department of the Division of Quezon to facilitate the distribution of online survey questionnaires and execute research among the intended respondents.

Once data collection is finished, a careful procedure of verification and confirming the precision and dependability of the data takes place. Responses were verified for precision and thoroughness, with discrepancies and absent information being corrected. Statistical analysis software was used to apply descriptive statistics to highlight significant trends and patterns in assessing the e-literacy level of school leaders concerning Basic Digital Skills, Technology Integration in Leadership, ICT Professional Development, Awareness of Digital Pedagogy, Cybersecurity Awareness, Tech Support Problem-Solving, and Proficiency in E-Communication. Subsequently, inferential statistical methods, such as correlation analysis and t-tests, were performed to investigate the relationships between the respondents' profiles and the e-literacy levels of school heads, as well as the notable differences between the respondents' profiles and the e-literacy levels of school heads, respectively. This analysis resulted in identifying the crucial elements of the E-literacy skills of School Heads in the First Congressional District of Samar, establishing a clear basis to support conclusions and suggestions aimed at improving the overall quality of the education system, which will enhance student outcomes.

Ethical Considerations

Taking ethical considerations into account is essential at every phase of the study to maintain equilibrium between the possible risks of the research and its anticipated benefits. In this study, the researchers monitored the data collection process from obtaining consent to the audio-recording stage. During the data collection phase, the questionnaires were conducted using a face-to-face approach. Prior to the process, informed consent was acquired from every respondent,

guaranteeing they grasped the objective of the study, their rights, and the voluntary aspect of their involvement. Data confidentiality was maintained during all research activities, with any identifying details either removed or encoded to safeguard participant privacy.

Informed Consent. This research process was crucial for helping individuals grasp the possible risks and advantages of taking part in a study or undergoing treatment. It is a basic ethical and legal obligation that safeguards people's liberty and rights.

Data Privacy. This procedure safeguards participants' personal data from unauthorized access, usage, or release. It's an important ethical guideline that protects the privacy of participants and avoids causing harm. Data confidentiality was essential for protecting participants' privacy and maintaining trust in the research.

III. Results and Discussion

DISCUSSIONS

This section summarizes the investigations' key findings and offers recommendations based on the preceding discussion.

Summary of Findings

1. As to the profile of the respondents, most school heads (75.4%) were between 35 and 48 years old, while a significant majority (64.7%) of respondents were female. Most school heads (67.3%) were married, and in terms of school heads' position, most of them were Head Teacher I and III, which constituted the largest proportions of respondents (24.7% and 20.7% respectively).

2. Findings also revealed the years in Service of the school heads where a large majority (75.3%) had 6 or more years of administrative experience. In terms of education, most of them (71.3%) hold a master's degree or equivalent. The training courses mostly attended were the National seminars/training (38%). On the other hand, in terms of Gadgets, Laptops were the most used gadget (58%), while in terms of Platforms, Google Classroom was the most frequently employed platform (36%).

3. Findings revealed that school heads demonstrated high e-literacy across all assessed areas (ICT background, electronic technology, teaching integration, cybersecurity), though some specific skills within each area showed slightly lower proficiency.

4. No significant relationship was found between demographic or professional characteristics and e-literacy levels. The null hypothesis tested is **accepted.**

5. The test of differences between the profile of the respondents and their level of e-literacy found no significant differences in the level of e-literacy. The null hypothesis tested is **accepted.**

2. The top three challenges to ICT integration were lack of student device access, limited teacher training, and teacher resistance to change. The top responses in coping mechanisms of the school heads who faced challenges are the practice the most coping techniques; school heads' practices are through ICT training programs or conferences, followed by organizing in-house training sessions and workshops, training to manage basic ICT troubleshooting tasks, and hiring or designating an ICT coordinator or technician respectively.

3. School heads primarily used training programs and designated ICT personnel to address these challenges.

IV. Conclusion

Based on the findings of the study, the following conclusions have been reached:

1. The demographic evaluation indicates that most school heads are relatively young and predominantly female, suggesting a potential shift toward more diverse leadership in educational settings. The high percentage of married respondents may contribute to a sense of stability and commitment in their roles. The prevalence of Head Teacher I and III positions highlights the importance of these roles within school administration, suggesting a need for targeted support and development for individuals in these positions.

2. The plurality of school heads with over six years of administrative experience and advanced degrees indicates a highly competent leadership team capable of handling difficult educational environments. The highlights of national training seminars suggest that ongoing professional development is highlighted, which is important for adapting to the dynamic needs of educational leadership. The preference for laptops and Google Classroom reflects a strong belief in technological innovation, effectively in both administrative and teaching contexts.

2. The high e-literacy levels in multiple areas suggest that school heads are prepared to use technology in their leadership roles effectively. However, the identification of specific areas with slightly lower proficiency highlights opportunities for further training and development. Improving these areas will enhance their overall effectiveness in integrating technology into school management and teaching practices.

3. The absence of significant relationships between demographic and professional characteristics and e-literacy levels suggests that factors such as age, gender, and

educational background are not the direct cause of technological proficiency. This finding emphasizes the importance of focusing on professional development and training programs that cater to all school heads, regardless of their demographic profiles.

4. The lack of significant differences in e-literacy levels among respondents reinforces the conclusion that all school heads, regardless of their background or experience, possess a similar level of technological proficiency. This uniformity suggests that e-literacy is an essential skill for all school heads, which can be further enhanced through targeted training initiatives.

5. The identified barriers to ICT integration highlight underlying problems that need to be addressed to facilitate effective technology use in schools. The lack of access to devices, inadequate teacher training, and resistance to change are barriers that can hinder progress. The coping mechanisms employed by school heads, including training programs and in-house workshops, indicate taking initiatives to overcome these challenges.

6. The dependence on training programs and designated ICT personnel to address integration problems emphasizes the importance of continuous professional development and resource allocation. By investing in these areas, school heads can promote a more encouraging environment for both staff and students, ultimately leading to improved educational outcomes through effective technology integration.

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