



## THE IMPACT OF DIGITAL LITERACY AS A LEARNING STRATEGY UNDER THE NEW NORMAL ON EDUCATION

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### ABSTRACT:

This review research contains different articles from different authors on the World Wide Web, focusing on the impact of digital literacy as a learning strategy in education. These articles are based on the following on teacher preparation (digital skills and knowledge) and student participation in digital technology The key point. Technology. This review shows that digital literacy has become an important part of teachers' training for student learning as part of making education possible during a pandemic. The review showed that technical knowledge alone is not enough, but teachers need to innovate in learning activities by involving students so that they can apply these skills to solve accessibility gaps and modify the learning experience to meet the needs of students. Challenge. Distance learning. The results show that teachers and students need constant contact to know how to take full advantage of the benefits of technology (as part of a blended learning model) and how to use it effectively in our education system to create a real learning experience.

### KEYWORDS:

**DIGITAL LITERACY, DIGITAL COMPETENCE FRAMEWORK, DISTANCE LEARNING, LEARNING STRATEGY.**

### I. INTRODUCTION

According to Pérezholistic Tornero's approach, digital literacy is defined as "the acquisition of technical skills to use information and communication technologies, explained in a broad sense, except for the development of basic practices and intellectual skills". component of the expert's digital skills, it is now the most important task in vocational education in developed countries. Researchers L. Thomas and Stommel said that the importance of digital standards is increasing. Globalization of the world and education. They are the guarantee that educated people can complete labor market readiness training and contribute to society, especially during the pandemic. Teachers and educational leaders will be allowed to use digital technologies in teaching and leadership roles (Stommel, 2014). Properly educating students and teachers to use digital technology effectively in the classroom is a long-standing challenge (Guzman and Nussbaum 2009; Otero et al. 2005; Sutton 2011).

Due to the current situation of the COVID19 pandemic, restrictive measures are being developed at all levels of education and in various situations. Most research focuses on specific countries or elements of e-learning, such as technical issues, psychological effects, or exchange of opinions. Technological advancements have prompted world-class institutions to create new projects and concepts to improve teaching and learning. The purpose of

this research is to describe the impact of digital literacy as a learning strategy on students and teachers to strengthen student learning and contribute to broader research on student participation in the classroom.

### II. METHODOLOGY

This is a descriptive study on the impact of digital literacy as an educational learning strategy, using different articles and current publications to support its content. The articles used have been carefully considered to solve the problem based on the topic and show how digital literacy contributes to the entire teaching process.

### PRESENTATION OF DATA AND ANALYSIS

#### METHODS

To answer the questions in this review study, the researchers searched several related studies on the digital skills of teachers and students in education. The accompanying research comment comes from a comparison of data from three articles in 2006 and 2013. These studies have been thoroughly researched so that researchers can carefully describe the impact of digital literacy on education.

#### SAMR (SUBSTITUTION, AUGMENTATION, MODIFICATION, AND REDEFINITION MODEL:

The model is essentially a descriptive framework that hierarchically maps the different educational uses of

technology according to levels or stages, from substitution ("digitization" of work traditionally done with traditional resources) to redefinition (curriculum, pedagogy, and practice through digital technology). SAMR has been widely adopted by teacher educators and schools as a practical guide to indicate the progress of ICT development due to its commitment to the utopian position of redefining the curriculum through technology (Geer et al., 2017; Hilton 2016). According to Puentedura (2006), in the redefinition phase, "technology allows the creation of new tasks that were previously unimaginable", he stated that these tasks are consistent with the use of higher-order thinking skills such as analysis, evaluation and the creativity. In the substitution phase, "technology acts as a direct substitute tool without functional changes" Puentedura (2006) aligns it with lower order thinking skills, such as comprehension and memory.

Although the SAMR framework develops its strategies by providing descriptive 'target points', which may be helpful to teachers, it does not provide specific instructions for the types of activities that each stage may represent, nor does it clearly specify the support and instruction needed. Changes in technology and design of learning. Some changes need to be redeveloped to make it more comprehensive and effective.

#### **TECHNOLOGICAL PEDAGOGICAL CONTENT KNOWLEDGE OR TPACK MODEL:**

The technical teaching content knowledge or TPACK model of Mishra and Koehler (2006) is a broader and more inclusive framework that can solve the shortcomings of SAMR to some extent. TPACK builds on the early work of Shulman (1986), "explaining how teachers' understanding of educational technology and content knowledge (PCK) interact to produce effective technical teaching" (Koehler et al. 2013, p. 14).). Unlike SAMR, TPACK does not represent a hierarchical structure or progress in stages but proposes an overall model that theorizes the relationship and contribution of technology, teaching, and content knowledge to effectively use technology focused on learning courses. TPACK integrates each element into a core core. Through the supportive teaching method (TPK) that recognizes students' previous experience, it combines deep and strong subject conceptual knowledge (CK) with an understanding of the potential and ability of using technology (TCK) Combining to strengthen learning, understanding, and learning needs. The success of TPACK is based on the ability of teachers in each field and their flexibility, willingness to update, and the ability to explore how each field is interconnected to support the effective use of technology in a variety of different situations (Harris et al., 2017). 2009). Although TPACK recognizes the integrated relationship between conceptual content knowledge and pedagogy and technology, this relationship is rarely reflected in curriculum design and teaching practice in teacher education programs (Ndongfack 2015). According to Ndongfack, there are fundamental structural problems in many teachers' education programs that are not conducive to the construction of comprehensive

TPACK knowledge. These include the tendency to "focus on separately developing pedagogy knowledge and content, and giving (students) some basic computer skills, rather than how to integrate them into the teaching and learning process" (Ndongfack 2015, p 1707). This separation is also seen in some frameworks that list capacities separately, rather than explain how they can work together in a more effective and integrated approach (eg ISTE 2017; UNESCO 2011). Although some studies have shown that using a comprehensive TPACK approach to redevelop courses can bring subject-related learning benefits (such as Habowski and Mouza 2014), these innovations are currently not common in teacher education programs.

While providing a more comprehensive framework to identify the complexity of optimizing the contribution of digital technology in the classroom, TPACK firmly puts the focus of other frameworks on subject learning outcomes. In other words, it theorizes the relationship and combination of teaching, content, and technical knowledge to improve student performance in subject subjects, and sometimes uses them to improve student performance. Since the release of TPACK in 2006, the education and technology landscape has undergone major changes, mainly in response to new digital innovations and the rapidly changing and often unstable social, political, and economic environment. In view of these changes, it can be said that the knowledge that school students need and the knowledge their teachers need to teach them, safe, sustainable, and productive participation and reaping the benefits of digital resources in a challenging future environment requires more than simple. Get in touch with the technology of information and communication technology in the study.

#### **RESULTS**

##### **DIGITAL COMPETENCE:**

The Delphi study by Janssen et al. (2013) provides information on what a more comprehensive digital capability framework could look like. His survey of 95 experts, including representatives from academia, education and training, government and policy, and the IT business sectors, revealed twelve elements considered essential for a wide range of digital capabilities, such as integration, technology learning and information management, etc. Janssen et al. (2013) Conceptualize each element as the "cornerstone" for building overall digital capabilities. At the core of the model are "core" capabilities, including functionality, breadth, and specialized use of digital technology. These capabilities are enhanced by improving the network (communication and collaboration of technical intermediaries) and information management (access and use of digital information). Parallel to these are what are called "support" capabilities. The capabilities they represent include an understanding of legal and ethical considerations, personal and societal influences and influences, and character factors, such as maintaining a balanced and objective attitude toward

technological innovation and a willingness to explore the potential of emerging technologies for personal interests and professionals. With the development of skills, the level of personal reflection and integration in all aspects of daily activities will help increase the understanding of how to use digital technology appropriately, leading to options and uses that are beneficial to the individual and the profession.

In their discussion of the model, Janssen et al. (2013) show the limitations of its direct application to specific environments. They noted the need to strike a balance between the options, "a common denominator is broad enough to cover almost everything, (and therefore) too inclusive or too vague, or a narrow common denominator (possibly) restricts" (p. 480). In addition, they commented that "digital capabilities should be understood as a diverse concept" (page 15). 480), emphasizing that the unique but interrelated and interrelated purposes and functions of digital technology must be considered in different contexts. Jason et al. (2013) emphasized that the way digital capabilities are developed and demonstrated in one environment will be different from other environments, and it is important to look at digital capabilities "from multiple angles" (page 480).

In addition to the research in this review, today's society requires new forms of organization of social, political, economic, and educational life, and therefore requires new professionals with a wide range of skills that include digital capabilities (Cabero, VázquezCano And López Meneses, 2018). As pointed out by González Calatayud, Román García and Prendes Espinosa (2018), given the importance of competence and its central position in the progressive approach adopted by our educational system, the official body has begun to list the basic skills required by students, that include Capacity numbers (European Commission, 2006, 2016; European Union, 2014; Law on the Organization of Education, 2006; OECD, 2005; UNESCO, 2011). Digital skills can be understood as the ability to know how to use technology effectively to improve all areas of our daily lives. However, digital competence is not only an isolated skill that must be developed, but also a set of skills, abilities, and attitudes that must be implemented in different areas and dimensions of knowledge (Ferrari, Neza, and Punie, 2014; Rodríguez García, Raso Sánchez, and Ruiz Palmero, 2019; VázquezCano, 2014).

### III. CONCLUSION

The research shows that digital awareness is not enough, students and teachers must have the skills to use ICT to be successful and achieve better results in the learning process. Achieving greater efficiency in the learning process in a school setting requires not only the ability to search and find useful information and resources, but also the ability to analyze and synthesize the information received, and to share and discuss different ideas and opinions. It can help students solve real-life problems.

### IV. ACKNOWLEDGMENT

This research journal has been made possible through the support and guidance of the following people:

Dr. Marilyn M. Miranda and Dr. Emily C. Rosal, Professor of the College of Technological University- Graduate School for giving us a good guidance throughout numerous consultations.

Schools Division Superintendent- DepEd City of Naga, Dr. Rosalie M. Pasaol and the Assistant Schools Division Superintendent, Dr. Michaelangelo Sauro for the support in pursuing our graduate studies to grow professionally.

To our family who supported us financially and gave an unending support to make this publication feasible.

Lastly, to Heavenly Father for the wisdom, courage, and strengths that He gave us to make this paper possible.

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