Digital Competence and Work Life Balance on Teaching Effectiveness of Long Serving Basic Education Teachers

Eric Rey Q. Pico[1] and Gladys S. Escarlos PhD[2]

[1]Kinapat Elementary School, Department of Education

[2]Faculty, Central Mindanao University, Musuan, Maramag, Bukidnon

ABSTRACT

This study was conducted to examine the relationship between digital competence, work-life balance, and teaching effectiveness among long-serving teachers in basic education, specifically in the school districts of Damulog North, Damulog South, Dangcagan, Don Carlos 1, Kibawe East, Kibawe West, Kitaotao 1, and Maramag 1. A survey questionnaire was employed to collect data from 320 elementary and high school teachers, focusing on various indicators of digital competence, work-life balance, and teaching effectiveness. The findings indicate that long-serving basic education teachers demonstrate high digital competence, effectively integrating digital tools into their teaching practices to enhance engagement and personalized learning. Their work-life balance and teaching effectiveness are rated as very satisfactory, reflecting a strong emphasis on family relationships and self-care, and showcasing excellent subject knowledge and the use of strategies that promote independent learning and effective classroom management. Based on the results, the study recommends enhancing digital competencies and supporting teachers in achieving a healthy work-life balance. Essentially, implementing targeted professional development programs and creating supportive work environments that prioritize teachers' well-being. Ultimately, the study highlights the importance of addressing both digital competence and work-life balance as crucial components for enhancing teaching effectiveness among experienced teachers.

Keywords: Digital competence, Work-life balance, Teaching effectiveness

INTRODUCTION

Teaching effectiveness is a complex concept that integrates various dimensions of a teacher's role, including classroom management, pedagogical skills, and the ability to engage students in meaningful learning experiences. This effectiveness is crucial for fostering a supportive environment that enhances student success. The role of long-serving basic education teachers is particularly significant in this context, as their commitment to student success and adept management of learning environments are essential for positive educational outcomes. However, the COVID-19 pandemic presented substantial challenges for these teachers, who often struggled to adapt to new digital technologies due to their extensive experience and limited digital skills. This difficulty led some educators to contemplate retirement as they grappled with the pressures of balancing work and personal life in the face of online teaching demands. This study adheres to ethical standards in research, ensuring that all participants provided informed consent and that their confidentiality is maintained throughout the research process. Ethical considerations were prioritized to uphold the integrity of the study and protect the rights of all participants involved.

Research highlights that the teaching effectiveness of long-serving educators directly influences student development and learning outcomes. High levels of teaching effectiveness enhance not only the teachers' own performance but also the overall learning experiences of their students. To maintain this effectiveness, continuous professional development and adaptability to emerging educational challenges are vital. Key factors contributing to teaching effectiveness include digital competence and work-life balance. Digital competence enables teachers to integrate technology into their practices, enhancing lesson engagement and interaction. Additionally, effective communication and collaboration with students and colleagues are fostered through these digital tools. On the other hand, a healthy work-life balance is critical for teachers' well-being

and motivation, directly impacting their effectiveness in the classroom. When teachers can manage their professional and personal responsibilities, they are more energized and focused, reducing stress and burnout.

The ongoing study aims to explore the relationship between digital competence and work-life balance concerning the teaching effectiveness of long-serving basic education teachers during the 2024–2025 school year. By enhancing digital skills and maintaining a work-life balance, the research seeks to improve teaching effectiveness, especially in elementary and secondary education. It will analyze indicators such as commitment to student success, subject knowledge, independent learning facilitation, and effective management of learning environments. The study focuses on specific school districts within the Division of Bukidnon, aiming to provide insights for educational leaders and policymakers on how to support teachers in adapting to an increasingly digitalized environment while promoting high standards of teaching effectiveness.
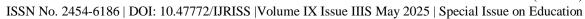
REVIEW OF RELATED LITERATURE

Teaching effectiveness is a critical concept that reflects teachers' ability to provide high-quality instruction while addressing the diverse needs of their students (Sullivan & Smith, 2020). Long-serving teachers bring invaluable experience that enriches their teaching strategies and classroom management capabilities, essential for fostering a positive learning environment (Kraft et al., 2020). Their role extends beyond merely conveying information; they actively cultivate critical thinking, creativity, and problem-solving skills in their students, preparing them for future challenges (Gordon et al., 2021). Moreover, effective teaching requires adaptability to various learning styles, ensuring that every student feels engaged and supported (Tomlinson & Strickland, 2018). Recent studies, such as those by Gordon and Leithwood (2021), have shown that post-pandemic teaching practices have shifted, necessitating further examination of how these adaptations impact effectiveness. Continuous professional development and access to essential resources are vital for these educators, enabling them to refine their skills and maintain motivation (Avalos, 2021), which is crucial for navigating classroom complexities and sustaining high levels of teaching effectiveness over time.

Digital competence refers to the ability of educators to effectively utilize digital technologies in their teaching practices, significantly impacting instructional delivery and student engagement. This competence encompasses a range of skills, including the use of digital tools, the integration of technology into pedagogy, and adaptation to new educational technologies (Redecker, 2020). Recent research by Voogt and Roblin (2018) highlights how digital competence has become even more critical in the post-pandemic context, where educators must adapt rapidly to new technologies and teaching methods. Incorporating qualitative data, such as teacher narratives or focus group discussions, can provide richer insights into these experiences. Research indicates that digital competence is essential for teaching effectiveness, particularly among long-serving teachers who must navigate a rapidly evolving technological landscape (Voogt & Roblin, 2018). As educational environments increasingly rely on digital tools, equipping teachers with the necessary digital skills becomes critical for fostering productive learning atmospheres (Hattie, 2020).

Work-life balance is a critical factor influencing the effectiveness and professional satisfaction of long-serving teachers. It encompasses the ability to manage personal and professional responsibilities in a way that promotes overall well-being. Recent research indicates that achieving a healthy work-life balance is not only essential for personal fulfillment but also significantly impacts teaching effectiveness and student outcomes (Skaalvik & Skaalvik, 2016). Studies by Skaalvik and Skaalvik (2016) focusing on post-pandemic challenges reveal that teachers who successfully balance their professional and personal lives are more likely to exhibit higher levels of engagement, creativity, and commitment in the classroom, ultimately benefiting their students.

Need for the Study

The researcher aimed to investigate the relationship between digital competence and work-life balance in relation to the teaching effectiveness of long-serving basic education teachers during the school year 2024-2025. Specifically, the study examined how digital competence, achieved through the effective use of technology, and work-life balance, fostered by sustaining personal and professional well-being, influenced teaching effectiveness. The research focused on teachers in the school districts of Damulog North, Damulog South, Dangcagan, Don Carlos 1, Kibawe East, Kibawe West, Kitaotao 1, and Maramag 1 within the Division of Bukidnon.

Objective of the Study

1. Assess the level of digital competence of teachers in terms of professional engagement, digital resources, teaching and learning, assessment, empowering learners, and facilitating learners' digital competence.
2. Ascertain the level of work-life balance of teachers in terms of satisfaction with family and self-life, awareness towards work-life balance, job satisfaction and flexible environment, and self-appreciation of work.
3. Determine the level of teaching effectiveness of long-serving basic education teachers in terms of commitment, knowledge of the subjects, teaching for independent learning, and management of learning.
4. Examine the relationship between teaching effectiveness, digital competence, and work-life balance.
5. Find out the variable, singly or in combination, that best predicts teaching effectiveness.

Hypotheses of the Study

1. There is no significant relationship between digital competence and work-life balance and the teaching effectiveness of long-serving basic education teachers.
2. There is no variable, singly or in combination, that best predicts the teaching effectiveness of long-serving basic education teachers.

METHODOLOGY

This research study utilized a descriptive-correlational research design. The study was conducted in the school districts of Damulog North, Damulog South, Dangcagan, Don Carlos, Kibawe East, Kibawe West, Kitaotao 1, and Maramag 1 in the province of Bukidnon, Philippines focusing on teachers with 15 years or more of service
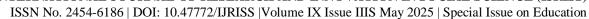
Tool of the Study

The research employed a detailed questionnaire that included a demographic profile section, capturing optional respondent information such as name, completion date, school affiliation, district, division, length of service, and current professional designation. It was based on the European Framework for the Digital Competence of Educators (DigCompEdu) from 2017, which showed high reliability (Cronbach's alpha = .970). The questionnaire also included instruments grounded in the work of Punia and Kamboj (2013) and Cabahit (2014), with high reliability scores of .966 and .935, respectively.

Analysis and Interpretation of Data

Table I. Summary of the level of Digital Competence of long-serving basic education teachers.

INDICATORS	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
1. Professional Engagement	4.15	Often	High Digital Competence
2. Digital Resources	4.10	Often	High Digital Competence
3. Teaching and Learning	4.00	Often	High Digital Competence
4. Assessment	3.97	Often	High Digital Competence
5. Empowering Learners	3.83	Often	High Digital Competence
6. Facilitating Learners' Digital Competence	3.80	Often	High Digital Competence
OVER-ALL MEAN	**3.97**	**Often**	**High Digital Competence**
Legend:			
Range Scale	Descriptive Rating		Qualitative Interpretation
1.00-1.50	Never		Very Low Digital Competence
1.51-2.50	Rarely		Low Digital Competence
2.51-3.50	Sometimes		Moderate Digital Competence
3.51-4.50	Often		High Digital Competence
4.51-5.00	Always		Very High Digital Competence

In analyzing the data, various methods were applied, including descriptive statistics such as mean, standard deviation, and ranks. The mean score of 3.97, categorized as "Often," indicates "High Digital Competence" among long-serving basic education teachers across six indicators: professional engagement, digital resources, teaching and learning, assessment, empowering learners, and facilitating learners' digital competence. Many educators reported that their digital skills have enhanced their teaching approaches, fostering more engaging and collaborative learning environments. This suggests that teachers not only exhibit confidence in their technological abilities but also actively integrate digital resources to improve instructional practices. Their commitment to professional growth highlights the need for supportive communities and targeted professional development programs that build on these experiences to enhance teaching efficacy.

Table II. Summary of the level of Work-Life Balance of long-serving basic education teachers.

INDICATORS	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
Satisfaction with Family and Self-Life	4.37	Often	Very Satisfactory
Awareness towards Work-Life Balance	4.26	Often	Very Satisfactory
Job Satisfaction and Flexible Environment	4.23	Often	Very Satisfactory
Self-Appreciation of Work	4.19	Often	Very Satisfactory
OVER-ALL MEAN	4.26	Often	Very Satisfactory
Legend:			
Range Scale	Descriptive Rating		Qualitative Interpretation
1.00-1.50	Never		Very Low
1.51-2.50	Rarely		Low
2.51-3.50	Sometimes		Satisfactory
3.51-4.50	Often		Very Satisfactory
4.51-5.00	Always		Excellent

The mean scores of teachers' work-life balance were assessed across four indicators: satisfaction with family and self-life, awareness of work-life balance, job satisfaction and flexible environment, and self-appreciation of work. The overall mean score of 4.26, categorized as "Often," reflects a "very satisfactory" level of work-life balance. This suggests that teachers perceive a commendable equilibrium between their personal and professional lives, which is essential for enhancing their overall well-being. Many educators expressed that this balance allows them to be more engaged and effective in their teaching roles. Their positive perceptions underscore the importance of fostering supportive environments and policies that promote work-life balance, thereby contributing to both personal fulfillment and professional effectiveness.

Table III. Summary of the level of Teaching Effectiveness of long-serving basic education teachers.

INDICATORS	MEAN	DESCRIPTIVE RATING	QUALITATIVE INTERPRETATION
Knowledge of the Subjects	4.53	Always	Excellent
Teaching for Independent Learning	4.49	Often	Very Satisfactory
Management of Learning	4.48	Often	Very Satisfactory
Commitment	4.45	Often	Very Satisfactory
OVER-ALL MEAN	4.49	Often	Very Satisfactory
Legend:			
Range Scale	Descriptive Rating		Qualitative Interpretation
1.00-1.50	Never		Poor
1.51-2.50	Rarely		Unsatisfactory
2.51-3.50	Sometimes		Satisfactory
3.51-4.50	Often		Very Satisfactory
4.51-5.00	Always		Excellent

The mean scores of teaching effectiveness for long-serving basic education teachers were assessed across four indicators: Knowledge of the Subjects, Teaching for Independent Learning, Management of Learning, and

Commitment. The overall mean score of 4.49, categorized as "Often," reflects a "Very Satisfactory" level of teaching effectiveness. This suggests that these teachers possess commendable teaching skills, which positively contribute to the learning environment. Many educators indicated that their expertise and commitment enhance student engagement and foster independent learning. This highlights the importance of continuous professional development to further strengthen teaching practices and optimize student outcomes.

Statistical Analysis

The correlation analysis revealed a significant relationship between digital competence and teaching effectiveness among long-serving teachers in basic education, with a positive correlation (R = 0.461**) indicating that those with higher digital skills are more effective in their teaching practices. Additionally, a strong positive correlation (r = 0.560, p = 0.000) with work-life balance suggests that teachers who maintain a healthy balance between their professional and personal lives are more effective, enhancing job satisfaction and teaching engagement (Chen et al., 2022). The analysis also highlighted positive correlations with key factors such as digital resources (r = 0.440), teaching and learning (r = 0.406), and assessment (r = 0.399), indicating that experienced teachers who effectively integrate digital tools significantly enhance student learning outcomes.

Table IV. Correlation Analysis Between Digital Competence and Work-Life Balance on Teaching Effectiveness.

INDEPENDENTVARIABLES	PEARSONR	PROBABILITY
Digital Competence	.461	.000**
Digital Resources	.440	.000**
Professional Engagement	.434	.000**
Teaching and Learning	.406	.000**
Assessment	.399	.000**
Empowering Learners	.347	.000**
Facilitating Learners' Digital Competence	.286	.000**
Work-Life Balance	.560	.000**
Job Satisfaction and Flexible Environment	.519	.000**
Awareness towards Work-Life Balance	.505	.000**
Satisfaction with Family and Self-Life	.486	.000**
Self-Appreciation of Work	.414	.000**

The regression analysis identified significant variables that affect the teaching effectiveness of long-serving basic education teachers, highlighting the critical roles of digital competence and work-life balance. Specifically, digital resources (B = 0.169, p < 0.001) emerged as the strongest predictor, indicating that teachers with higher digital skills enhance student learning outcomes. Additionally, job satisfaction and a flexible work environment (B = 0.147, p = 0.010) significantly influence teaching quality. In contrast, self-appreciation of work (B = 0.137, p = 0.005) and awareness of work-life balance (B = 0.133, p = 0.020) further contribute to effectiveness. These findings underscore the importance of fostering digital skills and a supportive work environment.

Table V. Regression analysis shows variables significantly affecting Teaching Effectiveness of Long-Serving Basic Education Teachers.

Model	Unstandardized Coefficient		Standardized Coefficient	t-value	p-value
	B	Std. Error	Beta		
(Constant)	2.016	.185		10.869	.000
Digital Competence Digital Resources	.169	.031	.270	5.500	.000
Work-Life Balance, Job Satisfaction, and Flexible Environment	.147	.056	.191	2.605	.010

Self-Appreciation of Work	.137	.049	.182	2.811	.005
Awareness towards Work-Life Balance	.133	.057	.158	2.335	.020

R=.622[d] R^2=.387   F=46.801   Sig.=0.000[e]

FINDINGS OF THE STUDY

1. Teachers demonstrate highly competent digital skills, particularly in utilizing digital tools to enhance their instructional effectiveness. This proficiency may support diverse teaching methods and foster student engagement and learning outcomes. For policy makers, this highlights the potential need for ongoing professional development programs that focus on digital literacy, ensuring teachers are equipped with the latest tools and techniques to navigate evolving educational technologies.

2. Teachers exhibit a very satisfactory work-life balance, which is essential for job satisfaction and overall well-being. A healthy work-life balance may contribute significantly to teacher retention and effectiveness. This finding suggests that implementing supportive policies, such as flexible work arrangements and mental health resources, could promote well-being among educators. Professional development programs may also incorporate strategies for managing work-life balance, equipping teachers with skills to prioritize self-care alongside their professional responsibilities.

3. Teachers have demonstrated a very satisfactory commitment to their roles, utilizing effective strategies to promote independent learning and manage the classroom effectively. This commitment may be crucial for creating a positive learning environment. To build on this, professional development initiatives could focus on collaborative teaching strategies and classroom management techniques, encouraging teachers to share best practices and learn from one another. Such programs may enhance teacher efficacy while fostering a sense of community and support among educators.

4. The correlation analysis reveals a significant relationship between digital competence, work-life balance, and teaching effectiveness. Understanding this relationship may inform educational policy by highlighting the potential need for integrated approaches that address both technological proficiency and personal well-being. Policies may promote a holistic view of teacher development, recognizing that enhancing digital skills while supporting work-life balance may lead to improved teaching outcomes.

5. The regression analysis indicates that digital competence, particularly the use of digital resources, and work-life balance, including job satisfaction, flexible work environments, self-appreciation of work, and awareness of work-life balance, are the strongest predictors of teaching effectiveness. This finding suggests that targeted interventions in these areas could enhance educational outcomes. Policy makers and administrators may prioritize investments in professional development programs that focus on digital competence and provide resources for maintaining work-life balance. By fostering an environment that values both technological integration and teacher well-being, educational institutions may significantly improve teaching effectiveness and student success.

REFERENCES

1. Avalos, B. (2021). Teacher professional development in a changing world. Journal of Education and Training Studies, 9(1), 1-10. https://doi.org/10.11114/jets.v9i1.5012.
2. Gordon, S. P., L. M., & H. J. (2021). Fostering creativity and critical thinking in the classroom: Strategies for effective teaching. Educational Leadership, 78(5), 12-17.
3. Hattie, J. (2020). The effect of technology on learning: A synthesis of the research. Routledge.
4. Kraft, M. A., Blazar, D., & Hogan, D. (2020). The effectiveness of teacher coaching: A meta-analysis of the empirical literature. Review of Educational Research, 90(4), 568-601. https://doi.org/10.3102/0034654319878250
5. Redecker, C. (2020). European framework for the digital competence of educators: DigCompEdu. Publications Office of the European Union. https://doi.org/10.2760/159770.
6. Skaalvik, E. M., & Skaalvik, S. (2016). Teacher self-efficacy and teacher burnout: A study of the relationship between teacher self-efficacy and burnout in Norwegian teachers. Educational Psychology, 41(4), 513-529. https://doi.org/10.1080/01443410.2020.1840394.

7. Sullivan, M., & Smith, R. (2020). Understanding teaching effectiveness: A comprehensive study. Teaching and Teacher Education, 94, 103-115. https://doi.org/10.1016/j.tate.2020.103115.
8. Tomlinson, C. A., & Strickland, C. A. (2018). Leading and managing a differentiated classroom. ASCD.
9. Voogt, J., & Roblin, N. P. (2018). A comparative analysis of international frameworks for 21st century competencies: Implications for national curriculum policies. Journal of Curriculum Studies, 50(3), 299-317. https://doi.org/10.1080/00220272.2017.1422028.