



CORRELATION OF TEACHERS' COMPETENCE IN DEVELOPING AND UTILIZING SUPPLEMENTARY MATERIALS IN EPP: INPUT FOR THE IMPROVED TEACHING PROCESS

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ABSTRACT

The study determined the correlation between teachers' competence in developing and utilizing supplementary materials in Edukasyong Pantahanan at Pangkabuhayan (EPP). Specifically, it tried to gauge the level of teachers' competencies in developing supplementary materials in EPP as to curriculum alignment and teachers' competence in using the supplementary materials. Also, it sought to determine the correlation between teacher's competencies in developing and utilizing supplementary materials in E.P.P.

The research method employed for investigating the correlation between teachers' competencies in developing and utilizing supplementary materials in EPP involved descriptive research design. A purposive sampling technique was used in determining the 100 respondents, composed of 50 teachers from the Pila Sub-Office and 50 teachers from the Santa Cruz Sub-Office. Survey-questionnaire validated by the master teachers in the division of Laguna was used.

The findings indicated a high level of competence among teachers in both developing and utilizing supplementary materials for Edukasyong Pantahanan at Pangkabuhayan (EPP). Teachers demonstrated in developing these materials, as well as utilizing them for instruction. Moreover, it was found that there was a significant relationship between the EPP teachers' competencies in developing and utilizing supplementary materials across several dimensions. Despite thorough analysis, it was determined that there is no notable correlation between curriculum alignment, developing differentiation, developing digital competence, and adapting to students needs.

The findings of the study reveal that even though the level of teacher's competencies in developing and utilizing supplementary materials with respect to indicators like curriculum alignment, pedagogical knowledge, and use of assessment, all indicators like content knowledge/expertise, differentiation, digital competence, management of resources, and adaptation to student's needs shows otherwise. Therefore, it is safe to assume that there is no significant correlation between E.P.P. teacher's competencies in developing a utilizing supplementary materials, thus the null hypothesis is accepted.

A proposed framework for developing and utilizing supplementary materials in EPP for an improved teaching process was crafted based on the results. Relatively, future researchers are highly encouraged to incorporate the suggested framework into their research endeavors, focusing on creating and integrating supplementary materials to enrich the instructional techniques employed by EPP educators. Through a comprehensive examination of its impact on the efficacy of teaching and learning methodologies, scholars can offer significant contributions to the realm of education. These contributions will foster a deeper understanding of how instructional practices can be explicitly optimized within the EPP domain, thus paving the way for continuous enhancements in this crucial area of pedagogy.

KEYWORDS: EPP; supplementary materials; teachers' competencies

1. INTRODUCTION

Supplementary resource materials are additional but more functional. The teacher must supplement materials to promote the improved teaching-learning process (Karki, 2018). The Department of Education (DepEd) seeks innovative ways to enhance the teaching-learning process thru learning action cells (LAC). Supplementary materials, including textbooks, worksheets, multimedia resources, and interactive activities, significantly enrich students' learning experiences and improve educational outcomes (Tomlinson, 2011). According to Mondragon et al. (2023), supplementary materials were effective among students. This study focused on the correlation between teachers' competence in developing and utilizing supplementary materials in the subject of Edukasyong Pantahanan at Pangkabuhayan (EPP) and the overall effectiveness of the teaching process.

Edukasyong Pantahanan at Pangkabuhayan (EPP) is a core subject in the Philippines that equips students with practical

knowledge and skills for home management and livelihood. Given its practical nature, the effective integration of supplementary materials can significantly enhance student engagement and learning. Teachers' competence in creating and using these materials is thus pivotal. In this context, competence encompasses the teachers' competence in developing and utilizing the supplementary materials. Developing the said material encompasses variables such as curriculum alignment, pedagogical knowledge, content knowledge, and use of assessment. The material includes differentiation, digital competence, management of resources, and adaptation to students' needs.

Previous studies highlight the positive impact of well-developed supplementary materials on student achievement. Rahimipour (2021) revealed that supplementary materials positively impacted the learners' learning. Similarly, a study by Espino et al. (2020) asserted that supplementary materials can significantly enhance the quality of education by providing



diverse learning resources that cater to different learning styles and needs.

In this study, the researcher aimed to determine the correlation between the teachers' competence in developing and utilizing the supplementary materials of EPP in Pila and Santa Cruz Sub-offices. Focusing on these locales, the study sought to provide localized insights that can inform targeted interventions and professional development programs for EPP teachers.

1.1 Statement of the Problem

Specifically, this study aimed to answer the following sub-problems.

1. What is the level of teachers' competencies in developing supplementary materials in EPP in terms of:
 - 1.1. curriculum alignment,
 - 1.2. pedagogical knowledge,
 - 1.3. content knowledge/expertise, and
 - 1.4. use of assessment?
2. What is the level of teachers' competencies in using the supplementary materials in EPP in terms of:
 - 2.1. differentiation,
 - 2.2. digital competence,
 - 2.3. management of resources, and
 - 2.4. adaptation to students' needs?
3. Is there a significant correlation between the EPP teachers' competencies in developing and utilizing the supplementary materials?
4. What framework for an improved teaching process can be crafted?

2. METHODOLOGY

The research method employed for investigating the correlation between the teachers' competencies in developing and utilizing supplementary materials in Edukasyong Pantahanan at Pangkabuhayan (EPP) towards an improved teaching process involved quantitative research design.

According to Creswell (2018), quantitative methods are instrumental in facilitating the precise measurement and in-depth analysis of numerical data, making them well-suited for evaluating teachers' competencies in developing and employing supplementary materials. Notably, variables such as curriculum

alignment, pedagogical knowledge, digital competence, and responsiveness to students' needs can be effectively quantified using standardized scales or Likert-type items. These tools offer a structured approach that yields objective assessments of educators' proficiencies in these critical areas, fostering a comprehensive understanding of their capabilities and areas for potential growth.

3. RESULTS AND DISCUSSION

This chapter mainly discusses the researcher's problems in the study. The discussion is divided into three (3) parts: the teachers' competencies in developing the supplementary materials, the teachers' competencies in using the supplementary materials, and the relationship between the two variables.

Level of Teachers' Competencies in Developing Supplementary Materials

The level of teachers' competencies in developing supplementary materials in EPP in terms of curriculum alignment, pedagogical knowledge, content knowledge/expertise, and use of assessment was treated statistically using mean and standard deviation.

Level of Teachers' Competencies in Developing Supplementary Materials in Terms of Curriculum Alignment,

which examines the level of teachers' competencies in developing supplementary materials with a focus on curriculum alignment, offers a critical lens into the intersection of instructional design and educational objectives. As such, this table serves as a complete evaluation of teachers' competencies in this essential aspect of educational practice.

Through an analysis of curriculum alignment, educators and educational stakeholders gain valuable insights into the extent to which supplementary materials support and enrich the attainment of Curriculum goals. This sets the stage for a nuanced exploration of teachers' proficiency levels in developing supplementary materials that seamlessly integrate with established curricular frameworks, ultimately enhancing the educational experience for students.

Table 1 Level of Teachers' Competencies in Developing Supplementary Materials in terms of Curriculum Alignment

<i>The Teachers...</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>1. ...can align the supplementary materials I develop with the goals and objectives of the EPP curriculum.</i>	4.53	0.50	Strongly Agree
<i>2. ...confident in my ability to ensure that the supplementary materials I create align with the prescribed EPP curriculum content.</i>	4.48	0.50	Strongly Agree
<i>3. My supplementary materials effectively complement the EPP curriculum to enhance students' learning experiences.</i>	4.48	0.54	Strongly Agree
<i>4. I have received adequate training and support to align my supplementary materials with the EPP curriculum.</i>	4.10	0.75	Agree
<i>5. ...regularly update and revise my supplementary materials to maintain alignment with EPP curriculum changes.</i>	4.28	0.67	Strongly Agree



6. ...can modify or adapt my supplementary materials to meet my EPP students' specific needs and learning styles while staying aligned with the curriculum.	4.35	0.52	Strongly Agree
7. ...collaborate with colleagues to ensure that our supplementary materials align with the EPP curriculum, fostering a consistent learning experience.	4.37	0.60	Strongly Agree
8. ...have access to resources and references that help me align my supplementary materials with the EPP curriculum effectively.	4.40	0.49	Strongly Agree
9. ...actively seek feedback from students to assess how well my supplementary materials align with their curriculum expectations and needs.	4.39	0.63	Strongly Agree
10. ...believe that my competency in aligning supplementary materials with the EPP curriculum significantly contributes to student satisfaction and learning outcomes.	4.44	0.59	Strongly Agree
Weighted Mean		4.38	
SD		0.58	
Verbal Interpretation			Very High Competence

Table 1 presents the level of teachers' competencies in developing supplementary materials in terms of curriculum alignment. The overall weighted mean is 4.38 with a standard deviation of 0.58, indicating a verbal interpretation of Very High Competence. This demonstrates a strong consensus among teachers regarding their competencies in aligning supplementary materials with the goals and objectives of the EPP curriculum.

Respondents strongly agreed that they can align the supplementary materials they develop with the goals and objectives of the EPP curriculum, with the highest (M =4.53, SD 0.50). This reflects a high level of confidence among teachers in ensuring that their materials are closely integrated with the prescribed curriculum content, enhancing instructional coherence and effectiveness.

Additionally, respondents strongly agreed that they could modify or adapt their supplementary materials to meet their EPP students' specific needs and learning styles while staying aligned with the curriculum, which received the lowest (M= 4.10, SD= 0.75). Although this was the lowest-rated statement, it still falls within the Agree category, indicating a perceived need for further support and training.

This implies that teachers possess a very high level of competency in developing supplementary materials that align with the EPP curriculum, enhancing the learning experience and contributing to positive student outcomes. However, there may be opportunities for professional development to strengthen further teachers' abilities to adapt materials to meet diverse student needs while maintaining alignment with curriculum standards.

The importance of teachers being skilled in creating supplementary materials, specifically in terms of their pedagogical knowledge, cannot be overstated when delivering impactful classroom lessons. This is highlighted in Table 2, which provides a detailed breakdown of educators' expertise in developing additional resources that enrich student learning and contribute to a more engaging educational environment. Through a comprehensive assessment of pedagogical skills, as reflected in this detailed table, educators gain valuable insights into their ability to create instructional materials that effectively address various learning styles, enhance understanding, and promote critical thinking in their students. Equally important is the need for educators to grasp the proficiency levels highlighted in Table 2, as this information serves as a crucial guide in their teaching strategies and overall classroom approaches.

Table 2 Level of Teachers' Competencies in Developing Supplementary Materials in Terms of Pedagogical Knowledge

STATEMENTS...	MEAN	SD	REMARKS
1. I believe that my competency in pedagogical knowledge significantly contributes to the success of supplementary materials in EPP and positively impacts student learning outcomes.	4.34	0.55	Strongly Agree
2. I actively seek feedback from EPP students to gauge how well my supplementary materials support their learning from a pedagogical perspective.	4.20	0.59	Agree
3. I can assess the effectiveness of my supplementary materials through pedagogical evaluation and adjustments.	4.36	0.59	Strongly Agree
4. I collaborate with other EPP teachers to exchange	4.39	0.65	Strongly Agree



pedagogical insights and best practices for developing supplementary materials.

5. I have the skills to adapt my supplementary materials to address the diverse learning needs of EPP students while maintaining pedagogical soundness.	4.41	0.60	Strongly Agree
6. I believe my pedagogical knowledge enables me to provide clear instructions and guidance within the supplementary materials for EPP.	4.31	0.58	Strongly Agree
7. I regularly integrate innovative teaching strategies into my supplementary materials to promote active learning among EPP students.	4.33	0.60	Strongly Agree
8. I can create supplementary materials that incorporate interactive and engaging activities to enhance EPP students' understanding.	4.33	0.57	Strongly Agree
9. I am confident in my ability to design supplementary materials that cater to various learning styles and preferences of EPP students.	4.32	0.58	Strongly Agree
10. I deeply understand pedagogical principles and theories that inform the development of supplementary materials for EPP.	4.33	0.62	Strongly Agree
Weighted Mean		4.33	
SD		0.59	
Verbal Interpretation			Very High Competence

Table 2 presents the level of teachers' competencies in developing supplementary materials in terms of pedagogical knowledge. The overall weighted mean is 4.33 with a standard deviation of 0.59, indicating a verbal interpretation of Very High Competence. This suggests a strong consensus among teachers regarding their competencies in integrating pedagogical principles into developing supplementary materials for EPP.

Respondents strongly agreed that their competency in pedagogical knowledge significantly contributes to the success of supplementary materials in EPP and positively impacts student learning outcomes, with a (M=4.34, SD= 0.55). This highlights the perceived importance of pedagogical expertise in enhancing the effectiveness of instructional materials and fostering positive learning experiences for students.

Additionally, respondents strongly agreed that they possess the ability to assess the effectiveness of their supplementary materials through pedagogical evaluation and adjustments, with a (M= 4.36, SD= 0.59). This demonstrates a proactive approach among teachers to continuously improve their instructional practices based on pedagogical insights and student feedback. Furthermore, respondents strongly agreed that they have the

skills to adapt their supplementary materials to address the diverse learning needs of EPP students while maintaining pedagogical soundness (M = 4.41, SD 0.60). This indicates a high confidence level among teachers in their ability to tailor instructional materials to accommodate various learning styles and preferences.

Overall, the findings imply that teachers possess a very high level of competencies in integrating pedagogical knowledge into developing supplementary materials for EPP. This highlights the importance of pedagogical expertise in creating practical instructional resources that promote active learning, engagement, and understanding among students.

In Table 3, you will find a comprehensive overview detailing the proficiency levels of teachers' competencies, specifically in creating supplementary materials with a strong emphasis on content knowledge. This evaluation plays a critical role in shedding light on how well educators can strategically deliver additional resources, which in turn play a pivotal role in bolstering students' understanding and mastery of the subject material, ultimately elevating the overall learning experience and academic achievement.



Table 3 Level of Teachers' Competencies in Developing Supplementary Materials in Terms of Content Knowledge/Expertise

STATEMENTS...	MEAN	SD	REMARKS
1. I engage in professional development opportunities to further enhance my content knowledge for EPP.	4.56	0.59	Strongly Agree
2. I am skilled at adapting supplementary materials to accommodate the specific content requirements of different EPP grade levels.	4.30	0.64	Strongly Agree
3. I collaborate with fellow EPP teachers to share content knowledge and ensure consistency in supplementary materials.	4.37	0.61	Strongly Agree
4. I regularly update my content knowledge to stay current with changes in the EPP curriculum and subject matter.	4.34	0.61	Strongly Agree
5. I can incorporate real-world examples and applications into supplementary materials, making EPP content more relatable to students.	4.43	0.54	Strongly Agree
6. My content knowledge enables me to identify key concepts and learning outcomes that should be emphasized in supplementary materials for EPP.	4.30	0.58	Strongly Agree
7. I can create supplementary materials that align seamlessly with EPP subject matter, ensuring accuracy and relevance.	4.44	0.61	Strongly Agree
8. I am confident in my knowledge of EPP curriculum goals and objectives, allowing me to align supplementary materials effectively.	4.39	0.65	Strongly Agree
9. I have a strong understanding of the content areas relevant to EPP, which informs the development of supplementary materials.	4.38	0.63	Strongly Agree
10. I believe that my content knowledge plays a vital role in the quality of supplementary materials for EPP and positively impacts student learning outcomes.	4.45	0.63	Strongly Agree
Weighted Mean		4.40	
SD		0.61	
Verbal Interpretation			Very High Competence

Table 3 presents the level of teachers' competencies in developing supplementary materials in terms of content knowledge/expertise. The overall weighted mean is 4.40 with standard deviation of 0.61 indicating a verbal interpretation of Very High Competence. This indicates a strong consensus among teachers regarding their competencies in integrating content knowledge and expertise into the development of supplementary materials for EPP.

Respondents strongly agreed that they engage in professional development opportunities to further enhance their content knowledge for EPP, with the highest (M= 4.56, SD= 0.59). This highlights the commitment of teachers to continuously improve their understanding of subject matter, ensuring the accuracy and relevance of instructional materials.

Additionally, respondents strongly agreed that they possess the ability to incorporate real-world examples and applications into supplementary materials, making EPP content more relatable to students, with (M=4.43, SD =0.54). This demonstrates a proactive approach among teachers in creating engaging and relevant instructional resources that resonate with students' experiences and interests.

Furthermore, respondents strongly agreed that they have a strong understanding of the content areas relevant to EPP, which informs the development of supplementary materials, with (M=4.38, SD= 0.63). This indicates a high level of confidence among teachers in their ability to identify key concepts and learning outcomes that should be emphasized in instructional materials.

Overall, the findings imply that teachers possess a very high level of competencies in integrating content knowledge and expertise into the development of supplementary materials for EPP. This emphasizes the importance of teachers' subject matter expertise in creating effective instructional resources that support student learning and achievement.

Research on teachers' competency in developing supplementary materials based on content knowledge and expertise reveals a generally high level of capability. It is important to note that these findings are in line with the remarkable "Very High" level of competency demonstrated by teachers in terms of creating supplementary materials grounded in their content knowledge and expertise. This was supported by the study's calculated weighted mean score, emphasizing the teachers' ability to leverage their expertise for enriching pedagogical practices.



Table 4 Level of Teachers’ Competencies in Developing Supplementary Materials in Terms of Use of Assessment

STATEMENTS...	MEAN	SD	REMARKS
1. I am open to enhancing my skills in integrating assessment into supplementary materials for EPP.	4.64	0.48	Strongly Agree
2. I encourage students to use supplementary materials for self-assessment and improvement in EPP.	4.51	0.50	Strongly Agree
3. I collaborate with other EPP teachers to share effective strategies for integrating assessment into materials.	4.50	0.52	Strongly Agree
4. I believe that integrating assessment into supplementary materials enhances student understanding and performance.	4.59	0.55	Strongly Agree
5. I provide opportunities for students to self-assess and peer-assess their work through supplementary materials.	4.51	0.52	Strongly Agree
6. I regularly review and update supplementary materials to ensure they reflect changes in assessment criteria.	4.35	0.59	Strongly Agree
7. I align supplementary materials with the learning objectives and outcomes of EPP assessments.	4.34	0.52	Strongly Agree
8. Supplementary materials I develop include clear guidelines for assessing student learning and progress.	4.38	0.53	Strongly Agree
9. I consider a variety of assessment methods, such as quizzes, projects, and peer evaluations, when creating supplementary materials.	4.48	0.52	Strongly Agree
10. I effectively integrate assessment tools and strategies into the supplementary materials I develop for EPP.	4.38	0.55	Strongly Agree
Weighted Mean		4.47	
SD		0.53	
Verbal Interpretation			<i>Very High Competence</i>

Table 4 presents the level of teachers’ competencies in developing supplementary materials in terms of the use of assessment. The overall mean is 4.47 with a standard deviation of 0.53, indicating a verbal interpretation of Very High Competence. This proposes a strong consensus among teachers regarding their competencies in integrating assessment into the development of supplementary materials for EPP.

Respondents strongly agreed that they are open to enhancing their skills in integrating assessment into supplementary materials for EPP, with the (M =4.64, SD=0.48). This reflects a proactive attitude among teachers to continuously improve their abilities and incorporate assessment strategies that enhance student learning and performance.

Additionally, respondents strongly agreed that integrating assessment into supplementary materials enhances student understanding and performance (M=4.59, SD= 0.55). This highlights the perceived importance of assessment in reinforcing key concepts and promoting academic growth among students.

Furthermore, respondents strongly agreed that they encourage students to use supplementary materials for self-assessment and improvement in EPP, with a (M=4.51, SD= 0.50). This validates a commitment among teachers to empower students to take ownership of their learning and monitor their progress through self-assessment practices.

Overall, the findings imply that teachers possess a very high level of competencies in integrating assessment into developing supplementary materials for EPP. This highlights the importance of incorporating assessment strategies that promote student engagement, understanding, and academic growth within instructional resources.

Level of Teachers’ Competencies in Using the Supplementary Materials

The statistical analysis of teachers’ competencies in utilizing supplementary materials for English for Professional Purposes (EPP) focused on various aspects like differentiation, digital competence, resource management, and adjusting to students’ needs. This examination was conducted through the calculation of mean and standard deviation, providing insight into the effectiveness and proficiency of teachers in these critical areas of instruction.

Table 5 comprehensively analyzes teachers’ competencies in effectively utilizing supplementary materials to enhance learning outcomes. The evaluation primarily centers on their adeptness in customizing these resources to cater to a varied student population’s specific learning styles and requirements, thus showcasing the educators’ proficiency in fostering an inclusive and engaging learning environment.

Through this assessment, we gain insight into how effectively teachers utilize supplementary materials to provide personalized support and promote academic growth among their students.



Table 5 Level of Teachers' Competencies in Using the Supplementary Materials in Terms of Learning Differentiation
STATEMENTS...

STATEMENTS...	MEAN	SD	REMARKS
1. I believe that my ability to differentiate instruction using supplementary materials positively influences EPP student engagement and learning outcomes.	4.45	0.54	Strongly Agree
2. I encourage self-directed learning among EPP students by providing them with supplementary materials that allow for independent exploration.	4.41	0.53	Strongly Agree
3. I regularly assess the effectiveness of supplementary materials in meeting the individual needs of EPP students and make adjustments as necessary.	4.31	0.56	Strongly Agree
4. I incorporate a variety of supplementary materials to address different learning preferences among EPP students, such as visual aids, hands-on activities, and digital resources.	4.39	0.55	Strongly Agree
5. I adjust the pace of instruction with the help of supplementary materials to ensure that EPP students understand and master the content.	4.48	0.50	Strongly Agree
6. I use supplementary materials to facilitate group activities and peer collaboration among EPP students.	4.43	0.59	Strongly Agree
7. I challenge high-achieving EPP students by providing advanced supplementary materials to extend their learning.	4.31	0.53	Strongly Agree
8. I differentiate instruction using supplementary materials to provide additional support for struggling EPP students.	4.43	0.61	Strongly Agree
9. I tailor my use of supplementary materials to accommodate students with varying abilities and learning styles in EPP.	4.41	0.51	Strongly Agree
10. I can effectively adapt supplementary materials to meet the diverse learning needs of EPP students.	4.38	0.53	Strongly Agree
Weighted Mean		4.40	
SD		0.55	
Verbal Interpretation			Very High Competence

Table 5 presents the level of teachers' competencies in using supplementary materials in terms of learning differentiation. The overall weighted mean is 4.40 with a standard deviation of 0.55, indicating a verbal interpretation of Very High Competence. This suggests a strong consensus among teachers regarding their competencies in utilizing supplementary materials to cater to the diverse learning needs of EPP students.

Respondents strongly agreed that their ability to differentiate instruction using supplementary materials positively influences EPP student engagement and learning outcomes, with the highest (M= 4.45, SD=0.54). This highlights the perceived importance of differentiation in enhancing student engagement and promoting academic success among learners with varying abilities and learning styles.

Additionally, respondents strongly agreed that they tailor supplementary materials to accommodate students with varying abilities and learning styles in EPP, with a (M= 4.41, SD= 0.51). This demonstrates a commitment among teachers to individualize instruction and provide personalized learning

experiences that meet the unique needs of each student.

Moreover, it is apparent from the survey responses that educators show a consensus in their efforts to tailor the pace of teaching to the needs of EPP students by incorporating additional resources. The mean score of 4.48 with a standard deviation of 0.50 indicates a high level of agreement among teachers regarding the flexible nature of adapting supplementary materials to enhance students' grasp and mastery of academic subjects. This exemplifies a commitment to customizing instructional strategies to effectively meet EPP students' diverse learning requirements.

Overall, the findings imply that teachers possess a very high level of competencies in using supplementary materials to differentiate instruction and address the diverse learning needs of EPP students. This highlights the importance of providing inclusive and personalized learning experiences that foster academic growth and success for all learners.



Table 6 Level of Teachers' Competencies in Using the Supplementary Materials in Terms of Digital Competence			
STATEMENTS...	MEAN	SD	REMARKS
1. My digital competence positively impacts EPP students' satisfaction and learning outcomes.	4.36	0.56	Strongly Agree
2. I use digital supplementary materials to adapt to the evolving needs of EPP students in a technologically driven world.	4.37	0.54	Strongly Agree
3. I provide guidance and support to EPP students on how to use digital materials effectively for learning.	4.34	0.55	Strongly Agree
4. I am open to exploring new digital tools and platforms to diversify the supplementary materials I use in EPP.	4.36	0.56	Strongly Agree
5. I believe that digital supplementary materials improve EPP students' understanding of the content.	4.37	0.56	Strongly Agree
6. I encourage EPP students to use digital resources for independent learning and research.	4.35	0.52	Strongly Agree
7. I can troubleshoot common technical issues when using digital materials in EPP classes.	4.15	0.59	Agree
8. I integrate digital supplementary materials effectively to enhance EPP lessons and engage students.	4.32	0.58	Strongly Agree
9. I am proficient in finding and selecting digital supplementary materials that align with EPP curriculum goals.	4.22	0.58	Strongly Agree
10. I feel confident in using digital tools and resources to supplement EPP instruction.	4.36	0.63	Strongly Agree
Weighted Mean		4.32	
SD		0.57	
Verbal Interpretation		<i>Very High Competence</i>	

Table 6 presents the level of teachers' competencies in terms of digital competence when using supplementary materials. The overall weighted mean is 4.32 with a standard deviation of 0.57, indicating a verbal interpretation of Very High Competence. This suggests a strong consensus among teachers regarding their competencies in utilizing digital tools and resources to enhance instruction and engage EPP students in a technologically driven learning environment.

Respondents strongly agreed that their digital competence positively impacts EPP students' satisfaction and learning outcomes, with the highest (M= 4.36, SD= 0.56). This highlights the perceived importance of digital proficiency in fostering student success and enhancing the educational experience through technology integration.

Additionally, respondents strongly agreed that they use digital supplementary materials to adapt to the evolving needs of EPP students in a technologically driven world, (M=4.37, SD= 0.54). This demonstrates a proactive approach among teachers in leveraging digital resources to meet students' diverse learning preferences and technological skills.

Furthermore, respondents strongly agreed that they provide guidance and support to EPP students on using digital materials effectively for learning, with a (M= 4.34, SD= 0.55). This reflects a commitment among teachers to empower students with digital literacy skills necessary for academic success and lifelong learning.

Overall, the research suggests that teachers demonstrate a remarkable proficiency in utilizing digital supplementary materials for EPP instruction and fostering active student involvement in meaningful learning encounters. This underscores the significance of digital competence in equipping students with the necessary skills and knowledge to thrive in an ever-changing digital landscape, thereby paving the way for their future success.

Table 7 outlines an evaluation of the level of teachers' competencies concerning the utilization of supplementary materials, explicitly addressing the management of resources. This examination assessed educators' proficiency in efficiently organizing and utilizing supplementary materials to support their teaching objectives.



By examining the teaching staff's abilities within this context, the table offers valuable perspectives on how they harness available resources to improve the quality of instructional methods and make learning more conducive for students. Such

analysis sheds light on how effectively educators leverage resources to enrich the educational experience for their students.

Table 7 Level of Teachers' Competencies in using the Supplementary Materials in Terms of Management of Resources

<i>STATEMENTS...</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
<i>1. I am open to improving my resource management skills to better support EPP students' learning.</i>	4.63	0.51	Strongly Agree
<i>2. I believe that proper resource management positively impacts the effectiveness of EPP teaching.</i>	4.58	0.50	Strongly Agree
<i>3. I involve my EPP students in managing and organizing supplementary materials for a more interactive learning experience.</i>	4.44	0.54	Strongly Agree
<i>4. I collaborate with other EPP teachers to effectively share and manage supplementary materials.</i>	4.45	0.50	Strongly Agree
<i>5. I efficiently allocate resources to match the different EPP topics and subjects.</i>	4.41	0.55	Strongly Agree
<i>6. I keep track of the availability and condition of supplementary materials to ensure they are up to date.</i>	4.44	0.59	Strongly Agree
<i>7. I actively seek new, diverse supplementary materials to enrich EPP lessons.</i>	4.49	0.52	Strongly Agree
<i>8. I can adapt and modify supplementary materials to meet the specific needs of my EPP students.</i>	4.53	0.52	Strongly Agree
<i>9. I have a systematic approach to selecting, storing, and accessing supplementary materials for EPP.</i>	4.39	0.53	Strongly Agree
<i>10. I effectively organize and manage supplementary materials for EPP lessons.</i>	4.42	0.52	Strongly Agree
Weighted Mean		4.48	
SD		0.53	
Verbal Interpretation			<i>Very High Competence</i>

Table 7 illustrates the level of teachers' competencies in using supplementary materials in terms of the management of resources. The overall weighted mean is 4.48 with a standard deviation of 0.53, indicating a verbal interpretation of "Very High Competence." This suggests a strong consensus among teachers regarding their competencies in effectively managing resources to support EPP students' learning.

Respondents strongly agreed that they are open to improving their resource management skills to better support EPP students' learning, with the highest (M=4.63, SD= 0.51). This highlights a proactive attitude among teachers in continuously enhancing their abilities to allocate and utilize resources effectively to meet students' educational needs.

Additionally, respondents strongly agreed that they believe proper resource management positively impacts the effectiveness of EPP teaching, with an (M= 4.58 SD=0.50).

This highlights the perceived importance of resource management in creating an optimal learning environment that facilitates student engagement and academic achievement.

Furthermore, respondents strongly agreed that they involve their EPP students in managing and organizing supplementary materials for a more interactive learning experience (M=4.44, SD=0.54). This demonstrates a collaborative approach among teachers and students to promote ownership and responsibility for learning resources.

The research outcomes suggest teachers' proficiency in effectively handling resources to facilitate EPP instruction. This highlights the critical role of strategic resource management and organization in establishing an enriching educational setting that nurtures students' achievements and scholastic development, ultimately contributing to their academic advancement and overall success.



In sum, the literature demonstrates a spectrum of practices and challenges in teachers' management of supplementary materials, ranging from effective utilization and technology integration to potential gaps in accessing high-quality resources and addressing technical hurdles. These findings highlight the

need for continuous professional development and collaboration among educators and educational stakeholders to optimize resource management and enhance teaching and learning outcomes.

Table 8 Level of Teachers' Competencies in Using the Supplementary Materials in terms of Adaptation to Students' Needs

<i>STATEMENTS...</i>	<i>MEAN</i>	<i>SD</i>	<i>REMARKS</i>
1. I am open to improving my skills in adapting supplementary materials to meet students' needs better.	4.70	0.46	Strongly Agree
2. I involve students in selecting and adapting materials to empower their learning.	4.48	0.55	Strongly Agree
3. I collaborate with other EPP teachers to share strategies for adapting materials to students' needs.	4.44	0.60	Strongly Agree
4. I believe that adapting supplementary materials enhances student comprehension and participation.	4.52	0.55	Strongly Agree
5. I encourage my EPP students to provide feedback on supplementary materials and adapt them accordingly.	4.48	0.50	Strongly Agree
6. I ensure that supplementary materials align with my EPP students' individual interests and preferences.	4.46	0.54	Strongly Agree
7. I can differentiate supplementary materials to challenge and engage high-achieving EPP students.	4.40	0.60	Strongly Agree
8. I modify supplementary materials to support struggling EPP students.	4.48	0.60	Strongly Agree
9. I regularly assess my students' learning styles and abilities to tailor supplementary materials accordingly.	4.46	0.54	Strongly Agree
10. I effectively adapt supplementary materials to suit the diverse needs of my EPP students.	4.42	0.54	Strongly Agree
Weighted Mean		4.48	
SD		0.55	
Verbal Interpretation			<i>Very High Competence</i>

Table 8 depicts the level of teachers' competencies in using supplementary materials in terms of adaptation to students' needs. The overall weighted mean is 4.48, with a standard deviation of 0.55, indicating a verbal interpretation of Very High Competence. This suggests a strong consensus among teachers regarding their competencies in adapting instructional materials to meet the diverse needs of EPP students.

Respondents strongly agreed that they are open to improving their skills in adapting supplementary materials to better meet students' needs, with the highest (M= 4.70, SD= 0.46). This highlights a proactive approach among teachers to continuously enhance their abilities to tailor instructional resources to address the individualized learning requirements of students.

Additionally, respondents strongly agreed that they involve students in selecting and adapting materials to empower their learning, with an (M=4.48 and SD= 0.55). This demonstrates a collaborative approach between teachers and students in fostering ownership and agency over their learning experiences.

Furthermore, respondents strongly agreed that they believe adapting supplementary materials enhances student comprehension and participation, with a (M= 4.52 and SD= 0.55). This highlights the perceived importance of instructional adaptation in promoting student engagement and

understanding.

Overall, the findings imply that teachers possess a very high level of competencies in adapting supplementary materials to meet the diverse needs of EPP students. This highlights the importance of personalized instruction in creating inclusive learning environments that cater to each learner's unique strengths, interests, and preferences.

Blažević et al. (2022) and Harper (2019) contribute to the discourse on the significance of teachers' adaptation to students' needs when integrating supplementary materials into their teaching practices. Blažević's investigation into mathematics education in Croatia underscores teachers' commitment to addressing diverse student abilities and adjusting teaching methods during supplementary classes. Similarly, Harper's examination of an English as a Foreign Language course in China highlights the provision of a wide array of supplementary materials by the instructor to accommodate varying learner needs. However, Harper also identifies discrepancies between the instructor's objectives and the students' interpretations of the materials, underscoring the necessity for clearer communication channels.



Test of Significant Relationship between the EPP Teachers' Competencies in Developing and Utilizing the Supplementary Materials

The significant relationship between the EPP teachers' competencies in developing and utilizing the supplementary

materials in terms of differentiation, digital competence, management of resources, and adaptation to students' needs was treated statistically using Real Statistics Data Analysis Tools using the Pearson correlation coefficient.

Table 9 Significant Relationship between the EPP Teachers' Competencies in Developing and Utilizing the Supplementary Materials

Developing (IV)	Using (DV)			
	Differentiation	Digital Competence	Management of Resources	Adaptation to Students' Needs
CURRICULUM ALIGNMENT	0.49**	-0.03	0.61**	0.04
Significance(2-Tailed)	<.001	.749	<.001	.717
N	100	100	100	100
PEDAGOGICAL KNOWLEDGE	-0.10	-0.06	-0.12	0.45**
Significance(2-Tailed)	.324	.345	.263	<.001
N	100	100	100	100
CONTENT KNOWLEDGE	0.56**	-0.12	0.62**	0.16
Significance(2-Tailed)	<.001	.245	<.001	.115
N	100	100	100	100
ASSESSMENT INTEGRATION	0.12	0.50**	0.15	0.58**
Significance(2-Tailed)	.252	<.001	.132	<.001
N	100	100	100	100

P < 0.05 = significant

Table 9 shows the correlation between a teacher's competency in developing a specific aspect of supplementary materials (developing) and their competency in using that same aspect effectively (using). Statistical significance (p-value) is included to indicate how likely the observed correlation is due to chance rather than a genuine relationship.

For variables with Significant Correlations (p-value < .05):

A correlation coefficient of 0.49 (positive) and a p-value of <.001 (significant) suggests a strong positive relationship. This means teachers with higher competency in developing materials aligned with curriculum objectives (developing) tend to also have higher competency in using those aligned materials effectively within their teaching (using). In other words, strong development skills in curriculum alignment seem to translate into effective use.

A correlation coefficient of 0.56 (positive) and a p-value of <.001 (significant) suggests another strong positive relationship. This means teachers with a strong understanding of EPP subject matter when developing materials (developing) tend also to demonstrate effective use of that knowledge when utilizing the materials (using).

A correlation coefficient of 0.45 (positive) and a p-value of <.001 (significant) suggests a positive relationship between a

teacher's competency in using materials that integrate diverse teaching methods (using) and their competency in developing those methods (developing). However, the threshold for statistical significance is generally set at p < .05, so a p-value of <.001 is a powerful result. This suggests that teachers who are skilled at using these methods when implementing the materials were also likely skilled at integrating those methods during development, though the causal direction is unclear from this analysis alone.

A correlation coefficient of 0.50 (positive) and a p-value of <.001 (significant) suggests a strong positive relationship. This means teachers who can effectively integrate assessment strategies while using the materials (using) were also likely skilled at integrating assessment into the development of those materials (developing).

For No Significant Correlations (p-value > .05):

Correlation coefficients are close to zero (weak), and p-values are high (> .05), indicating no statistically significant relationship between a teacher's competency in developing materials that cater to diverse student needs (differentiation) or using digital resources (digital competence) and their competency in using those aspects of the materials.

Similarly, correlation coefficients are close to zero and p-values are high for these areas, indicating no statistically significant relationships between the developing and utilizing competencies.

These non-significant correlations, while not conclusive in indicating the absence of relationships, rather reflect the higher probability of any observed links occurring by chance. This situation implies the importance of conducting more in-depth investigations in these areas or recognizing that mastering these competencies could differ significantly from successfully utilizing them within the classroom setting.

This implies that educational stakeholders need to prioritize targeted professional development initiatives aimed at enhancing teachers' competencies in developing and utilizing

supplementary materials, particularly in areas such as curriculum alignment, content knowledge, digital competence, and adaptation to students' needs.

What framework for improved teaching process can be crafted in EPP?

Based on the high level of teachers' competencies in developing and utilizing supplementary materials, particularly in terms of curriculum alignment, pedagogical knowledge, content expertise, assessment use, learning differentiation, digital competence, resource management, and adaptation to student needs, a comprehensive framework can be recommended to further enhance teaching practices in Edukasyon Pantahanan at Pangkabuhayan (EPP).

Here is a suggested framework based on the findings:

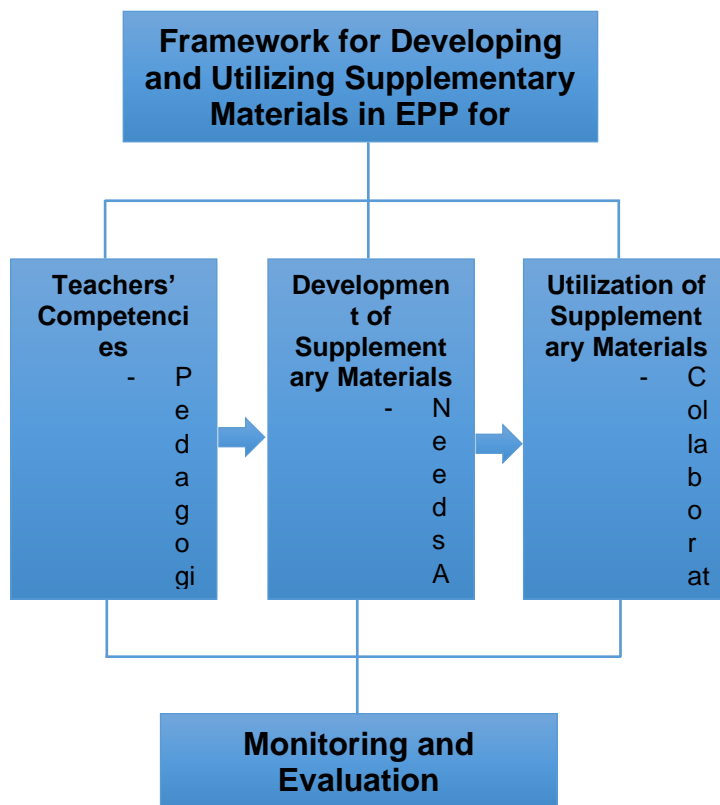


Figure 3. Framework for Developing and Utilizing Supplementary Materials in EPP for the Improved Teaching Process

This diagram visually represents the framework components and their interconnectedness in supporting the effective development and use of supplementary materials in EPP teaching. Each component enhances teaching and learning experiences, benefiting students' academic achievement and holistic development.

The teachers' competencies include Pedagogical Knowledge, Content Expertise, Digital Competence, and Resource Management Skills.

Pedagogical knowledge, the teachers should employ effective pedagogical strategies and instructional techniques when designing supplementary materials. This may include using

inquiry-based learning, cooperative learning activities, or hands-on experiences to engage students and promote deeper understanding.

For example, *Implement project-based learning activities where students research and design a sustainable household budget as part of the EPP curriculum. Provide guidance and support to facilitate student inquiry, critical thinking, and problem-solving skills.*

Content expertise/knowledge is essential for teachers to demonstrate expertise in the subject matter when developing supplementary materials. This involves providing accurate and comprehensive resources that address key concepts and skills



covered in the EPP curriculum.

For example, create a series of instructional videos explaining fundamental concepts in entrepreneurship and business management and *key topics in the EPP curriculum. Ensure that the content is accurate, clear, and accessible to students.*

Digital Competence, leveraging digital resources and technology, can enhance the development and delivery of supplementary materials. This includes using educational apps, online simulations, multimedia presentations, or interactive platforms to engage students and facilitate active learning experiences.

For example, Integrate a virtual simulation game that simulates real-world household management and budgeting scenarios into the EPP curriculum. Guide students in navigating the game and reflecting on their decisions to promote financial literacy skills.

Lastly, the teacher's resource management skills, as well as efficient allocation and management of resources, are essential for the effective implementation of supplementary materials. This includes organizing materials, managing time effectively, and utilizing technology tools to streamline workflows and enhance productivity.

Developing supplementary materials requires needs assessment, curriculum alignment, assessment integration, and learning differentiation.

Needs Assessment. Before creating supplementary materials, assessing students' needs, learning styles, and proficiency levels is crucial. This could involve surveys, diagnostic assessments, or informal observations to identify areas where additional support or enrichment is required.

For example, *a pre-assessment survey can be conducted to determine students' prior knowledge and interests in a specific topic within the EPP curriculum. Use the results to tailor supplementary materials to address areas where students need additional support or enrichment.*

Curriculum Alignment. Supplementary materials should align closely with the goals, objectives, and content of the EPP curriculum. This ensures that the materials reinforce what students are learning in class and contribute to instruction's overall coherence and effectiveness.

For example, *Develop a set of supplementary worksheets that directly align with the learning objectives outlined in the EPP curriculum. Ensure that the activities and exercises reinforce the concepts and skills covered in class.*

Assessment Integration. Supplementary materials should incorporate assessment tools and strategies to evaluate student learning outcomes. This could include formative assessments, quizzes, project-based assessments, or self-assessment activities to monitor progress and provide student feedback.

For example, *a digital quiz can be designed using an online*

platform to assess students' understanding of financial literacy concepts taught in the EPP curriculum. Provide immediate feedback and explanations for incorrect answers to support student learning.

They are learning Differentiation. Teachers should tailor supplementary materials to meet students' diverse needs and preferences. This involves providing multiple entry points, scaffolding support, and extension activities to accommodate varying learning styles, abilities, and interests.

For example, *Offer a menu of project options for a culminating activity in the EPP curriculum, allowing students to choose tasks that align with their interests and learning preferences. Provide scaffolding support and extension activities to accommodate diverse needs.*

The effective utilization of supplementary materials not only involves adapting to individual students' diverse learning needs but also encourages collaborative practices among educators and fosters active student participation in the learning process.

To effectively meet students' needs, it is crucial to consistently evaluate and modify supplementary materials in response to feedback, performance data, and changing educational requirements. This ongoing assessment and adjustment process guarantees that the materials stay current, interesting, and beneficial for enhancing student learning outcomes.

For example, *feedback from students regarding the effectiveness and relevance of the supplementary materials incorporated in the EPP classroom should be collected. This feedback will serve as valuable insight to further enhance and modify the materials to align more closely with the students' specific learning requirements and preferences, thus fostering a more conducive and engaging learning environment that supports their educational journey effectively.*

Collaborative Practices. Collaborative practices involving students empower them to take an active role in their education by creating, evaluating, and utilizing supplementary materials. Teachers foster a sense of ownership, responsibility, and agency by engaging students in collaborative processes, leading to enhanced learning outcomes and student satisfaction.

For example, *Students take on the role of facilitators by organizing and leading workshops or tutorials on specific topics within the EPP curriculum. Through these student-led sessions, classmates can learn from their peers, deepen their understanding, and explore different perspectives.*

Students' Involvement. Encouraging student participation in choosing, modifying, and assessing additional resources increases their sense of ownership in the learning process and fosters a greater degree of independence and responsibility for their education. Ultimately, this approach cultivates a more profound connection with the subject matter and facilitates a more engaging and meaningful educational experience.

For example, *Engage students actively in co-creating rubrics and assessment criteria for project-based assignments within*



the EPP curriculum. Foster a culture where students feel empowered to offer their insights on the selection of supplementary materials and resources that they perceive as both stimulating and beneficial for their learning journey.

Lastly, this shall be monitored and evaluated to determine the effectiveness of the developed and utilized supplementary materials in EPP.

Monitoring and Evaluation play a crucial role in the educational setting. It is indispensable to regularly monitor and evaluate supplementary materials to gauge their influence on student learning outcomes. This comprehensive process entails collecting pertinent data, actively seeking feedback from students and colleagues, and promptly implementing necessary adjustments to enhance overall effectiveness and ensure impactful learning experiences for all individuals involved in the academic journey.

Administering formative assessments at various points within the EPP curriculum allows for ongoing student progress and comprehension monitoring. Moreover, these assessments play a pivotal role in determining the effectiveness of the supplementary materials. By carefully analyzing the assessment data and student work samples collected, educators can gain valuable insights into students' areas of strength as well as pinpoint specific areas that may require improvement. This thorough analysis helps in making informed decisions on how best to tailor instructional strategies and adapt teaching methods to meet better the diverse learning needs of students across the curriculum.

4. CONCLUSION AND RECOMMENDATIONS

Based on the findings revealed, the conclusion was drawn: Although there are some indicators in developing and utilizing supplementary materials for E.P.P. shows very high competence across various indicators, overall result show no significant relationship is found between using curriculum alignment, developing differentiation, developing digital competence, and adapting to students' needs. Hence, accepting the null hypothesis becomes a plausible outcome considering these complexities. This highlights the diverse nature of teacher competencies and the unique considerations required for each skill set in developing and utilizing supplementary materials in E.P.P. The absence of a significant relationship in these areas suggests further investigation and potential intervention to bridge gaps or discrepancies. It underscores the complexity of teachers' roles and the multifaceted nature of their responsibilities in meeting the diverse needs of students. By acknowledging these nuances and tailoring support accordingly, educators can strive for continuous improvement and better cater to the evolving demands of the educational landscape.

Based on the findings and conclusions of the study, the following recommendations are hereby given:

1. To improve the development of supplementary materials for EPP, coordinators may establish a collaborative

platform, organize professional development sessions, and encourage cross-departmental collaboration to enrich resources and enhance effectiveness in classrooms.

2. School Heads and Master Teachers play a crucial role in recognizing and encouraging the effective utilization of supplementary materials within EPP classes. To foster this, they can introduce peer observation and feedback mechanisms. By sharing successful strategies and setting aside resources for collaborative training sessions, educators can enhance their teaching practices and ultimately benefit their students.
3. Future researchers are encouraged to employ the proposed framework for developing and utilizing supplementary materials to enhance the teaching process among EPP teachers. By assessing its effectiveness in improving teaching and learning processes, researchers can contribute valuable insights to the field of education and inform further advancements in instructional practices within the EPP subject area.

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