

Self-Efficacy of EPP/TLE/TVL Teachers' and Learners' Academic Performance

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Abstract

Self-efficacy is the belief in one's ability to accomplish tasks or reach objectives. The study investigated the extent of the Relationship between EPP/TLE/TVL teachers' self-efficacy and learners' academic performance. Data for this descriptive research was taken from 51 EPP, 10 TLE, 7 TVL teachers, and 259 students during the Academic Year 2020-2021 using a researcher's questionnaire that has passed the rigorous validity and reliability tests. The result indicates that *EPP/TLE/TVL Teachers* have a very high level in the distribution of learning modules while retrieval and the *Assessment of Progress were high. Furthermore*, students achieved a very satisfactory academic performance. This demonstrates a strong in applying knowledge and skills in their respective EPP/TLE/TVL subjects. There was no significance in the comparative analysis of teachers' demographic profile and self-efficacy, but a significant relationship existed between teachers' self-efficacy and learners' academic performance. The findings call for programs where teachers can expound their self-efficacy by sharing best practices to enhance student learning outcomes.

Keywords: Self-efficacy, EPP/TLE/TVL teachers, academic performance, distribution, retrieval

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Introduction

Rationale

The drive behind teacher education is the "acquisition of certain competencies related to aspects of classroom management, lesson planning, recording and reporting students" work leading to the achievement of prescribed for-life standards" (Darling-Hammond et al., 2020). Well-aligned and properly planned teacher education not only endorses that teachers are and will remain skilled and competent but also ensures persistent motivation to the teaching profession (OECD, 2019).

However, the teacher shortage is real, significant, growing, and worse than anybody thought (Garcia & Weiss, 2019). To overcome the teacher shortage, recruiting non-education teachers become the partial solution (OECD, 2021). In the EPP/TLE/TVL subjects, teachers are not only teaching the content of the lesson but also, to model the skills needed in a specific competency to the diverse (Padilla & Gonzales, (2021). However, several EPP/TLE/TVL teachers in the Philippines come from backgrounds unrelated to education. It is crucial to comprehend the self-efficacy levels of EPP/TLE/TVL teachers to enhance curriculum delivery and student outcomes (Zee & Koomen, 2016; Liu et al., 2022).

Literature Review

Research indicates that teachers' self-efficacy significantly influences their instructional practices and student outcomes. For instance, a study by Xiang et al. (2020) found that teachers with higher self-efficacy are more effective in implementing formative assessments, which are crucial for monitoring and supporting student learning. In Bangladesh, Rahman et al. (2022) investigated how technical-vocational track students managed modular learning during lockdowns. The study found that the availability of skill-based modules, the accessibility of teachers, and institutional initiatives to replicate real-world work through project-based examinations and video tutorials were all strongly associated with academic success.

According to Garcia and Dela Cruz (2021), two important elements affecting students' academic performance in EPP and TVL courses during the health crisis were teacher preparedness and the use of contextualized instructional materials. This aligns with the current study's findings, suggesting that bolstering teachers' confidence in assessing student understanding could improve academic performance. The effect of remote learning on Kenyan vocational education students was investigated by Mwangi and Nyagah (2022). They discovered that the lack of real-world examples and educational resources at home contributed significantly to the poorer academic achievement of students taking home economics, agriculture, and entrepreneurship courses. For instance, Dela Cruz (2024) found that higher levels of teacher self-efficacy in modular learning contexts were associated with improved student academic performance. Similarly, a study by Scherer et al. (2024) emphasized the



importance of self-efficacy in managing various teaching tasks, including the retrieval of learning materials, and its positive correlation with effective teaching practices.

Hence, Davis (2022) found that higher teacher efficacy in instructional strategies and classroom management was significantly associated with improved student performance in mathematics. Similarly, Han and Wang (2023) reported that teachers with high self-efficacy were more effective in implementing diverse assessment methods, leading to enhanced student engagement and learning outcomes. That there was a positive correlation between teacher self-efficacy and student academic achievement. Teachers with high self-efficacy are more likely to adopt effective instructional strategies, engage students actively, and provide meaningful assessments, leading to improved student outcomes. Institutions may consider mentorship programs, continuous professional training, and support systems to enhance teacher self-efficacy, ultimately benefiting student learning.

This aligns with Bandura's (1997) social cognitive theory, which emphasizes that teachers with higher self-efficacy are more effective in fostering student engagement and academic success. Furthermore, the results imply that teaching strategies, instructional delivery, and assessment practices in the EPP/TLE/TVL subjects were adequately implemented, ensuring that students acquired the necessary skills for their technical and vocational education. However, future studies may explore the long-term impact of teacher self-efficacy on student performance, particularly in post-pandemic education settings. This aligns with Bandura's Social Cognitive Theory, which posits that self-efficacy influences motivation, effort, and performance (Bandura, 1997). Recent empirical studies also support this Relationship. For instance, Zakeri et al. (2021) found that teachers with higher self-efficacy create more engaging and student-centered learning environments, resulting in better academic outcomes. Similarly, Llorent-Vaquero et al. (2022) reported that self-efficacious teachers provide better feedback and instructional support, leading to significant improvements in student achievement. These findings highlight the importance of fostering teacher confidence to enhance student learning experiences and performance.

Theoretical Underpinnings

This study is anchored in Self-Efficacy Theory by Albert Bandura (1997) and Constructivist Learning Theory by Bruner 1996 and Piaget, 1972, Self-Efficacy Theory which emphasizes individual beliefs that implement their capacity for the behavior needed to create a definite result. Self-efficacy extensively impacts how teachers execute their plans and react to challenges within the school setting (Liu et al., 2022). The Constructivist Learning Theory focuses on learner-centered instruction, which encourages learners to explore and apply ideas in practical contexts. Learners build understanding by connecting new material and what they already know, usually through practical, group, and problem-solving activities, instead of passively absorbing information (Alt, 2021).



Objectives

This paper aimed to determine the level of EPP/TLE/TVL teachers' self-efficacy and learners' academic performance. More specifically, it aimed to determine 1) the level of learners' academic performance during the academic year 2020-2021, 2) the significant difference in the level of self-efficacy of EPP/TLE/TVL teachers when they are grouped and compared according to the aforementioned variables, and 3) the Relationship in the level of self-efficacy of EPP/TLE/TVL teachers and level of learners' academic performance.

Methodology

This section details the research design, population and sampling, research instruments, data collection, analysis methods, and Ethical considerations to ensure research integrity.

Research Design

This paper used the descriptive-correlational research design to determine the level of self-efficacy of EPP/TLE/TVL teachers about learners' academic performance. A descriptive correlational study aims to characterize the associations between variables without trying to establish a causal relationship (Copeland, 2022). Additionally, it explains the elements and connections between them (Stangor & Walinga, 2019).

Respondents

This study used a total population technique to determine the respondents (51 EPP teachers, 10 TLE teachers, 7 TVL teachers, and 259 students).

Procedures for Data Collection

The result of the data collected, treated, tabulated, analyzed, and interpreted following the study's specific objective is presented in this part. A researcher-made questionnaire was employed. These include the respondents' profiles and the teacher's self-efficacy. Approval from the school's division superintendent and school head was sought. During the study, an orientation was implemented to complete the Google Form, and ethical considerations were thoroughly explained. Once all responses were gathered, the data was systematically organized and analyzed.

Data Analysis and Statistical Treatment

Appropriate statistical tools provided relevant and meaningful results throughout the research. Objective No. 1 used the descriptive analytical scheme and mean as statistical tools to determine the level of self-efficacy of EPP/TLE/TVL



teachers according to distribution, retrieval, and assessment. Objective No. 2 used the same analytical scheme and statistical tool to determine the level of learners' academic performance during the school year 2020-2021. Lastly, Objective No. 3 used the Spearman Rho to determine the significant Relationship, if any, between the level of self-efficacy of EPP/TLE/TVL teachers and the level of learners' academic performance.

Ethical Considerations

To guarantee the research study's ethical soundness, the researcher sent a letter seeking approval from the Schools Division Superintendent and the School Head to conduct the research study. Since the study was conducted online, the participants were orientated. As required by the current Data Privacy Act, they will not specifically provide their basic information to the public, and all information collected about the respondents was retained. Respondents can exclude or avoid answering any negative questions they believe to be unethical from the study questionnaire.

Results and Discussion

The data was collected, treated, tabulated, analyzed, and interpreted based on specific objectives with a statistical tool.

Table 1

Level of Self-efficacy of EPP/TLE/TVL Teachers in the Area Distribution

Area	Mean	Interpretation
A. Distribution		
1. The quick and efficient mode of distribution.	4.75	Very High Level
2. The acceptable and not bothersome frequency of distribution	4.49	Very High Level
3. On-time distribution of the modules and other learning materials.	4.61	Very High Level
4. Orderly distribution of modular distance learning.	4.57	Very High Level
5. Clear instructions in completing the assessed tasks.	4.59	Very High Level
6. Using a friendly/personal tone in distributing the learning modules.	4.65	Very High Level
7. Informing the parents on the manner of distribution of modules.	4.39	High Level
8. Observance of safety prevention protocols during the distribution of modules.	4.51	Very High Level
9. Organization and neatly bounding of the distributed self-learning modules in TLE/TVL.	4.39	High Level
10. Provision of sufficient opportunities to check students' understanding of the modules.	4.35	High Level
Overall Mean	4.53	Very High Level

Table 1 shows the level of self-efficacy of EPP/TLE/TVL teachers in the distribution area. It shows that teachers reported a very high level of self-efficacy, with an overall mean score of 4.53. The findings suggest that teachers feel highly confident in efficiently distributing learning materials.

A study by Xiang et al. (2020) found that teachers with higher self-efficacy are more effective in implementing formative assessments, which are crucial for monitoring and supporting student learning. In Bangladesh, Rahman et al. (2022)



investigated how technical-vocational track students managed modular learning during lockdowns. The study found that the availability of skill-based modules, the accessibility of teachers, and institutional initiatives to replicate real-world work through project-based examinations and video tutorials were all strongly associated with academic success.

According to Garcia and Dela Cruz (2021), teacher preparedness and contextualized instructional materials were two important elements affecting students' academic performance in EPP and TLE/ TVL subjects during the health crisis.

Table 2

Level of Self-efficacy of EPP/TLE/TVL Teachers in the Area of the Retrieval of Learning Modules

Area	Mean	Interpretation
B. On the Retrieval of Learning Modules		
1. Information on the manner of retrieval of modules.	4.43	High Level
2. Observation of safety prevention protocols observed during the retrieval of modules.	4.47	High Level
3. Quick and efficient mode of retrieval.	4.35	High Level
4. Acceptable and not bothersome frequency of your visits to school	4.55	Very High Level
5. On-time retrieval of the modules and other learning materials distributed by the school on time.	4.31	High Level
6. Overall, I am satisfied with the retrieval implementation of modular distance learning.	4.59	Very High Level
7. Sufficient opportunities were provided to check the students' understanding of the module.	4.49	Very High Level
8. The delays in the retrieval of modules are almost 6 days or more.	4.39	High Level
9. Coordination with the parents for the learners' remediation or assistance during the retrieval, if needed.	4.39	High Level
10. Are you overall satisfied with the implementation of the retrieval of modular distance learning?	4.43	High Level
Overall Mean	4.44	High Level

Table 2 shows the Level of Self-efficacy of EPP/TLE/TVL Teachers in the Area on the Retrieval of Learning Modules. It was revealed that teachers reported a very high level of self-efficacy, with an overall mean score of 4.44. The findings suggest that teachers feel highly confident while adhering to safety protocols during module retrieval.

Dela Cruz (2024) found that higher levels of teacher self-efficacy in modular learning contexts were associated with improved student academic performance. Similarly, a study by Scherer et al. (2024) emphasized the importance of self-efficacy in managing various teaching tasks, including the retrieval of learning materials, and its positive correlation with effective teaching practices.

Table 3

Level of Self-efficacy of EPP/TLE/TVL Teachers in the Area Assessment of Progress

Area	Mean	Interpretation
C. Assessment of Progress		
1. Prompt grades/feedback of students' work.	4.49	Very High Level
2. Easy tracking of students' learning progress.	4.51	Very High Level
3. Instruction in modules is clearly stated and can be well understood by the students.	4.37	High Level



4. Practice tests and activities in the modules age-appropriate.	4.51	Very High Level
5. Creating questions and activities in different levels of difficulty and stimulating your students' reasoning and creativity	4.59	Very High Level
6. Time frame in distributing the modules.	4.51	Very High Level
7. Integrating moral values, contents, information and illustration in the module consistent with moral values and proper conduct?	4.61	Very High Level
8. Satisfaction with the quality of the module, which provides good learning opportunities and supports independent learning.	4.35	High Level
9. Creative questions and activities at different levels of difficulty and stimulate your student's reasoning and creativity?	4.43	High Level
10. Clear instructions in modules as stated and can be well understood.	4.33	High Level
Overall Mean	4.47	High Level

Table 3 presents the Level of Self-efficacy of EPP/TLE/TVL Teachers in the Area of assessment of Progress. It shows that the overall mean score is 4.47, indicating a high level of self-efficacy in this area. These findings suggest that teachers feel particularly confident in designing diverse assessment tasks that challenge students' cognitive abilities, which is crucial for fostering critical thinking and creativity.

Hence, Davis (2022) found that higher teacher efficacy in instructional strategies and classroom management was significantly associated with improved student performance in mathematics. Similarly, Han and Wang (2023) reported that teachers with high self-efficacy were more effective in implementing diverse assessment methods, leading to enhanced student engagement and learning outcomes.

Table 4

Level of Learners Academic Performance during the School Year 2020-2021

Variable	Mean	Interpretation
Learners Academic Performance	86.99	Very Satisfactory

Table 4 shows the Level of Learners Academic Performance during the School Year 2020-2021. The results indicate that students achieved an average academic performance score of 86.99, which is categorized as very satisfactory. This suggests that students demonstrate a strong understanding of the competencies outlined in the curriculum, effectively applying knowledge and skills in their respective EPP/TLE/TVL subjects. This aligns with Bandura's (1997) social cognitive theory, which emphasizes that teachers with higher self-efficacy are more effective in fostering student engagement and academic success. Furthermore, the results imply that teaching strategies, instructional delivery, and assessment practices in the EPP/TLE/TVL subjects were adequately implemented, ensuring that students acquired the necessary skills for their technical and vocational education.

Table 5

Relationship in the Level of Self-efficacy of EPP/TLE/TVL Teachers and Level of Learners Academic Performance

Variable	rho	p-value	Sig. level	Interpretation
Level of Self-Efficacy	1.000	0.000	0.05	Significant



Learners' Academic Performance

Table 5 shows the relationship between EPP/TLE/TVL teachers' self-efficacy level and learners' academic performance. The results indicate a significant relationship between these variables, as evidenced by the p-value of 0.000 below the 0.05 significance threshold. The results emphasize the critical role of teacher self-efficacy in enhancing student learning and academic performance. Teachers with high self-efficacy are more likely to adopt effective instructional strategies, engage students actively, and provide meaningful assessments, leading to improved student outcomes.

For instance, Zakeri et al. (2021) found that teachers with higher self-efficacy create more engaging and student-centered learning environments, resulting in better academic outcomes. Similarly, Llorent-Vaquero et al. (2022) reported that self-efficacious teachers provide better feedback and instructional support, significantly improving student achievement. These findings highlight the importance of fostering teacher confidence to enhance student learning experiences and performance.

Conclusion

Based on the study's results reveal that teachers have very high levels of self-efficacy in the distribution and retrieval of learning modules while a high level in the assessment of progress. The students achieved a very satisfactory academic year in 2020 – 2021. Furthermore, there is a significant Relationship between the Level of Self-efficacy of EPP/TLE/TVL Teachers and the Level of Learners' Academic Performance. This finding calls for providing and strengthening teacher training and seminar workshops. This will prepare teachers ' self-efficacy in enhancing student learning and academic performance. Teachers with high self-efficacy are more likely to adopt effective instructional strategies, engage students actively, and provide meaningful assessments, leading to improved student outcomes.

Acknowledgement

The researcher would like to express his profound gratitude to everyone who provided any assistance in carrying out this study. To Sir Jolly G. Gariando, Jr., for the constant guidance and unwavering support, and to the Palen Members for their invaluable input and feedback, which have substantially strengthened the foundation of this research endeavor. Also, thank everyone who helped and shared their remarkable efforts in finishing this study.

Conflict of Interest

The researcher affirms no conflict of interest associated with this study.

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