



# THE RELATIONSHIP BETWEEN TEACHERS SELF-EFFICACY AND STUDENTS' ACADEMIC ACHIEVEMENT

Lotchie G. Degamo<sup>1</sup>, Elizabeth D. Dioso, EDD.<sup>2</sup>

<sup>1</sup>Teacher – Talian Elementary School

<sup>2</sup>Adviser – Assumption College of Nabunturan

Article DOI: <https://doi.org/10.36713/epra23225>

DOI No: 10.36713/epra23225

## ABSTRACT

This study aimed to investigate the relationship between teacher's self-efficacy and academic achievement of the students at Katipunan Integrated School, Coronobe Integrated School and New Albay National High School. The research employed a quantitative research design, utilizing a survey questionnaire as the primary data-gathering tool. The participants were 100 Grade 10 students randomly selected. The grades were gathered for the academic performance and the survey questionnaire adapted from Bandura's Teachers' Self-Efficacy (TSE). The data collected were analyzed using statistical methods such as mean, standard deviation, and Pearson correlations. The results showed that there is no significant relationship between teachers' self-efficacy and academic achievement of students. This implied that the variables in the context of the current study do not significantly relate to one another. The study recommends that students should prioritize their academic responsibilities to achieve better academic performance.

**KEYWORDS:** Teachers' Self-Efficacy, Teachers' Belief, Computer Self-Efficacy, Instructional Self-Efficacy, Technology Integration Self-Efficacy, Academic Performance, Descriptive Correlational Study.

## INTRODUCTION

### The Problem and Its Background

Teachers with positive levels of self-efficacy are exposed to new teaching methodologies and techniques that are needed for the students to learn better the lessons and able to display a high level of academic performance. According to Ross and Bruce (2007), one of the best indicators of student's accomplishments is teacher self-efficacy both individually and collectively. Many instructors today feel unprepared and ineffective, lacking the confidence and empowerment necessary to effectively engage with students. Because of their disengagement, student achievement keeps failing. A teacher's and their colleague's confidence in their ability to provide meaningful and sufficient teaching to support students' performance at or beyond mandated academic levels is one of the many factors that will determine the future success of our nation's educational system.

A study was conducted by Shahzad (2017) in Chiltan Town of Quetta City, Pakistan with the objective to find out the impact of teacher self-efficacy on the secondary school students' academic achievement. For this purpose, 60 secondary school teachers and a hundred secondary school students in Chiltan Town of Quetta City were randomly selected. To collect the data, teacher self-efficacy questionnaire for teachers was used and to measure students' academic achievement a test was developed. Data were analyzed through Pearson Correlation and Multiple Regressions. The findings of the study revealed that teacher self-efficacy has a positive impact on the students' academic achievement.

The study conducted by Padohinog et al. (2024) in Bacoor, Cavite, Philippines investigated the self-efficacy of the teachers and student engagement in the Philippine setting. Convenience sampling was chosen with 139 teachers in the Philippines. An online survey questionnaire was used in this study, whereas data were analyzed with weighted mean and one-way analysis of variance. Analysis revealed that student engagement has become the most positive indicator of teacher self-efficacy among the variables. The result also showed that teachers indicate a significant positive relationship among achievement goals, instructional strategies, and student engagement which assumes their strong development. The study suggested that teachers may capitalize on the essential needs and interests of the students for active and cooperative learning which eventually improve their academic performance.

In Talian Elementary School, where the researcher is currently teaching, she observed that some teachers who have been in the teaching profession for a quite long time appear to lack persistence in carrying out their duties in the classroom. These seasoned educators frequently delegate more challenging tasks to newly hired or younger teachers. Additionally, they tend to show minimal enthusiasm in their teaching practices and are often reluctant to embrace new trends in education-particularly in the integration of technology in instruction. Some of them express doubt in their ability to keep pace with the skills and strategies employed by newer teachers, which may indicate a lower level of self-efficacy. Given these observations, the researcher is motivated to investigate whether a teacher's self-efficacy has a significant relationship



with the academic performance of students. Teachers' self-efficacy-defined as their belief in their own ability to plan, organize, and carry out tasks necessary to achieve desired educational outcomes- plays a crucial role in how they engage students, implement teaching strategies, and adapt to innovations in pedagogy. When teachers possess a high level of self-efficacy, they are more likely to set challenging goals, persist through difficulties, and adopt new teaching methods, all of which can positively impact student learning and achievement. Understanding this relationship is essential, especially in the current educational landscape where technological advancement and learner diversity demand dynamic and confident teaching approaches. This study aims to provide insights that could help school leaders and policymakers develop professional development programs that not only enhance teacher competence but also build their confidence and willingness to grow professionally. Ultimately, fostering high self-efficacy among teachers could contribute to creating a more effective, motivated, and student-centered learning environment. This is the reason why the researcher would like to venture to determine if the teachers' self-efficacy has something to do with the academic performance of the students.

**Objectives**

The study aimed to determine the relationship between teachers' self-efficacy and the academic performance of the students for school year 2024- 2025. Specifically, it seeks to answer the following questions:

1. What is the level of self-efficacy of teachers in terms of: 1.1) teachers' beliefs, 1.2) computer self-efficacy, 1.3) instructional self-efficacy and 1.4) technology integration self-efficacy?
2. What is the academic performance of students as measured by their test scores?
3. Is there significant relationship between the self-efficacy of teachers and the academic performance of the students?

**METHODOLOGY**

This chapter presents the research design, the research locale, research respondents, research instruments, validation of the instrument, research procedure, statistical tools used in the study and ethical consideration.

**Research Design**

A quantitative descriptive-correlational research design was used in this study. Quantitative method involves the processes of collecting, analyzing, interpreting, and writing the results of a study. Specific methods exist in survey research that relate to identifying a sample and population, specifying the type of design, collecting and analyzing data, presenting the results,

**Range of Mean**

4.50-5.00  
3.50-4.49  
2.50-3.49  
1.50-2.49  
1.00-1.49

**Descriptive Equivalent**

Always  
Often  
Sometimes  
Rarely  
Never

**Interpretation**

Always manifested.  
Often manifested.  
Sometimes manifested.  
Rarely manifested.  
Never manifested.

making interpretation, and writing the research in a manner consistent with a survey study (Creswell, 2014). This study utilized the correlational approach in discovering the relationships among variables. The descriptive-correlational research design was appropriate in this study since the researcher does not intend to manipulate the variables. The study was focused on the description of the phenomena and to determine the relationship between the identified variables. This design is appropriate to use in this study since it will determine if there is a relationship between teachers' self-efficacy and the academic performance of the students. All the variables in this study cannot be controlled and manipulated. The data on the teachers' efficacy can be collected through surveys while the academic performance which is dependent variable is measured through the scores of the test in Science, Mathematics, and English.

**Research Locale**

This study was conducted in the Municipality of Maragusan, Davao de Oro. It was considered as a first-class municipality and the farthest municipality in the province and is composed of 24 barangays. The researcher chose public secondary schools in Maragusan East District as the respondents of the study. These schools are Coronobe Integrated School, Katipunan Integrated School and New Albay National High School.

**Research Respondents**

The respondents of this study were Grade 10 student who are enrolled in Coronobe Integrated School, Katipunan Integrated School, and New Albay National High School for school year 2024-2025. Using the universal sampling technique, all student populations in Grade 10 are considered as the respondents.

**Research Instrument**

Data were gathered using an adapted questionnaire. In an introductory section, the respondents were acquainted with the objective of the study and were asked to participate by filling out the questionnaire. The adapted questionnaire was taken from Bandura's Instrument on Teachers' Self-efficacy Scale with four indicators: teachers' belief, computer self-efficacy, instructional self-efficacy, and technology integration self-efficacy. On the other hand, the academic performance of the students was measured in their test scores in Mathematics, Science, and English. A five-point Likert scale was used to answer each of the items given. The manifestation of each of the indicators was described as follows:

### Validation of Instrument

The research questionnaire was being validated by five experts in the field to check the suitability of the items included in the instrument. After the validation, the instrument was pilot-tested to establish the reliability of the research instrument. A group of 20 teachers who were not included in the study will be taken for the pilot testing of the instrument. Any observations made during the pilot testing; the researcher was immediately made some mechanisms to improve the questionnaire. With the use of Cronbach Alpha, the reliability of the questionnaire was determined.

### Research Procedure

The study followed standard procedure before the researcher proceeded to data collection such as: Permission to Conduct

### Location Map of the Respondent Schools in Maragusan East District



## RESULTS

Included in this chapter are the presentation, analysis and interpretation of the results. The topics are discussed based on the presentation of the problems.

### What is the level of self-efficacy of teachers in terms of?

#### 1.1 Teachers' Belief

The result shows that the teachers have a high degree of self-efficacy, their aggregate mean score is 4.29, which is the descriptive equivalent of "Often". This implies that teachers generally have faith in their capacity to use instructional global tactics, engage students in learning, and manage classroom tasks. In summary, the mean score of 4.29 indicates high levels of self-efficacy, which bode well for the general efficacy and morale of the teaching staff.

#### 1.2 Computer Self-Efficacy

According to the data, teachers have a high level of computer self-efficacy, as indicated by their descriptive equivalent of

the Study, Collation and Tabulation of Data, Analysis and Interpretation and Ethical Consideration.

### Statistical Tool

The responses to the items in the questionnaire were analyzed and interpreted using the appropriate statistical tools as follows:

**Mean.** This is used to describe the level of self-efficacy of the teachers which is believed to affect the academic performance of the students.

**Pearson r.** This test is used to determine the relationship between the teachers' self-efficacy and the academic performance of the students.

"Often" and overall mean score of 4.12. This finding implies that the majority of educators are generally confident in their capacity to use computer technologies in the classroom and for other related professional tasks.

#### 1.3 Instructional Self Efficacy

With an overall mean score of 4.11, which is the descriptive equivalent of "Often", the results demonstrate that teachers have a high level of instructional self-efficacy. This indicates that teachers generally have faith in their capacity to successfully develop, carry out, and assess instructional strategies in order to advance student learning.

#### 1.4 Technology Integration Self-Efficacy

As demonstrated by overall mean score of 4.14, which is descriptively equivalent to "Often", the study found that teachers have a high degree of technology integration self-efficacy. In order to improve learning and instructional delivery, teachers are generally confident in their ability to



successfully integrate technology into their teaching practices, according to these results.

**Level of self-efficacy of teachers in terms of: teachers’ beliefs, computer self-efficacy, instructional self-efficacy, and technology integration self-efficacy.**

The over all mean score of 4.55, which is classified as “Always”, shows a very high degree of self-efficacy. According to this finding, the teachers are very confident in their capability to effectively manage classroom dynamics, make use of technological resources. Create and deliver high quality training and incorporate technology into their teaching strategy.

**What is the academic performance of students as measured by their test scores?**

A mean score of 4.31 – which is interpreted as “Often” – is indicative of a high level of academic achievement among students, according to the analysis of their test scores. Accordingly, the majority of students are likely to comprehend and successfully apply the material covered in class, producing positive test results. Even though this performance is praiseworthy, it is not yet at the highest level of proficiency, suggesting that there is still opportunity for academic support and improvement.

**Is there significant relationship between teachers’ self-efficacy and students’ academic performance?**

A correlation analysis was done to see if there is a significant relationship between teachers’ self-efficacy and students’ academic performance. The outcome showed a p-value of 0.295 and a correlation coefficient of  $r= 0.106$ . There is a very weak positive relationship, according to the correlation coefficient ( $r= 0.106$ ). However, the observed relationship is not regarded as statistically because the p-value ( $p= 0.295$ ) is greater than the standard alpha threshold of 0.05. Thus, the decision rule (DR) concludes that there is no meaningful connection between students’ academic achievement and teachers’ self-efficacy. This show that differences in teachers’ self-efficacy do not significantly or quantifiably affect students’ test scores in the context of this study.

A correlation coefficient of  $r= 0.106$  with a p-value of 0.295 was obtained when the relationship between teachers’ self-efficacy and student’s academic performance was examined. Since the p-value is higher than the 0.5 significance level, the result shows a very weak positive correlation that is not statistically significant. This implies that the variables in the context of the current study do not significantly relate to one another.

**Recommendations**

The following suggestions are put forth in view of the results showing no correlation between students’ academic achievement and teachers’ self-efficacy.

1. Classroom observations is one of the ways which teachers’ efficacy can be assessed.
2. To fully comprehend the wider effects of teachers’ efficacy, academic performance should be evaluated in conjunction with other metrics like student motivation, behavior, and involvement.
3. School should continue to support professional development initiatives because even though self-efficacy did not directly affect test scores in this study, it is still crucial for teachers’ confidence and professional growth.
4. Research should look into their possible factors that affect academic performance, like teaching methods, student participation, classroom dynamics, or socio-economic background.

**Conclusion**

Based on the findings, it was found out that the level of self-efficacy of teachers in terms of teachers’ belief, computer self-efficacy, instructional self-efficacy, and technology integration self-efficacy are rated as “Always” which means that all indicators are always manifested and as to the academic performance of students as measured by their test scores are rated as “Often” which means that all indicators are often manifested. Further, it was also revealed that there was no significant relationship between teachers’ self-efficacy and academic achievement of students.

**Table 1**  
**Respondents of the Study**

Name of Schools	No. of Teachers	No. of Grade 10 students Respondents
Coronobe Integrated School	9	28
Katipunan Integrated School	9	22
New Albay National High School	19	50
Total	37	100

**Table 2**  
**Teachers’ Belief**

Teachers’ Beliefs	Mean	Descriptive Equivalent
1. Help students think critically.	4.55	Always
2. Motivate students who show low interest in school work.	4.28	Often
3. Make expectations clear about student behaviour.	4.19	Often
4. Respond to difficult questions from the students.	4.08	Often
5. Help students value learning.	4.60	Always
6. Foster students’ creativity.	4.26	Often
7. Improve understanding of a student who is failing.	4.31	Often
8. Use a variety of assessment strategies.	4.19	Often



9. Improve an alternative explanation for example when students are confused.	4.24	Often
10. Implement alternative strategies in the classroom.	4.19	Often
<b>Overall Mean</b>	<b>4.29</b>	<b>Often</b>

**Table 3**  
**Computer Self-Efficacy**

Computer Self-Efficacy	Mean	Descriptive Equivalent
1. Use ICT efficiently.	4.20	Often
2. Learn to use new ICT tools independently.	4.08	Often
3. Find a useful ICT application in the internet if need to find one.	4.13	Often
4. Able to download programs on the internet.	4.20	Often
5. Solve technical problems when use ICT.	4.00	Often
<b>Overall Mean</b>	<b>4.12</b>	<b>Often</b>

**Table 4**  
**Instructional Self-Efficacy**

Instructional Self-Efficacy	Mean	Descriptive Equivalent
1. Increase students' memory of what have been taught in previous lessons.	4.29	Often
2. Keep students on task on difficult assignments.	3.85	Often
3. Promote learning when there is lack of support from home.	4.07	Often
4. Get children to do their homework.	4.17	Often
5. Overcome the influence of adverse community conditions on student's learning.	4.17	Often
<b>Overall Mean</b>	<b>4.11</b>	<b>Often</b>

**Table 5**  
**Technology Self-Efficacy**

Technology Integration Self-Efficacy	Mean	Descriptive Equivalent
1. Apply ICT to enhance student learning.	4.39	Often
2. Create meaningful learning experience for the students with ICT.	4.21	Often
3. Motivate students to use ICT in their learning.	4.00	Often
4. Find ways to apply ICT in teaching.	4.07	Often
5. Integrate ICT as a meaningful part of the lesson.	4.04	Often
<b>Overall Mean</b>	<b>4.14</b>	<b>Often</b>

**Table 6**  
**Students' Academic Achievement/ Performance**

Grades Range	Frequency	Percentage
75 – 79	12	12%
80 – 89	58	58%
90 – 1 00	30	30%
<b>Total</b>	<b>100</b>	<b>100%</b>

**Table 7**  
**Correlation between the Self-Efficacy of Teachers and the Academic Performance of the Students**

Pearson Correlations			
		Efficacy	Academic Performance
Efficacy	Pearson' s r		
	p-value		
Academic Performance	Pearson' s r	0.106	
	p-value	0.295	

$r = 0.106$   $p = 0.295$



## REFERENCES

1. Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage URL: <https://doi.org/10.5539/elt.v12n5p40>
2. Padohinog, E., Liwanag, B., & Balsicas, N. (2024). Teacher self-efficacy through achievement goals, instructional strategies, and student engagement in the Philippine setting. *Asia Pacific Higher Education Research Journal (APHER)*, 11(1).
3. Ross, J. A., & Bruce, C. (2007). Professional development effects on teacher efficacy. *The Journal of Educational Research*, 101 (1), 50-60.
4. Shahzad, K. & Naureen, S. (2017). Impact of Teacher Self-Efficacy on Secondary School Students' Academic Achievement. *Journal of Education and Educational Development*, v4 n1 p48-72 Jun 2017.