



The Relationship between Self-Efficacy, Digital Literacy and Students' English Achievement in Grade Eight at SMP Islam Al Azhar 37 Pekanbaru

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Article Info	Abstract
Article History Received: 2025-05-13 Revised: 2025-06-23 Published: 2025-07-09 Keywords: <i>Self Efficacy; Digital Literacy; Learning Achievement.</i>	<p>This study is a correlational quantitative research that aims to determine the Relationship between Self Efficacy and Digital Literacy on English Learning Achievement of Grade VIII Students of Al Azhar Islamic Junior High School 37 Pekanbaru. The formulation of the problem in this study is "Is there a Relationship between Self Efficacy and Digital Literacy on the English Learning Achievement of Grade VIII Students of Al Azhar Islamic Junior High School 37 Pekanbaru?". The population of this study is all students at Al Azhar Islamic Junior High School 37 Pekanbaru, with a sample of grade VIII students. The instruments used to collect data in this study consisted of questionnaires and documentation. From the analysis of the data obtained, it can be concluded that there is a relationship between Self Efficacy and Digital Literacy on the English Learning Achievement of Grade VIII Students of Al Azhar Islamic Junior High School 37 Pekanbaru. This is evidenced by the value of F calculated (56,513) > F table (3,119) or a significant level (0.000) < 0.058 so that H0 is rejected and Ha is accepted, which means that there is a relationship between Self Efficacy and Digital Literacy on the English Learning Achievement of Grade VIII Students of Al Azhar Islamic Junior High School 37 Pekanbaru.</p>
Artikel Info	Abstrak
Sejarah Artikel Diterima: 2025-05-13 Direvisi: 2025-06-23 Dipublikasi: 2025-07-09 Kata kunci: <i>Efikasi Diri; Literasi Digital; Prestasi Belajar;</i>	<p>Penelitian ini merupakan penelitian kuantitatif korelasional yang bertujuan untuk mengetahui hubungan antara Efikasi Diri dan Literasi Digital terhadap Prestasi Belajar Bahasa Inggris siswa kelas VIII SMP Islam Al Azhar 37 Pekanbaru. Rumusan masalah dalam penelitian ini adalah "Apakah terdapat hubungan antara Efikasi Diri dan Literasi Digital terhadap Prestasi Belajar Bahasa Inggris siswa kelas VIII SMP Islam Al Azhar 37 Pekanbaru?". Populasi dalam penelitian ini adalah seluruh siswa SMP Islam Al Azhar 37 Pekanbaru, dengan sampel siswa kelas VIII. Instrumen yang digunakan untuk mengumpulkan data dalam penelitian ini terdiri dari angket dan dokumentasi. Dari hasil analisis data yang diperoleh, dapat disimpulkan bahwa terdapat hubungan antara Efikasi Diri dan Literasi Digital terhadap Prestasi Belajar Bahasa Inggris siswa kelas VIII SMP Islam Al Azhar 37 Pekanbaru. Hal ini dibuktikan dengan nilai F hitung (56,513) > F tabel (3,119) atau tingkat signifikansi (0,000) < 0,058 sehingga H0 ditolak dan Ha diterima, yang berarti bahwa terdapat hubungan antara Efikasi Diri dan Literasi Digital terhadap Prestasi Belajar Bahasa Inggris siswa kelas VIII SMP Islam Al Azhar 37 Pekanbaru.</p>

I. INTRODUCTION

English learning at the junior high school level, including SMP Al Azhar 37 Pekanbaru, faces a variety of complex problems. As a foreign language, English is often considered hard by students since it requires one to master several linguistic skills such as reading, writing, listening, and speaking. These challenges have been further complicated by students having low self-confidence or self-efficacy and narrow digital literacy in learning, greatly affecting their learning outcomes.

According to Bandura, self-efficacy is defined as a belief in one's capability to execute an action required to attain an outcome or fulfill a certain function. In academic settings, students' self-

efficacy would determine the level of their efforts, persistence, and accomplishments. Those students who view themselves as highly self-efficient develop more confidence to surmount difficulties, become more active participants in learning activities, and are more persistent in completing tasks, including those relevant to English learning (Bandura, 1997).

Self-efficacy is who defined it as the belief in one's capabilities to effectively organize and execute the necessary actions required to achieve specific goals. Education is an extensively researched area in terms of self-efficacy, encompassing teachers who instruct students ranging from elementary school children to university-level adults (Yao, 1997). On the

contrary, the student with low self-efficacy always feel anxious and doubt themselves and easily give up in the problem solving that makes them lower academic achievement.

In addition, digital literacy has become one important aspect of English education in this modern era. Gilster points out that the person with digital literacy ability can understand, locate, evaluate and use the information while using the digital technology (Glistter, 1997). Digital literacy in the learning of English provides students with access to a variety of learning resources, such as language learning apps, interactive videos, and authentic online materials. Digitally literate students will have more ease in comprehending the concepts of English and applying what they have learned to real-life situations.

Digital literacy has sometimes even led various researchers to use both literacy interchangeably. This may be due to the fact that the first computer comes to mind when it comes to digital tools, that is, the computer represents digitalization and digital tools. This can be given as evidence of the interaction between digital literacy and other types of literacy (Fatima, 2023).

On the other hand, students who are not digitally literate will not be able to use technology as a tool for learning. Technology in education is who supported technology use to aid in foreign language learning. The benefits noted here include heightened student motivation, an opportunity for language practice in an interactive environment, and the opportunity for exposure to authentic resources. These are privileges which will only be applicable to those with adequate digital literacy. This relation between self-efficacy, digital literacy, and academic success is further supported by Zimmerman and Schunk who indicated that students with developed confidence in their learning abilities and able to stand up to the challenges of modern technologies show better academic performance, thus suggesting that the two factors support one another in influencing the students' learning outcomes (Zimmerman, 2011).

Al Azhar Islamic Junior High School 37 Pekanbaru was established because of the development of Al Azhar Islamic Boarding School Foundation (YPI) schools throughout Indonesia. Seeing the condition of Pekanbaru which is the capital of the province and the response to the high expectations of the community about the need for quality Islamic educational institutions

that can ensure the quality of religious and academic education integrally. To maintain the quality of religious and academic education, Al Azhar Islamic Junior High School 37 Pekanbaru implements a learning program guided by the National Curriculum and the YPI Al Azhar Primary and Secondary Education Curriculum. The implementation of the curriculum is based on Pancasila and based on the Islamic faith, sourced from the Quran, and sunnah.

The rapid development of technology is an opportunity as well as a challenge in education. The use of the right technology can have a good impact on the students of Al Azhar Islamic Junior High School 37 Pekanbaru. Based on this, Al Azhar Islamic Junior High School 37 Pekanbaru developed the Digital Smart Classroom program. This program aims to make learning more interesting and develop students' creativity in using their learning tools. The learning tool used is the iPad because it has a long battery life and is more mobile to use. In addition, various excellent programs are carried out in the context of developing students to excel. These achievements include academic and non-academic achievements. This makes graduates of Al Azhar Islamic Junior High School 37 Pekanbaru excel in achievement and are civilized in accordance with social and religious norms.

From the first observation conducted by the researcher, it was found that there is a problem faced by students in learning English; one of them is the lack of self-confidence in learning English. Some students feel that learning English is a difficult and intimidating subject; it makes them passive and less motivated. Whereas technology has hugely improved, it should act as a conduit for enhancing the learning skills of students in English. In fact, at present, almost all students are able to use smartphones, which should be used as a means for learning English. It is the same kind of situation that occurs with the eighth-grade students at SMP Al Azhar 37 Pekanbaru, and this situation affects their academic performance. English Achievement at the Eight Grade of SMP Islam Al Azhar 37 Pekanbaru have not reached the minimum score limit of students, This is evidenced by the fact that there are still many student scores that do not reach the minimum limit of 75 score.

Considering the identified research gap and explanation above, the researcher conducted research entitled "The Relationship between Self-Efficacy, Digital Literacy and Students' English Achievement in Grade Eight at SMP Islam Al Azhar 37 Pekanbaru".

II. METHOD

This study employed a quantitative correlational research design, which is rooted in the positivist paradigm and aims to examine the statistical relationship between variables. According to Creswell (2012), the quantitative method is used to test objective theories by examining the relationship among variables, which can be measured using instruments and analyzed using statistical procedures. In this context, the researcher sought to determine the relationship between self-efficacy and digital literacy and their influence on students' English learning achievement.

Quantitative research is characterized by its emphasis on measuring variables numerically and analyzing data with statistical tools to test hypotheses or answer specific research questions (Gay, Mills, & Airasian, 2011). This approach is particularly effective for establishing patterns and relationships among variables within a defined population. Furthermore, the correlational aspect of the research is concerned with discovering whether a relationship exists between two or more quantifiable variables and how strong that relationship is, as stated by Fraenkel, Wallen, and Hyun (2012). Correlational research does not imply causation but rather identifies the degree to which variables move in relation to one another.

The population of the research refers to the total number of individuals from which data can be drawn. In this study, the population consisted of eighth-grade students at SMP Islam Al Azhar 37 Pekanbaru during the 2024–2025 academic year. The total number of students across four classes was 78. The sample was drawn directly from this population, and because the size was manageable, the entire population was used as the sample in this research, which is commonly referred to as total sampling. According to Sugiyono (2016), total sampling is a technique where the entire population is used as the research sample when the population is relatively small.

To collect data, the researcher used instruments that are essential for acquiring relevant information systematically and accurately. Arikunto (2010) emphasized that a research instrument is a tool used to collect data to ensure that the process is efficient, systematic, accurate, and easy to analyze. In this study, two main instruments were used: questionnaires and documentation. The questionnaire was developed to measure students' self-efficacy and digital literacy. It consisted of structured items

with Likert-scale responses, allowing the researcher to quantify student perceptions and experiences. Documentation, as another method of data collection, involved gathering existing records and information such as student grades, which served as the indicator of English learning achievement.

The data analysis technique applied in this study was based on statistical calculations. To assess the relationship between variables, the researcher calculated the mean (average) score for each variable. This technique involves summing the total responses for each variable and dividing it by the number of respondents, as described by Nazir (2011). This basic statistical approach provided a foundation for further analysis, including the use of correlation tests to examine the strength and direction of the relationships between self-efficacy, digital literacy, and English learning achievement.

In summary, the use of a quantitative correlational approach enabled the researcher to objectively investigate the interconnections between self-efficacy, digital literacy, and academic performance. By utilizing established instruments and statistical methods, this study ensured reliability, validity, and clarity in the research findings.

III. RESULT AND DISCUSSION

A. Result

The value of the correlation coefficient (R) between the independent variable and the dependent variable was 0.775 which was located in the range of 0.600 – 0.799 with a strong category. This means that there is a strong relationship between self-efficacy and digital literacy and students' English achievement.

Then a determination coefficient value (R^2) of 0.601 was obtained. This means that 60.1% of learning outcomes are influenced by self-efficacy and digital literacy. While the remaining 39.9% was influenced by other variables that were not included in this regression model

1. Correlation Coefficient (R) and Determination (R²)

Tabel 1. Test Relationship Between Self-Efficacy And Digital Literacy And Students' English Achievemet

Model Summary ^b					
Type	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.775a	.601	.590	7.77282	2.066
a. Predictors: (Constant), Digital Literacy, Self Efficacy					
b. Variable Dependent: English Achievement					

And in Simultaneous Test (F Test) we know the F value is calculated as 56.513 with a significance of 0.000. While the value of F is tabled at a significance level of 5% with the equation is 3.119. Thus, the result of F calculation (56.513) > F table (3.119) or significance (0.000) < 0.05 is obtained. Thus, it can be known that self-efficacy and digital literacy together have a significant effect on English achievement.

2. Simultaneous Test (F Test)

Tabel 2. Significant Effect From Self-Efficacy And Digital Literacy Together On English Achievement

NEW ERA					
Type	Sum of Squares	Df	Mean Square	F	Sig.
Regression	6828.704	2	3414.352	56.513	.000b
1 Residual	4531.258	75	60.417		
Total	11359.962	77			
a. Variable Dependent: Completion					
b. Predictors: (Constant), Digital Literacy, Self Efficacy					

And from Partial Regression Coefficient Test (T Test) Self efficacy. Obtained a calculated t value (8.893) > t table (1.992) or Sig. (0.000) < 0.05. This means that self-efficacy has a significant effect on English Achievement.

3. Partial Regression Coefficient Test (T Test)

Tabel 3. Self-efficacy has a significant effect on English Achievement

Coefficient					
Type	Unstandardiz ed Coefficients	Standa rdized Coeff icients	T	Sig.	
	B	Std. Error			
(Constant)	10.389	6.410		1.621	.109
1 Self Efficacy	.407	.046	.658	8.893	.000
a. Variable Dependent: Completion					

Digital literacy. The value of t calculated (4.236) > t table (1.992) or Sig. (0.000) < 0.05 was obtained. This means that digital literacy has a significant effect on English Achievement.

4. Partial Regression Coefficient Test (T Test)

Tabel 4. Digital Literacy has a significant effect on English Achievement

Coefficient					
Type	Unstandardiz	Standard		T	Sig.
	ed Coefficients	zed Coefficients			
	B	Std. Error	Beta		
(Constant)	10.389	6.410		1.621	.109
1 Digital Literacy	.261	.062	.313	4.236	.000
a. Variable Dependent: Completion					

And from Multiple Regression Equation:

$$\hat{Y} = 10.389 + 0.407 X_1 + 0.261 X_2 + e$$

The meaning of the numbers in the regression equation above:

- The value of constant (a) is 10.389. This means that if the variables of self efficacy and digital literacy are assumed to be zero (0), then the learning outcome is 10.389.
- The value of the regression coefficient of the self efficacy variable was 0.407. This means that every increase in self-efficacy by 1 unit will increase learning outcomes by 0.407 and vice versa assuming other variables are fixed.
- The value of the regression coefficient of the digital literacy variable was 0.261. This means that every increase in digital literacy by 1 unit will increase learning outcomes by 0.261 and vice versa assuming other variables are fixed.

- d) Standard error (e) is a random variable and has a probability distribution that represents all factors that have an influence on learning outcomes but are not included in the equation

B. Discussion

Before conducting the research, the researcher first conducts a Validity Test of the research instrument. The Self Efficacy research instrument consists of 32 statement items. Based on the instrument-to-non-sample trial conducted involving 10 respondents, and from the analysis of the trial of the distribution of instruments to respondents that can be used with Valid status as many as 26 statements. Meanwhile, the Digital Literacy variable consists of 38 statement items. Based on the instrument-to-non-sample trial conducted involving 10 respondents, and from the analysis of the trial of the distribution of instruments to respondents that can be used with Valid status as many as 27 statement items.

Based on the results of the test, the correlation coefficient (R) between the independent variable and the dependent variable is 0.775 which is located in the range of 0.600 – 0.799 with a strong category. This means that there is a strong relationship between self-efficacy and digital literacy and students' English achievement. Then a determination coefficient value (R^2) of 0.601 was obtained. This means that 60.1% of learning outcomes are influenced by self-efficacy and digital literacy. While the remaining 39.9% was influenced by other variables that were not included in this regression model

And at the value of the result F calculate (56.513) > F table (3.119) or significance (0.000) < 0.05 . Thus, it can be known that self-efficacy and digital literacy together have a significant effect on English Achievement.

Meanwhile, in the Self efficacy variable. Obtained a calculated t value (8.893) > t table (1.992) or Sig. (0.000) < 0.05 . This means that self-efficacy has a significant effect on English achievement and on the Digital Literacy variable. The value of t calculated (4.236) > t table (1.992) or Sig. (0.000) < 0.05 was obtained. This means that digital literacy has a significant effect on English achievement.

This is in line with previous research conducted in 2021, written by Eirene Katsarou, entitled "The Effects of Computer

Anxiety and Self-Efficacy on L2 Learners' Self-Perceived Digital Competence and Satisfaction in Higher Education". This study investigates Low computer anxiety (CA) and high computer self-efficacy (CSE) levels are important affective factors that promote students' academic success in the current digital era. In an effort to understand their role in successful and effective participation in online learning environments for language learning purposes, the study investigated their effect on 331 undergraduate L2 learners' self-reported assessments of their digital literacy skills and on the level of satisfaction they express with the online component of their English for Specific Purposes course in higher education in Greece. Data were gathered via four survey questionnaires that elicited relevant information on participants' digital literacy level, learner satisfaction, computer anxiety and selfefficacy respectively. Statistical analysis of the results revealed an overall adequate level of students' digital literacy skills and a high level of satisfaction with all aspects of the online module of the blended learning course. Females reported a lower level of CA and a higher level of CSE. CA was found to be the strongest predictor of learners' digital literacy skills assessments and CSE of learner satisfaction perceptions, resulting in overall higher IT use and positive attitudes to the course.

And a research in 2024, written by Seyum Getenet , Robert Cantle , Petrea Redmond and Peter Albion, entitled "Students' digital technology attitude, literacy and self-efficacy and their effect on online learning engagement". This study investigates This study utilised students' online engagement, digital technology attitude, digital literacy, and self-efficacy theories to develop and test a model connecting these factors within a regional university in Australia. A field survey collected data from 110 first-year students. AMOS 28 was employed for measurement and structural model path analysis. The study initially examined the impact of students' attitudes and digital literacy on their self-efficacy. Subsequently, the effects of self-efficacy on five dimensions of online engagement were assessed: social, collaborative, cognitive, behavioural, and emotional. The findings indicated that positive student attitudes and digital literacy significantly contributed to self-efficacy,

which, in turn, positively affected the engagement dimensions. This suggests that when designing and facilitating online, blended, or technology-enhanced courses in higher education, educators should pay attention to various elements of engagement. The study highlights the importance of considering students' attitudes and digital literacy in fostering self-efficacy and enhancing online learning engagements. Further research and implications for future studies are also recommended.

So research in 2022, written by Sutiman, Herminarto Sofyan, Soenarto and Farid Mattohari, Muhammad Nurtanto, entitled "Students' Career Decision-Making During Online Learning: The Mediating Roles of Self-Efficacy in Vocational Education". This study investigates vocational education in Indonesia has experienced problems in making career decisions for students, which was exacerbated by the COVID-19 pandemic. Therefore, this research aims to examine the role of self-efficacy and mediate digital literacy, social environment, and counselling guidance in influencing career decision-making. This is an ex-post-facto research design with data collected from a sample of 566 vocational education students in Indonesia through a questionnaire method distributed online using Google Form. The collected data was then analyzed using structural equation modelling (SEM) with path analysis and bootstrap methods. The results revealed that self-efficacy plays a vital role in mediating digital literacy and guiding students in career decision-making. On the other hand, digital literacy, guidance, and counselling have a significant direct effect on self-efficacy and career decision-making. Meanwhile, the social environment only has a significant direct effect on students' career decision-making. The real role of all elements of vocational education in strengthening self-efficacy, growing digital literacy, monitoring social environment interactions, and providing counselling guidance to students is needed to increase optimism and the quality of career decision-making in vocational education

Also a research in 2018, written by Hatice Değirmenci Gündoğmuş, entitled "Self-efficacy of teacher candidates for teaching first reading and writing". This study investigates The purpose of this study is to determine by different variables the self-efficacy of a teacher candidate for teaching first reading

and writing in their 3rd and 4th year in the department of primary school teaching. In line with the purpose of the study, the self-efficacy levels of teacher candidates for teaching first reading and writing were analyzed on the basis of gender and academic year. The screening model was used in the study. The study group is made up of 165 teacher candidates in their 3rd and 4th year in the department of primary school teaching. The "Self-Efficacy Scale for Teaching First Reading and Writing" developed by Delican (2016) was used as the data collection tool. Descriptive statistics and independent samples t-test were used for data analysis. It was found in the study that self-efficacy of teacher candidates for teaching first reading and writing is intermediate, the self-efficacy for teaching first reading and writing shows a statistically significant difference and female teacher candidates have higher self-efficacy for teaching first reading and writing than male teacher candidates; however the academic year does not have any significant effect on the self-efficacy for teaching first reading and writing. Based on the study, suggestions were made to ensure that teacher candidates teach first reading and writing effectively.

IV. CONCLUSIONS AND SUGGESTIONS

A. Conclusion

Referring to the data analysis and data presentation in chapter IV, finally the researcher concludes that the answers of the formulation of the problem are as follows:

1. On the variable Self efficacy. Obtained a calculated t value (8.893) > t table (1.992) or Sig. (0.000) < 0.05. This means that self-efficacy has a significant effect on English Achievement.
2. On the Digital Literacy variable. The value of t calculated (4.236) > t table (1.992) or Sig. (0.000) < 0.05 was obtained. This means that digital literacy has a significant effect on English Achievement.
3. At the value of the result F calculate (56.513) > F table (3.119) or significance (0.000) < 0.05. Thus, it can be known that self-efficacy and digital literacy together have a significant effect on English achievement.

B. Suggestion

Since self-efficacy significantly affects English achievement, teachers should create a

supportive environment that helps students build confidence in their abilities. Encouraging small successes, offering constructive feedback, and promoting independent learning can strengthen students' belief in their capability.

Given the positive impact of digital literacy, schools should enhance access to digital tools and train students to use them effectively in language learning. Teachers also need support in integrating technology into lessons to foster more interactive and engaging English learning.

As both self-efficacy and digital literacy influence achievement together, schools should implement programs that develop these skills in parallel. Combining digital education with confidence-building activities can improve learning outcomes more effectively.

Future research should consider broader samples and explore additional variables, such as motivation or parental support, to gain a deeper understanding of factors influencing English learning achievement.

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