



The Effect Of Differentiated Learning On Students' Mathematical Self-Efficacy On The Probability Material In Grade X

Krismawati Sianturi¹, Agusmanto J. B Hutaurok², Dame Ifa Sihombing³

Program Studi Pendidikan Matematika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas HKBP Nommensen Medan, Indonesia

Email: krismawati.sianturi@student.uhn.ac.id

Article History:

Accepted: 8 July 2024

Revised: 6 Mei 2025

Published: 30 Juli 2025

Abstract

This study aims to determine the effect of differentiated learning on students' mathematical self-efficacy in probability material in class X of SMK Negeri 5 Medan in the 2024/2025 academic year. The type of research is a quasi-experiment with sampling using the Cluster Random Sampling technique. The researcher used a questionnaire and observation as instruments to collect data. The results of the data analysis showed that the sig value (2-tailed) was $0.000 < 0.05$ at a significance level of 5%, which means that there is an effect of differentiated learning on students' mathematical self-efficacy in probability material in class X of SMK Negeri 5 Medan. From the results obtained the regression equation $\hat{Y} = 17.615 + 0.431 X$. Based on the results of the regression significance test, it can be concluded that there is an influence between differentiated learning on students' mathematical self-efficacy. The magnitude of the influence calculated with the coefficient of determination (R^2) is 61.2%, meaning it is included in the moderate category and the relationship between differentiated learning and students' mathematical Self-efficacy with a value of $r = 0.782$, which means that both variables have a relationship with the percentage of values in the moderate category.

Keywords : Differentiated learning, Students' mathematics Self-efficacy

INTRODUCTION

Education is a process to increase, improve, change the knowledge, and actions of a person or group of people with the aim of improving human life through learning activities. In accordance with Law No. 20 of 2003 in (Pristiwanti et al., 2022) that "Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential". One of the learning that improves the educational process in Indonesia is mathematics. According to (Shofwani, *, Jufri, & ., 2023) that "Mathematics is an exact science that is always found in the school environment and in

everyday life", so mathematics is mandatory to be studied at all levels of education from elementary school to college (Syahputri, Dewi, & Widyaningrum, 2023). Mathematics lessons can help students to develop various skills, such as problem solving, mathematical communication, mathematical connections and even mathematical self-confidence (Puspaningtyas, 2019). This makes it easier for students to understand how mathematics is applied and the benefits of mathematics in everyday life (Pitaloka & Arsanti, 2022).

In reality, Indonesian students' achievement in mathematics remains problematic, as seen from the results of the 2018 Programme for International Student Assessment (PISA) survey, where Indonesia ranked 73rd out of 79 countries with an average score of 379 (Hadi, Prihasti Wuriyani, Yuhdi, & Agustina, 2022). Student learning outcomes during semester exams are very low (Simanjuntak, 2021), and mathematics is considered a difficult subject to learn (Farid, Yulianti, Hasan, & Hilaiyah, 2022) and is boring due to its abstract nature and its complexity of formulas.

Many factors influence the low results of mathematics education in Indonesia, including, poor learning processes, teachers who are less skilled in providing learning (Sebastian Sitompul, Dolok Saribu, Melati Sitinjak, Laia, & Gressella Br Simangunsong, 2024), the methods used by teachers when teaching are less varied, monotonous, using conventional methods, students are less motivated in learning mathematics , students lack self-confidence, students' views tend to be negative towards mathematics lessons and students lack attention from parents (Rosyah & Darmawan, 2023).

Probability is a part of statistics taught in grade X of Vocational High Schools in accordance with the independent curriculum. The goal of learning statistics is to foster students' self-confidence and problem-solving skills. The implementation of probability learning in vocational high schools is still problematic in terms of students' self-confidence in solving problems. This is in accordance with the problems faced by students in learning probability, namely difficulty identifying the concepts used, identifying events that occur in contextual stories, connecting the concepts of sets and probability, and also difficulty connecting images and symbols (Mehan, Sumerjana, & Suweca, 2023).

In reality, until now, students still experience difficulties in applying formulas, difficulties in understanding opportunities and difficulties in understanding problems in questions, this makes students lazy and bored in learning it, therefore teachers must be able to create a comfortable situation for students in learning mathematics (Basra, 2023).

Factors that cause students to have difficulty learning probability material are students having low self-confidence, so students have difficulty in applying formulas to solve a problem (Bendriyanti, Dewi, & Nurhasanah, 2022) and teachers using monotonous teaching methods which cause students to be less focused on paying attention to learning because they feel bored.

Differentiated learning recognizes the diversity of students and has long been implemented in the United States. One solution to address the diversity of student abilities is to create a pleasant learning environment, encourage speaking practice, facilitate collaborative learning, and select appropriate learning materials and processes (Ade Sintia Wulandari, 2022). Differentiated learning is an effort to modify the learning process in grade 10 to accommodate the learning needs of each individual student. These modifications relate

to learning preparation, learning profiles, and learning interests in order to achieve maximum learning outcomes. According to Farid (Herwina, 2021) diverse differentiated learning processes can indirectly foster student creativity by providing them with various opportunities to demonstrate what they have learned. Furthermore, differentiated learning is a highly recommended method for use in learning to more easily achieve learning objectives as creativity continues to develop.

The development gained can form a positive mindset, which is reflected in students' self-confidence or self-efficacy. Self-efficacy is an intrinsic factor that plays a crucial role in learning success. This term refers to an individual's belief in their ability to achieve goals. This belief drives students to achieve success, increases their self-confidence, and motivates them to give their best effort in achieving goals, both in academic and non-academic fields.

One factor influencing self-efficacy is direct experience, namely, past experience with a task, whether successful or unsuccessful. Students perceive both success and failure as learning experiences. Learning experiences can continuously improve students' learning capacity, help them achieve learning goals, and maximize communication skills.

Meeting these learning requirements can lead to students facing challenges. One of these challenges is low self-confidence in their abilities (Safitri & Juliati Nasution, 2023). The level of self-efficacy depends on the student's own thinking. Individual thinking about self-efficacy will influence the amount of effort expended and their resilience in facing challenges or unpleasant experiences during the learning process. Students with low self-efficacy in completing assignments will tend to avoid assignments or even choose to copy their friends' work. Conversely, students with high self-efficacy will persist in completing assignments, even if they feel difficult and are unsure whether the results are correct or incorrect (Poulou, Reddy, & Dudek, 2019).

Based on the results of interviews conducted by researchers with mathematics teachers at SMK Negeri 5 Medan, it was stated that various problems that cause low levels of mathematics learning are low levels of student self-efficacy. One of the problems faced by students in learning mathematics is the assumption that mathematics is difficult and complicated. In addition, the large number of formulas and the breadth of the material also hinder students from understanding and mastering mathematics learning materials. Students who lack confidence in their abilities tend to experience obstacles in the learning process. When given assignments, students will have difficulty completing them and when given the opportunity to express their opinions, students hesitate to express their opinions (Reaves & Cozzens, 2018). Students need experience and knowledge to fulfill this. One of the factors of self-efficacy related to self-efficacy is the need for students to gain experience in completing assignments, both those that end in success.

success or failure. Differentiated learning encourages students to construct their knowledge and skills independently, by connecting prior knowledge and experiences meaningfully with newly acquired knowledge. When implemented correctly, students will not perceive learning material as difficult (Srimulyani & Hermanto, 2021).

Based on the description above, the author wants to conduct research to determine the influence of Differentiated Learning on Students' Mathematical Self-efficacy. Departing from this thought, the researcher is interested in conducting research with the title "The

Effect of Differentiated Learning on Students' Mathematical Self-efficacy on Probability Material in Grade X of SMK Negeri 5 Medan in the 2024/2025 Academic Year."

RESEARCH METHODS

The type of research used by the researcher is quantitative research. According to Sugiyono (Hendriana & Kadarisma, 2019).the quantitative method is a method of collecting data with research instruments and analyzing data based on quantitative statistics with the aim of testing the formulated hypothesis. Based on the type of research, the research method used is a quasi-experimental. Quasexperimental is carried out on the experimental group to test the established hypothesis. The design form used in the study is the One Group Post-test Only Design. This design has one experiment that is given a treatment and given a post-test but without a pre-test. An overview of this design is as follows: This research was conducted at SMK Negeri 5 Medan for the 2024/2025 academic year. This school is located at Jalan Timor No. 36, Gaharu, Medan City, North Sumatra Province. The reason the researcher chose this research location was because the school has implemented the independent curriculum and there has been no similar research at the school. This research was conducted in the even semester of the 2024/2025 academic year.

According to Sugiyono (KURBANOGLU & TAKUNYACI, 2021). "Population is a generalization area consisting of objects and subjects that have certain qualities and characteristics selected by researchers to be studied and then conclusions drawn". The population of this study was all class X students of SMK Negeri 5 Medan which consists of 11 classes.

A sample is a portion of the population's population and its characteristics (Rajagukguk & Hazrati, 2021). Sampling is a technique for taking samples from a population, a sample that is part of the population, then studied and the research results (conclusions) are then applied to the population (generalization) . The sampling technique in this study was cluster random sampling, a sampling technique used to determine samples if the objects/subjects to be studied or data sources are very broad, for example, students from a country, province, or district. This technique is usually carried out in stages by randomly determining which areas will be used as samples. Therefore, the sample in this study is one class (Namaziandost & Çakmak, 2020)..

RESULTS AND DISCUSSION

Time and Place of Research

This research was conducted on March 13, 2025 – March 27, 2025 in the 2024/2025 academic year in Class X TKR-3 of SMP Negeri 5 Medan, located at Jalan Timor No. 36, Gaharu, Medan City, North Sumatra Province.

Research Instrument Trial

Before the questionnaire was used on the research sample, the questionnaire was first tested in class XI TITL 1 and XI TPM 2. The aim was to determine the validity and reliability of each questionnaire. From the results of the research trial, the validity and reliability calculations were obtained with the following analysis:

The validity of this research questionnaire was tested using the product-moment correlation formula (Appendix 19, page 106). The questionnaire consisted of 15 statement items (Appendix 6, page 87). In processing the data, the researcher used SPSS 25.0 for Windows, which can be seen in (Appendix 13, page 100).

Data Analysis Results

Descriptive Statistics

Descriptive statistical analysis was conducted to describe students' mathematical self-efficacy after the implementation of differentiated learning. Based on the results of data processing from 14 valid questionnaires in (Appendix 9 page 93) the average mathematical self-efficacy of students was 48.26, which indicates that in general students have a good level of mathematical self-efficacy regarding their abilities in learning mathematics. The standard deviation of 4.0 indicates that the data distribution is moderate and does not deviate too much from the average value. In addition, the variance of 16.0 illustrates that there are differences in assessments between students regarding their mathematical self-efficacy, but it is still within acceptable limits. The results obtained indicate that students respond quite well to learning. The level of mathematical self-efficacy of students appears stable, even though there are differences in learning methods and different levels of self-confidence.

The data normality test is used to determine whether the data follows a normal distribution pattern or not. The results of the normality test calculation were carried out using SPSS 25.0 for windows on (Appendix 17 page 104). The decision-making criteria in this study used a significance level of 5% or 0.05. If $\text{sig} > 0.05$ then the data being tested is normally distributed, conversely if $\text{sig} < 0.05$ then the data being tested has an abnormal distribution. Based on the calculation of the normality test (Sig) it is known by using the One-Sample Kolmogrov-Smirnov Test that the sample in this study is < 50 . For the significant value of the post-test students' mathematical self-efficacy in the experimental class is $0.200 > 0.05$. Based on the results of the normality test above, it shows that in the experimental class the sig value is > 0.05 , so it can be concluded that the data is normally distributed. Simple Linear Regression Equation

Table 1. Simple Linear Regression Test

Model	Coefficients ^a										
	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95,0% Confidence Interval for B		Correlations			Part
	B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part	
1	(Constant)	17.615	6.151		2.864	.007	5.101	30.129			
	X	.431	.109	.566	3.944	.000	.209	.653	.566	.566	.566

a. Dependent Variable: Y

Simple linear regression aims to determine whether differentiated learning has an influence on students' mathematical self-efficacy by using the equation $\hat{Y} = a + bX$. Based on calculations using SPSS 25.0 for windows in table 4.7, the regression equation for differentiated learning (X) on students' mathematical self-efficacy (Y) is obtained with a value of 17.615 and b of 0.431, so the regression equation for the effect of X on Y is obtained: $\hat{Y} = 17.615 + 0.431 X$. The a value of 17.615 is a constant which means that if there is no differentiated learning ($X = 0$), then students' mathematical self-efficacy is still at 17.615. The value of b is the regression direction coefficient which shows that every increase of one unit i. Differentiated learning will have an impact on increasing students' mathematical self-efficacy by 0.431 units. Thus, the regression equation shows that there is a positive influence of differentiated learning on students' mathematical self-efficacy. Based on calculations using SPSS 25.0 for window, F count of 0.807 can be obtained, then compared with F table in (attachment 21 page 108) is 4.14. In accordance with the provisions of decision making is based on several provisions, namely: 1) if F count $< F$ table or $0.807 < 4.14$ then H_0 is rejected and H_a is accepted. The conclusion is that there is a linear relationship between differentiated learning and students' mathematical self-efficacy. 2) if F count $> F$ table, then H_0 is accepted and H_a is rejected. The conclusion is that there is no linear relationship between differentiated learning and students' mathematical self-efficacy. So it can be concluded that H_a is accepted with the testing criteria of F count $< F$ table or $0.807 < 4.14$, namely there is a linear relationship between Differentiated learning on students' mathematical self-efficacy. Based on calculations using SPSS 25.0 for windows presented in table 4.9, it is obtained that F hitung = 51.987 with a significance level of $\alpha = 5\%$ or 0.05, then the numerator dk is 1 and the denominator dk is 33, from the F table distribution list in (attachment 21 page 108) it is obtained that $F_{0.95}(1, 33) = 4.14$. According to the decision-making criteria if F hitung $\leq F(1 - \alpha), (1, n - 2)$ or $51.987 \leq 4.14$ then accept H_0 and reject H_a . The conclusion is that there is no significant influence between differentiated learning on students' mathematical self-efficacy. Then if F hitung $\geq F(1 - \alpha), (1, n - 2)$ then accept H_a and reject H_0 . The conclusion is that there is a significant influence between differentiated learning on students' mathematical self-efficacy. then it can be concluded that H_a is accepted with the decision-making criteria F hitung $\geq F(1 - \alpha), (1, n - 2)$ namely there is a significant influence between differentiated learning on students' mathematical self-efficacy.

Correlation Coefficient

Table 2. Correlation Coefficient

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782 ^a	.612	.600	1.95706

a. Predictors: (Constant), X

The correlation coefficient test was conducted to determine the closeness of the relationship between differentiated learning and students' mathematical self-efficacy. Based on table 4.10, the r_{xy} was obtained at 0.566 at a significance level of 0.05 and $N = 35$. Based on the level of closeness of the relationship, the relationship between variables X and Y is stated to have a moderate/sufficient relationship or in other words, the two variables have a close relationship with each other. 5% or 0.05, $dk = N - 2$. Based on the distribution of the t table in (Appendix 20 page 107) the value of t is 0.975; $(33) = ttabel = 2.0345$. The testing criteria are accept H_0 if it is in the range of $-2.0345 < t < 2.0345$ then there is no significant and strong influence between the use of differentiated learning on students' mathematical self-efficacy, and reject H_0 if $t \text{ hitung} > ttabel$ or $3.944 > 2.0345$, if H_0 is rejected and H_a is accepted then there is a significant and strong influence between the use of differentiated learning on students' mathematical self-efficacy. Because the value of $t \text{ hitung} > ttabel$ or $3.944 > 2.0345$, if H_0 is rejected and H_a is accepted then there is a significant and strong influence between the use of differentiated learning on students' mathematical self-efficacy. Thus, it can be concluded that there is a significant and strong influence between the use of differentiated learning on students' mathematical self-efficacy.

To determine the magnitude of the influence of differentiated learning on students' mathematical self-efficacy. Based on the results of the determination coefficient using SPSS 25.0 for windows, it can be presented in table 4.12 as follows: Based on the test results in table 4.12, the correlation coefficient shows an R value of 0.782 and a determination coefficient value or *Rsquare* of 0.612. Based on SPSS data processing and the formula $r^2 = 0.612 \times 100\% = 61.2\%$, it shows that there is an influence influenced by the independent variable (X) on the dependent variable (Y) which is 61.2%. While the remaining $100\% - 61.2\% = 38.8\%$ is influenced by other variables. The final conclusion is the power of differentiated learning on students' mathematical self-efficacy in the material of probability with a coefficient of $R = 0.782$ with a coefficient of determination of 61.2 indicating that 61.2% of students' good mathematical self-efficacy can be produced by good differentiated learning.

Research Discussion

After conducting research to see the effect of differentiated learning on students' mathematical self-efficacy on the material of probability in class X of SMK Negeri 5 Medan,

namely by using a questionnaire instrument to determine students' mathematical self-efficacy (Atiyah, Miarsyah, & Sigit, 2020). After the results were obtained, the researchers analyzed them to determine the effect of differentiated learning on students' mathematical self-efficacy on the material of probability (Zulnaidi, Heleni, & Syafri, 2021). Based on the results of the research and analysis, the relationship between the two variables is significant, which is stated as $t h \text{ itun } g > ttabel$, then H_0 is rejected and H_a is accepted, meaning that there is a strong relationship between differentiated learning and students' mathematical self-efficacy (Shin, 2018).

Based on the results of the regression test, the correlation coefficient r_{xy} of 0.566 is included in the category of moderate/sufficient relationship between differentiated learning and students' mathematical self-efficacy. From the calculation of the coefficient of determination (R^2) = 0.612, it means that the influence of differentiated learning on self-efficacy is 61.2% and the rest is influenced by variables not studied by the researcher. Based on the simple regression calculation, the equation $\hat{Y} = 17.615 + 0.431 X$ is obtained. From this equation, the regression direction coefficient (b) = 0.431, meaning that both variables have an influence. This means that students' mathematical self-efficacy results will increase with the influence of differentiated learning of 0.431 (Chang, Panjaburee, Lin, Lai, & Hwang, 2022).

Based on the research results, the researcher concluded that this study is in line with the initial hypothesis, namely that there is an effect of differentiated learning on students' mathematical self-efficacy. This effect indicates that the applied learning is able to shape students' self-confidence. These results align with research conducted by Prima (2022), which shows that differentiated learning effectively increases students' understanding and interest through media that suits their learning styles. This similarity indicates that learning that addresses individual needs can have a positive influence on students' self-efficacy.

CONCLUSION

Based on the problem formulation and research hypothesis presented as well as the research results based on data analysis and hypothesis testing, it can be concluded that there is an influence of differentiated learning on students' mathematical self-efficacy on probability material in class X of SMK Negeri 5 Medan in the 2024/2025 academic year.

Suggestion

For the sake of the development and success of implementation in improving the quality of education, especially in students' mathematical self-efficacy, the researcher provides the following suggestions:

1. In implementing mathematics learning, it is hoped that teachers will be able to provide interesting differentiated learning so that the needs and learning styles of each student are more interested in participating in the learning.
2. Students are expected to be more active in understanding the material on opportunities and have strong self-efficacy in planning and implementing solutions, as well as having awareness and control over their thinking processes.

3. Due to limitations in conducting this research, it is recommended that further research be conducted that examines differentiated learning on other topics or other aspects relevant to students' mathematical self-efficacy.

BIBLIOGRAPHY

Ade Sintia Wulandari. (2022). Literature Review: Pendekatan Berdiferensiasi Solusi Pembelajaran Dalam Keberagaman. *Jurnal Pendidikan Mipa*, 12(3), 682–689. <Https://Doi.Org/10.37630/Jpm.V12i3.620>

Atiyah, U., Miarsyah, M., & Sigit, D. V. (2020). The Effect Of Using E-Learning Based Guided Discovery Learning Model Based On Self-Efficacy Towards Student Learning Outcomes In Biology Class In Reproductive System Subject In High School. *International Journal For Educational And Vocational Studies*, 2(9).

Basra, H. (2023). Pembelajaran Berdiferensiasi Dengan Quizizz. *Jurnal Sipatokkong Bpsdm Sulsel*, 3(4), 193–208. <Https://Doi.Org/10.58643/Sipatokkong.V3i4.177>

Bendriyanti, R. P., Dewi, C., & Nurhasanah, I. (2022). Manajemen Pembelajaran Berdiferensiasi Dalam Meningkatkan Kualitas Belajar Siswa Kelas Ix Smpit Khairunnas. *Jurnal Pendidikan (Teori Dan Praktik)*, 6(2), 70–74. <Https://Doi.Org/10.26740/Jp.V6n2.P70-74>

Chang, C.-Y., Panjaburee, P., Lin, H.-C., Lai, C.-L., & Hwang, G.-H. (2022). Effects Of Online Strategies On Students' Learning Performance, Self-Efficacy, Self-Regulation And Critical Thinking In University Online Courses. *Educational Technology Research And Development*, 1–20. <Https://Doi.Org/Https://Doi.Org/10.1007/S11423-021-10071-Y>

Farid, I., Yulianti, R., Hasan, A., & Hilaiyah, T. (2022). Strategi Pembelajaran Diferensiasi Dalam Memenuhi Kebutuhan Belajar Peserta Didik Di Sekolah Dasar. *Jurnal Pendidikan Dan Konseling (Jpdk)*, 4(6), 11177–11182. <Https://Doi.Org/Https://Doi.Org/10.31004/Jpdk.V4i6.10212>

Hadi, W., Prihasti Wuriyani, E., Yuhdi, A., & Agustina, R. (2022). Desain Pembelajaran Diferensiasi Bermuatan Problem Based Learning (Pbl) Mendukung Critical Thinking Skill Siswa Pada Era Kenormalan Baru Pascapandemi Covid-19. *Basastra*, 11(1), 56. <Https://Doi.Org/10.24114/Bss.V11i1.33852>

Hendriana, H., & Kadarisma, G. (2019). Self-Efficacy Dan Kemampuan Komunikasi Matematis Siswa Smp. *Jnpm (Jurnal Nasional Pendidikan Matematika)*, 3(1), 153–164. <Https://Doi.Org/Http://Dx.Doi.Org/10.33603/Jnpm.V3i1.2033>

Herwina, W. (2021). Optimalisasi Kebutuhan Murid Dan Hasil Belajar Dengan Pembelajaran Berdiferensiasi. *Perspektif Ilmu Pendidikan*, 35(2), 175–182. <Https://Doi.Org/10.21009/Pip.352.10>

Kurbanoglu, İ., & Takunyaci, M. (2021). A Structural Equation Modeling On Relationship Between Self-Efficacy, Physics Laboratory Anxiety And Attitudes. *Journal Of Family Counseling And Education*, 6(1), 47–56. <Https://Doi.Org/10.32568/Jfce.866649>

Mehan, R. Y., Sumerjana, K., & Suweca, I. W. (2023). Pendekatan Pembelajaran Berdiferensiasi Pada Materi Teknik Vokal Chest Voice Di Amabile Music Studio. *Melodious : Journal Of Music*, 2(1), 18–27. <Https://Doi.Org/10.59997/Melodious.V2i1.2177>

Namaziandost, E., & Çakmak, F. (2020). An Account Of Efl Learners' Self-Efficacy And Gender In The Flipped Classroom Model. *Education And Information Technologies*, 25(5), 4041–4055. <Https://Doi.Org/10.1007/S10639-020-10167-7>

Pitaloka, H., & Arsanti, M. (2022). Pembelajaran Diferensiasi Dalam Kurikulum Merdeka. *Seminar Nasional Pendidikan Sultan* ..., (November), 2020–2023.

Poulou, M. S., Reddy, L. A., & Dudek, C. M. (2019). Relation Of Teacher Self-Efficacy And Classroom Practices: A Preliminary Investigation. *School Psychology International*, 40(1), 25–48.

Rajagukguk, W., & Hazrati, K. (2021). Analisis Self-Efficacy Siswa Dalam Penelitian Pembelajaran Matematika Dengan Pendekatan Matematika Realistik Dan Inkuiiri. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, 5(2), 2077–2089. <Https://Doi.Org/10.31004/Cendekia.V5i2.761>

Reaves, S. J., & Cozzens, J. A. (2018). Teacher Perceptions Of Climate, Motivation, And Self-Efficacy: Is There Really A Connection. *Journal Of Education And Training Studies*, 6(12), 48–67. Opgehaal Van <Http://Jets.Redfame.Com>

Rosyah, D. L. A., & Darmawan, P. (2023). Analisis Relevansi Pembelajaran Diferensiasi Pada Kurikulum Merdeka Dengan Konsep Visi Pedagogik Ki Hajar Dewantara. *Jurnal Ekonomi, Bisnis Dan Pendidikan (Jebp)*, 3(9), 5.

Safitri, M., & Juliati Nasution, Y. S. (2023). Analisis Strategi Marketing Dalam Meningkatkan Volume Penjualan Produk Cat Jotun (Studi Kasus : Cv. Tebar Jalur Mas Kompleks Cemara Asri). *Cakrawala Repository Imwi*, 6(1), 46–53. <Https://Doi.Org/10.52851/Cakrawala.V6i1.188>

Sebastian Sitompul, A., Dolok Saribu, A., Melati Sitinjak, P., Laia, H., & Gressella Br Simangunsong, Y. (2024). Diferensiasi Substansial Sistem Activity Based Costing Dan Sistem Tradisional Pada Industri Perbankan. *Innovative: Journal Of Social Science Research*, 4(4), 7342–7354.

Shin, M.-H. (2018). Effects Of Project-Based Learning On Students' Motivation And Self-Efficacy. *English Teaching*, 73(1), 95–114. Opgehaal Van <Http://Journal.Kate.Or.Kr/>

Shofwani, Y., * M. Z., Jufri, A. W., & . (2023). Penerapan Pembelajaran Berdiferensiasi (Diferensiasiasi Proses) Untuk Meningkatkan Kemampuan Komunikasi Peserta Didik Di Kelas X-4 Sma Negeri 1 Mataram. *Jurnal Literasi Dan Pembelajaran Indonesia*, 3(2), 101–105.

Srimulyani, V. A., & Hermanto, Y. B. (2021). Impact Of Entrepreneurial Self-Efficacy And Entrepreneurial Motivation On Micro And Small Business Success For Food And

The Effect Of Differentiated Learning On Students' Mathematical Self-Efficacy On The Probability Material In Grade X Of State Vocational High School 5 Medan In The 2024/2025 Academic Year—Krismawati Sianturi, Agusmanto J. B Hutauryuk, Dame Ifa Sihombing

Beverage Sector In East Java, Indonesia. *Economies*, 10(1), 10.
<Https://Doi.Org/10.3390/Economies10010010>

Syahputri, A. S., Dewi, C., & Widyaningrum, H. K. (2023). Pengaruh Pembelajaran Diferensiasi Berbantuan Website Genially Terhadap Motivasi Belajar Siswa. *Seminar Nasional Sosial, Sains, Pendidikan, Humaniora (Senassdra)*, 2(2), 685–691.

Zulnaidi, H., Heleni, S., & Syafri, M. (2021). Effects Of Sscs Teaching Model On Students' Mathematical Problemsolving Ability And Self-Efficacy. *International Journal Of Instruction*, 14(1).