Volume 3 Number 4 (2024) page 14-18 e-ISSN: 2828-1241 DOI: http://doi.org/10.24036/langgam

# THE INFLUENCE OF DIFFERENTIATED LEARNING MODELS ON THE SOCIOLOGY LEARNING OUTCOMES OF CLASS X STUDENTS AT SMA N 2 WEST SUMATRA

# Rini Hidayati<sup>1</sup>, Fitri Eriyanti<sup>2</sup>

<sup>1</sup>Program of Social Science Education, Universitas Negeri Padang, Indonesia Email: rinihidayati0998@gmail.com

<sup>2</sup> Program of Social Science Education, Universitas Negeri Padang, Indonesia Email: fitri.eriyanti@fis.unp.ac.id

Langgam Journal is licensed under a HYPERLINK "http://creativecommons.org/licenses/by/4.0/" Creative Commons Attribution 4.0 International.

**Abstract.** One of the factors causing the low learning outcomes of students is the inappropriate selection of learning models by teachers who cannot serve students according to the abilities and uniqueness of each student. So the differentiated learning model is here to try to answer these problems, therefore this research aims to determine whether or not there is an influence of the application of the differentiated learning model on student learning outcomes. The type of research used in this research is quantitative research. The population and sample of this research were 116 class X students. The research instrument is a questionnaire, the questionnaire is given to students via Google Form after going through validity and reliability tests. Data analysis uses simple regression. The research results revealed that there was a significant influence of the application of the differentiated learning model on student learning outcomes of 78.1% and 21.9% was influenced by other factors outside the research. Because F count > F table. This proves that the application of the differentiated learning model has a significant effect on the learning outcomes of students in sociology subjects, social research materials, class X students at SMAN 2 West Sumatra.

**Keywords:** Questionnaire, Differentiation, Learning outcomes

### **INTRODUCTION**:

Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals, and the skills needed by themselves, society, nation and state (Boiliu et al., 2020) The transformation of educational patterns in the 21st century requires a demand in the world of education, where an important role in a learning process is collaboration that is created in the classroom between students and teachers. The teacher as an instructor is not only to transfer knowledge to students, not only as the only source of learning in the world of education but also as a facilitator and mediator in developing students' potential. So this is where the teacher's war is needed, how the teacher's skills and experience are integrated to create an interesting learning process for students, effective learning conditions, comfortable and conducive and creating a warm atmosphere with variations in learning that can improve learning outcomes and can maximize the potential of all children or students.

So in improving the quality of education, of course it will not be separated from the role of teachers in implementing the learning process in the school. Here the teacher as the spearhead in the world of education can be said to be a very influential party in the learning process in the classroom. Of course, a quality learning process cannot be obtained just instantaneously, but to make this happen, there needs to be interaction between students and their teachers. So here is the role of a teacher in determining good learning

patterns, strategies or models for students so that in the future, apart from creating a comfortable, safe atmosphere, there will of course be changes in student learning outcomes.

The reality that the author found in the field where the author teaches at SMAN 2 West Sumatra, the school located on Jalan Lintas Sumatra, Jlan Koto Gaek, Guguk, Gunung Talang District, Solok Regency is one of the boarding schools, a school whose students come from from diverse regions, tribes and even different religions throughout West Sumatra. in practice, especially in sociological learning, sociological learning process activities, learning process activities carried out in the classroom still rely on the teacher as the only learning source, are still dominated by the transfer of knowledge from a teacher to students, and are also dominated by the teacher as the center in the learning process. Dominated by conventional learning models, which causes children's level of activity to be very low. Where the application of this learning model influences a child's learning outcomes, a child's learning outcomes are not low, because each of them has different learning abilities and learning styles from each other.

Table 1. Average Daily Test Score for 1 Sociology subject for Class X Students of SMAN 2 West Sumatra

No	Class	Average
1	X.E 1	79
2	X.E 2	76
3	X.E 3	77
4	X.E 4	76

The low learning outcomes obtained by students are caused by the tendency of teachers to apply conventional learning models in the classroom where the center of learning is the teacher and students who listen and accept whatever the teacher says. And also with the conventional learning model, only a few children can understand the material using this method, because each student has different comprehension abilities from one another. So based on this, to follow up on the problem of low student learning outcomes, it is necessary to have an accommodating learning model that respects the potential of each student, namely the differentiated learning model.

Carol A. Tomlinson, an educator since 1995, has studied differentiated learning in her book entitled How to Differentiate Instruction in Mixed Ability Classroom. Where in differentiated learning, teachers must teach or provide material to students by paying attention to the level of readiness, interests, and learning styles of students. and also in the learning process teachers must be able to modify the learning content, learning process, products and results of the learning and also pay attention to the learning environment of students (Alfurgan et al. 2020).

In accordance with the independent curriculum, learning should be directed according to students' abilities and according to the differences that exist in students. This is clearly seen by the fact that there are students whose scores are low while their ability is high, and also because many students are less enthusiastic about participating in learning activities. This is thought to be caused by the learning process carried out by the teacher not being in accordance with the learning style of the students. And the assessment or assessment carried out by the teacher is not in accordance with the students' talents and interests. As an educator, it is not enough for a teacher to just have knowledge of the subject he teaches. However, you must also have skills in increasing students' activeness in learning. Teachers must also be able to provide learning experiences to their students. Therefore, improving teacher performance in the learning process in the classroom will greatly influence student learning outcomes later.

The differentiated learning strategy is expected to be able to create effective learning and answer the diverse learning needs of students and the potential possessed by students based on the background of the problem. Researchers are interested in researching to see how "The effect of implementing the differentiated learning model on the learning outcomes of class Sociology lessons on social research material at SMAN 2 West Sumatra".

#### **METHOD**

The type of research used in this research is quantitative research. This research wants to see whether or not there is an influence of the application of differentiated learning models on student learning outcomes in sociology subjects on social research material. In this study, a sample of 116 students was taken. The entire population was used as a research sample. And also the research data collection instrument used a questionnaire consisting of 17 statements related to the application of the differentiated learning model and 13 statements related to learning outcomes. And before distributing the questionnaire to respondents, it was tested first with other students, namely given to class XI students who had studied social research material using the differentiated learning model. After that, the validity of the research data was tested. Of the 30 statement items, all of them are valid.

Next, namely the homogeneity test, the homogeneity test aims to see whether the distribution of research data is homogeneous or not. After processing the data using SPSS 25, the results showed that the data was homogeneously distributed. After the questionnaire is valid, it is given to respondents, and the data is processed and analyzed using a simple regression test. And after processing the results of the respondents' answers, a normality test of the research data as well as reliability and linearity was carried out, and the result was that the application of the linear differentiated learning model to sociology learning outcomes was carried out. Then analyzed using multiple intelligence theory.

#### RESULTS AND DISCUSSION

#### Result

## Validity and Reliability

Test A questionnaire is said to be valid if it is able to measure what is desired. An instrument is said to be valid if it can reveal data from the variables studied accurately (Arikunto (2006). The validity test aims to test the appropriateness or validity of an instrument. This is done to prove that the questionnaire distributed is truly suitable for distribution to respondents. Questionnaire tested on students who had studied social research material, namely class.

Reliability is related to the issue of trust. A questionnaire can be said to have a high level of confidence if the questionnaire can provide consistent results. So the definition of instrument reliability is related to the problem of determining the results of the questionnaire (Arikunto: 2010: 239). Reliability aims to see in the questionnaire whether there are variations in the statement items that are tested, whether they only focus on one material or whether there are variations in the statement items. The aim of the reliability test is to see the high level of trustworthiness of a questionnaire. Based on the results of these calculations, it can be seen that the value of the reliability test results is 0.956, so it can be said that the instrument which has been valid after carrying out the validity test first shows very high reliability which is in the range of 0.800-1.000, which means that this instrument is suitable for use in real research.

# **Test results Research prerequisites**

#### Normality and homogeneity test

The normality test is carried out to determine whether the data is normally distributed or not in single data (Sugiyono, 2010:197). The normality test is carried out to determine whether the variables X and Y under study have a normal or abnormal distribution. Based on the table above, it appears that the sig value obtained from the normality test shows that the data is normally distributed. This is proven by the significance level of 0.75 > 0.05, so it can be stated that the data is normally distributed.

Homogeneity test is testing whether data is caused by data or not. The Homogeneity Test aims to see whether the data is homogeneously distributed or not. Based on the table above, we can see that the sig value obtained from the homogeneity test results is greater than the test level value, namely 0.075 and 0.075 > 0.05, so it can be said that the scores or research data results are homogeneously distributed or homogeneously distributed.

#### **Simple Regression Analysis**

This simple regression test was carried out to answer the proposed research hypothesis. Next, to see the influence of variable X on Variable Y, you can see the Model Summary section of the SPSS output results. Based on the SPSS 25 output results, it is known that R Square is 0.781. This means that the variable implementing the differentiated learning model contributes 78.1% to changes in learning outcome variables. Meanwhile, 21.9% was influenced by other factors outside the research. Based on the ANOVA table, the

calculated F is 25.866 and the F table is 3.92. Because F count > F table, the regression equation used can be applied in this analysis. This means that the variable application of the differentiated learning model influences the learning outcomes of students in sociology subjects, social research material, class X students at SMAN 2 West Sumatra.

#### Discussion

Based on the results of the research data processing, the application of the differentiated learning model has a significant effect on changes in student learning outcomes. This is because the differentiated learning model can serve students according to the potential or abilities of each student (Hasanah et al., 2023: 240-241). The differentiated learning model is a learning model that respects students, this is because each student grows and develops according to their own potential, according to the multiple intelligence theory, a child or student is unique according to their respective potential. Each child is different from one another, because not all children or students have the same abilities, because abilities are very diverse or multiple intelligent, there are children or students who develop abilities in the field of art, there are those who have abilities in the field of calculations, there are who have abilities in sports, academics, etc. So each child is unique with their own abilities. Therefore, the hadi differentiated learning model is a learning model that can serve students who can appreciate students' potential (Nisa, 2015).

Multiple Intelligences is a bridge that connects the demands that must be faced in an increasingly rapid world and the abilities that students must have. As stated by (Putri et al., 2021:85-87) the benefits of multiple intelligences are: First, multiple intelligences provide different perspectives for solving problems. Second, this learning can train students to bring their hobbies into their future work. Thus, in the midst of increasingly rapid world development, students will be able to create a minimum job for themselves through their hobbies. Third, this learning will provide a lot of substance to train creativity and social skills. Fourth, this learning can further enable someone to develop themselves and appreciate their talents (Fatimah & Mashar, 2023).

The application of the differentiated learning model based on research results using a literature review approach to research articles resulted in the results that 16 articles met the aim of the literature review. The results of the analysis show that as many as 94% of articles show that differentiated learning strategies have a positive effect on learning outcomes. However, it cannot be ignored that 6% of articles indicate that there are situations where differentiated learning strategies do not have a significant impact on their learning outcomes in a positive way (Aulia et al., 2023). This means that the application of the learning model has a significant influence on student learning outcomes.

This is also in accordance with research conducted by (Anggreini et al, 2021) who conducted research on the application of differentiated learning models at SMPN 20 in South Tangerang city. The application of the differentiated learning model has a significant impact on students. This differentiated learning model (content, process, product and learning environment) can foster creativity in critical thinking, collaboration and communication according to the characteristics (learning readiness, learning style and interest) of students. This can be seen during the learning process, students are enthusiastic and the learning outcomes vary according to students' interests compared to a learning process that does not apply differentiation.

The application of the differentiated learning model in sociological learning on social research material has a significant influence on student learning outcomes. This is because this learning model can serve students well in accordance with the development of each student's multiple intelligence. So it is very important for a teacher to search, see and find information about students' abilities, interests, talents, learning styles and backgrounds. According to the theory of multiple intelligence which was first coined by Howard Gardner, according to him a child grows and develops with at least eight intelligences and not all of them are possessed by children, each will have two or 3 intelligences. (Nuzul, n.d. 2020).

Implementation of the application of Howard Gardner's theory regarding multiple intelligences which provides benefits for students so that they have competencies that will be useful to face the era of society. The multiple intelligences learning approach is student centered. The learning strategy used is a differentiated class, the method used is adapted to the way of learning each intelligence and the techniques and tactics used are specific, individual and unique (Kurniyati & Abdurrohman, 2022).

So, when applying the differentiated learning model in learning activities, you must pay attention to students' multiple intelligences because each student has various intelligences, not only in academics and so on. So the application of the differentiated learning model has been able to serve students well, respecting students according to each student's abilities and by paying attention to their multiple intelligences, this will

prevent a teacher from leveling all children in learning and cannot force children to do what they want. teacher but must be in accordance with the abilities and intelligence of each student (Fitriyah & Bisri, 2023).

The differentiated learning model is very different from the conventional learning model, the conventional learning model generalizes students so that only a small portion of students are served well so that what happens is that only children who have audio and visual learning styles are served while kinesthetic children are not served, and so tend to be considered naughty children, so the differentiated learning model needs to be applied because it is a learning model that can respect students according to their uniqueness or abilities and potential, so students will develop according to their existing potential, their abilities which are multiple intelligences.

#### **CONCLUSIONS AND SUGGESTIONS**

#### **Conclusions**

Based on the research and discussion presented in the previous chapter, it can be seen that there is a significant influence of the application of the differentiated learning model on class Windows 25 With a total of 116 respondents. From the processing results, it was found that 78.1% of the differentiated learning model had an influence on student learning outcomes and 21.9% was influenced by factors outside the research, so H0 was rejected and Ha was accepted. So the hypothesis proposed previously is accepted, namely that there is an influence of the application of the differentiated learning model on the learning outcomes of students in sociology subjects, social research material in class X SMA N 2 West Sumatra.

# **Suggestions**

Based on the conclusions and discussion of research results as explained above, it is proven that the application of the differentiated learning model has a significant effect on improving sociology learning outcomes for students. Based on this, the author suggests that all elements in the world of education synergize with each other in optimizing the application of this differentiated learning, and It is also recommended that teachers who are supported by the principal maximize and jointly optimize the implementation of the differentiated learning model by participating in training related to the application of the differentiated learning model and uploading the actual action on PMM (Merdeka Mengajar Platform).

# REFERENCES

Alfurqan dkk 2020. Membangun Sebuah Pengajaran Filosopi Personal: konsep dari Pengembangan Dan Pendidikan Dasar. *Jurnal Tarbiyah al-Awlad*, 2.

Anonim, n.d. *Dedi+Iskandar+-+Template+JPPI.pdf*.

Ayu Sri Wahyuni 2022. Literature Review: Pendekatan Berdiferensiasi Dalam Pembelajaran IPA. *Jurnal Pendidikan Mipa*, 12(2): 118–126.

Bendriyanti, R.P., Dewi, C. & Nurhasanah, I. 2022. Abstrac t.

Boiliu, N.I., Sihombing, A.F., Samosir, C.M. & Simanjuntak, F. 2020. Mengajarkan Pendidikan Karakter Melalui Matius 5:6-12. *Kurios*, 6(1): 61.

Cindyana, E.A., Alim, J.A. & Noviana, E. 2022. Jurnal PAJAR (Pendidikan dan Pengajaran) Volume 6 Nomor 4 Juli 2022 | ISSN Cetak: 2580 - 8435 | ISSN Online: 2614 - 1337 PENGARUH PEMBELAJARAN BERDIFERENSIASI BERBANTUAN MATERI AJAR GEOMETRI BERBASIS RME TERHADAP KEMAMPUAN PENALARAN MATEMATIS SISWA KE. 6: 1179–1187.

Indah Septa Ayu Laia, D. 2022. Pengaruh Strategi Pembelajaran Berdiferensiasi Terhadap Hasil Belajar Peserta Didik SMAN Negeri 1 Lhusa. *Jurnal Ilmiah Wahana Pendidikan*, Vol 8 No 2.

Khairani, Meri, S. Irawan 2021. Statistik Terapan. Depok: PT Raja Grafindo Persada.

Pane, R.N., Lumbantoruan, S. & Simanjuntak, S.D. 2022. Implementasi Pembelajaran Berdiferensiasi Untuk Meningkatkan Kemampuan Berpikir Kreatif Peserta Didik. *BULLET: Jurnal Multidisiplin Ilmu*, 1(3): 173–180.

Purba, M., Purnamasari, N., Soetantyo, S., Suwarma, I.R. & Susanti, E.I. 2021. *Prinsip Pengembangan Pembelajaran Berdiferensiasi ( Differentiated Instruction )*.

Rukminingsih, Adnan, G. & Latief, M.A. 2020. Metode Penelitian Pendidikan. Penelitian Kuantitatif, Penelitian Kualitatif, Penelitian Tindakan Kelas. Journal of Chemical Information and Modeling.