

Analysis of the 5th-Grade Student and Teacher's Needs Based on Learning Style in Emancipated Curriculum to Develop Differentiated Assessment

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Abstract: This research aims to analyze the needs of grade 5 elementary school students and teachers based on learning styles in the emancipated curriculum to develop differentiated assessments. This research took place in Buleleng with 27 students and one teacher as respondents. Using the descriptive qualitative method, the data was collected through direct observation, interviews, open-ended questionnaires using the VARK Fleming (2001) model, and English textbook analysis. The results of the analysis of interviews with teachers showed the conclusion that the implementation of the curriculum had not yet been optimal and is still in the adjustment stage; therefore, the learning and assessment process is not yet differentiated. The analysis of student questionnaires shows that there are different student learning styles, with the visual learning style being the most dominant, received 143 answers. With these results, teachers can modify learning media and activities to meet each student's needs and learning styles.

Keyword: *Need Analysis, learning style, Emancipated Curriculum, Differentiated Assessment*

INTRODUCTION

Educators are often challenged to determine the best methods for assessing students' progress and which processes to use during the learning process. This aligns with Saragih's (2016) assertion regarding the significance of assessment in the educational process. Determining the needs of the student and assessing the efficiency of teachers as educators and planners are all critical functions of assessment. Therefore, teachers must know how to create a practical assessment and which techniques to employ to assess students' learning. (Nurdiana, 2021). Assessment is implemented differently based on the curriculum used in a particular school or country. In Indonesia, a new curriculum called the Emancipated Curriculum has been implemented.

The Emancipated Curriculum is a government initiative to revive the education system (Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia, 2022). It represents the government's endeavor to reinstate learning and prevent learning loss after the COVID-19 pandemic. According to Anggraena et al., (2022), The emancipated curriculum emphasizes diverse learning opportunities, allowing students to delve into concepts and enhance their skills while prioritizing essential content. To implement the emancipated curriculum, teachers must apply a scientifically based approach that fosters critical thinking and creativity in their students (Kusumawardani et al., 2022; Astari et al., 2023). Additionally, this emancipated curriculum generally requires creativity inside and outside the classroom. (Abidin et al., 2023). Three essential elements of an emancipated curriculum are the use of the Pancasila student profile, the prioritization of literacy and numeracy, and the implementation of differentiated instruction by teachers based on each student's skills. (Digna & Widyasari, 2023). Furthermore, the assessment system included in the emancipated curriculum is a three-stage continuous assessment.

Students in the Emancipated Curriculum are assessed using three different forms of assessments: formative, summative, and diagnostic (Astari et al., 2023). Diagnostic assessment attempts to give a preliminary identification of student preparedness and learning preferences. (Aringka, 2023). Following the diagnostic assessment at the beginning of instruction, a formative assessment determines how much the students have improved during the learning process. The last step, a summative assessment, is also conducted as an end-of-semester evaluation (Astari et al., 2023). The emancipated curriculum guiding concepts serve as the basis for these assessments.

Differentiated learning is prioritized when implementing the emancipated curriculum. It involves using alternative teaching strategies, diverse assessment procedures, and need analysis to ensure that academic goals are reached based on student differences. (Ortega et al., 2018). In line with the statement from (Himmah & Nugraheni, 2023) Differentiated learning focuses extra attention on each student and allows for targeted learning. The learning environment, content, process, and effects are the five differentiated components based on Tomlinson and Moon, (2013) Theory. Students have different learning needs and styles, so altering those factors will improve the student's learning. According to Herdianto et al., (2023) The effectiveness of education depends upon the educator's qualifications, the learning environment, and the student's learning style.

Students can capture, assimilate, and uniquely receive information based on their learning style during the educational process. According to Asadipiran, (2016) The phrase "learning styles" refers to how different students use one or more senses to understand or remember. More profoundly, Fleming (2001) defined learning styles as individual characteristics and chosen techniques for obtaining, organizing, and processing knowledge. Meanwhile, another similar definition stated by Ghufiron, as cited in Herdianto et al., (2023) Learning styles can be used to characterize how students acquire knowledge, grasp complex material, and form diverse viewpoints. In this article, the researcher will adopt the four learning style models that Fleming (2001) identified: visual, aural, read/write/ and kinaesthetic. These are known as V-A-R-K.

Some previous research related to the analysis of students' learning styles. A study from Herdianto et al., (2023) Focused on analyzing students' learning styles. Using descriptive qualitative methods with a questionnaire, the researcher found that the students had different learning styles, which underlines that teachers should be able to apply differentiated learning to suit the needs of each student. In line with Wahab & Nuraeni (2020), using a qualitative descriptive research approach, this study is limited to analyzing three types of learning styles based on the theory of Deporter&Hernacky (2006): visual, auditory, and kinaesthetic learning styles. The results show that significant results were obtained, with the visual learning style being the most chosen by the students at 50%. In addition, research by Subagja & Rubini (2023) analyzes the four VARK's learning styles from Fleming (2001). This study used qualitative descriptive methods and found out that from the 100 students, the most dominant learning style was the kinaesthetic learning style, with the highest percentage being 35%. These studies prove that students do have different learning styles. Therefore, teachers are expected to be able to modify the learning process in terms of media and methods to meet the needs of each student. However, in previous studies, no study discussed the needs of teachers and students to optimize differentiated learning in the emancipated curriculum, which can be the basis for developing differentiated assessment. Differentiated learning is related to the implementation of the curriculum, while in differentiated learning, teachers are also expected to understand how to implement differentiated assessment because the two aspects are closely related.

This study aims to analyze the needs of students and teachers based on their learning styles in implementing the Emancipated Curriculum, which can be used as a reference in the development of differentiated assessment. This research is limited to analyzing the needs of students and teachers, and the researcher hopes that further research can use this study as a reference in developing differentiated assessments.

METHOD

In this research, to analyze teachers' and students' need analysis of learning styles in the Emancipated curriculum to develop differentiated assessment, the researcher used a descriptive qualitative research model. First, the data were collected by the researcher, and after that, the data that have been collected through several stages were analyzed using the theory from Miles, Huberman, and Saldana (2014). Based on the theory, there is an interactive model analysis data that includes four analyses: (1) Data Collection, this steps the researcher collects the data from the observation, interview, and student questionnaire (2) Data condensation, the researcher classifies the result of the questionnaire based on the four learning styles, (3) Data illustration, present the results of the classified data with graphic/chart. (4) Concluding, the researcher concludes based on the data. The steps of the data analysis by Miles et al. (2014) are presented in Figure 1. Below:

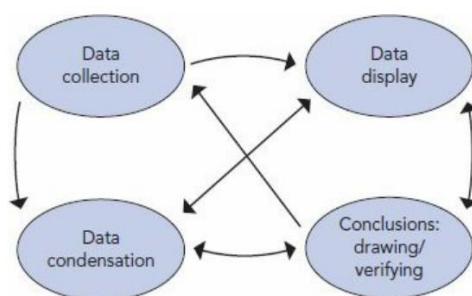


Figure 1. Interactive Model Analysis

Source: Miles et al., (2014)

At the stage of collecting the data researcher collects the data in several stages, starting from the observation stage, where the researcher observes teaching and learning activities in grade 5 elementary school directly during English learning. After that, interviews were conducted with the 5th-grade homeroom teacher who teaches the English lesson, and then questionnaires were given to the 27 students as the respondents to analyze their learning styles. The last step is an analysis of the document in this study; the researcher examined the English textbook to explore the topics and the language focus of each topic. After obtaining the data, the researcher conducted an analysis process with the purpose of finding out what the needs of students and teachers are in differentiated learning.

RESULTS AND DISCUSSION

The subjects of this study were one homeroom that teaches English lessons and 29 5th-grade students in one of the elementary schools located in Buleleng, Bali. In this finding, the researcher explained the interview with the teacher. The interview was conducted directly using recording to record the interview, and the interview was conducted at the school. Then, the students were given questionnaires on paper and distributed to 27 students. The last thing is document analysis, where, in this study, the researcher analyzed an English textbook of grade 5 students.

A. The Results of Teacher's Interviews

The interview was conducted directly with the 5th-grade homeroom teacher who teaches English lessons. The interview focused on several discussion topics, including implementing the Emancipated Curriculum, the assessment process carried out, and implementing assessments based on the Emancipated Curriculum with three stages: diagnostic, formative, and summative. The researcher explained the results of each focus on the interview clearly:

First, in the interview, the researcher discusses how the emancipated curriculum and the learning process are implemented in the school. In this section, the researcher discusses the process of implementing the emancipated curriculum at school, how the emancipated curriculum is implemented, and whether the 5th-grade students have used the assessment tailored to the emancipated curriculum. The answer given by the teacher is that the teacher says that the implementation of the independent curriculum in the school is not evenly distributed because there are certain times of application tailored to the class; for grade 5, it has only been implemented for a year, while in grades 3&6 it has not been implemented. This affected the application of assessments; the teacher said that they had been adjusted to the emancipated curriculum but were still in the process of adjustment and the early stages.

Second, the interview discussed the implementation of the assessment process, in which the teacher prepared and planned the assessment and gave feedback to students. The answer obtained from the teacher was that due to the adaptation to the new curriculum, the assessment process was not optimized. In addition, the teacher stated that diagnostic assessments have been carried out but not always, and usually, the assessment is given directly from the teacher to the students. In this way, it can be concluded that the assessment process is not optimal even though it has begun adapting the assessment based on the emancipated curriculum.

Third. The teachers were asked how to implement, determine criteria, and provide evaluation/feedback to the students in diagnostic, formative, and summative assessments. The teacher explained that, specifically in 5th grade, the diagnostic assessment had only been done several times initially at the beginning of the learning. This is in line with the interview results from the study by Supriatna et al., (2023) applying diagnostic assessment is the first step in implementing the emancipated curriculum. In the criteria, the teacher groups the students based on their ability analysis so that the teacher can give different treatments. It is similar as Faigawati et al., (2023) statements that carrying out the diagnostic assessment is important to know the student's diverse abilities and preferences. Formative assessment in grade 5 is usually assessed per chapter/topic and adjusted to the existing material, so there are no specific criteria, and it is only adjusted to the learning objectives. Furthermore, the last assessment, the summative assessment, was said to be carried out at the end of the semester so that the teacher analyzed each topic and made 40 questions based on each topic in one semester; this is what

students used to get the final grade. The teacher adds grouping the students based on their abilities, this aligns with the statement from Herwina, (2021) that it is important to understand that differentiated learning is not the same as individual learning.

Fourth, the final focus of this interview was the teachers' understanding of the differentiated assessment advocated in the emancipated curriculum. The researcher asked what the teacher understood about differentiated assessment, and the teacher answered that the understanding was still limited. This is because the curriculum implementation is relatively new and uneven, so there is still a lot that teachers need to understand, including the differentiated assessment. This certainly affects the assessment applied in the school, which is not fully differentiated with the emancipated curriculum because it is still in the process of being understood. In the end, the researcher asked what obstacles the teacher felt in implementing the differentiated assessment in differentiated learning based on the new curriculum, and the teacher explained that the main obstacle felt was because of the implementation of the emancipated curriculum, especially grade 5, had just been implemented so teachers still needed to add more information and knowledge about the implementation of this curriculum

B. The Results of Student's Questionnaires

Data was obtained from the results of the questionnaire containing 12 open-ended questions with a question model following Fleming's (2001) VARK theory, which allows students to choose more than one answer for each question. After collecting the data through preliminary observation of the school's environment and collecting the final data based on the learning styles questionnaire, the researcher gained the data for the research. The researcher classified the questionnaire results based on the results obtained from each question. The results of the student's learning style questionnaire are shown in Figure 2. below:

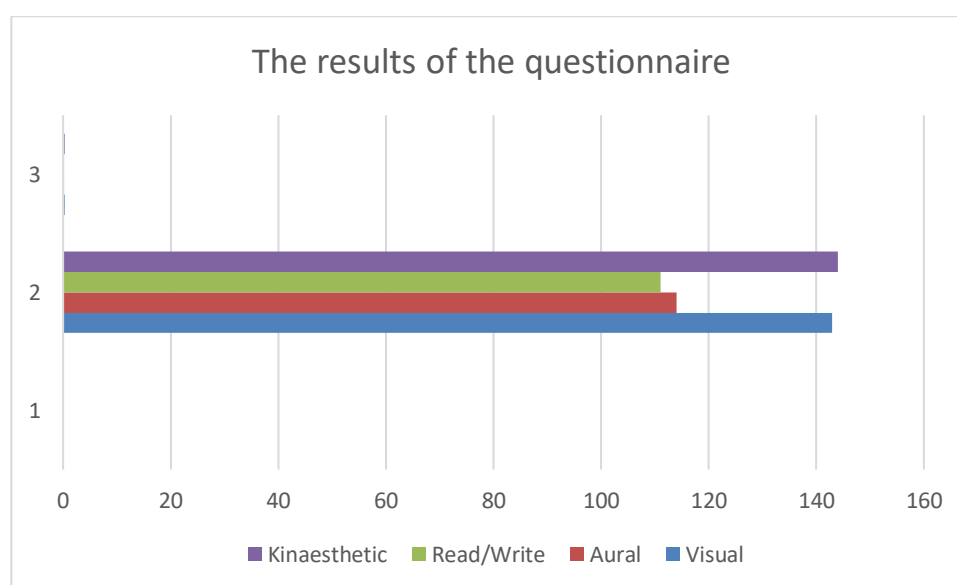


Figure 2. The results of the learning styles questionnaire

Based on the result of the data analysis from the learning questions adapted to the model of Fleming (2001), the results obtained can be described as follows: the students who chose the answer that leads to a kinaesthetic learning style get the most results with a total of 144 answers, this result proves that most 5th-grade students like to do learning that involves physical activity. This result is supported by the explanation from (2022): Kinaesthetic learners' hands-on learning is recommended because they prefer to study by doing and like to learn with movement. Furthermore, many students also like to learn by relying on their visuals. This is evidenced by the second largest result of the learning style questionnaire: students who chose answers that indicated visual learning style with a total of 143 answers. Based on the result will be a guideline for teachers in determining learning media that is visually appealing; some examples of media for visual learning style are pictures, charts, videos, brochures (Subagja & Rubini, 2023), and anything displayed using symbols rather than words (Fleming et al., 2005). Furthermore, 114 answers were obtained for students who chose answers that lead to an aural learning style, where students with this ability prefer to learn things orally and have conversations about something they are studying with teachers/friends, discuss in groups, and use tape recorders (Subagja & Rubini, 2023). The last one, getting the least answers, is the read/write learning style. This learning style got a total of 111 answers from students, and it means that grade 5 students at the school are less interested in learning materials that are shown in written form; this is because the learning media for the read/write learning style is usually in the form of books of handouts (Fleming et al., 2005). The total number of responses from grade 5 students on the questionnaire was 512, with 27 students as respondents.

The questionnaire results conclude that grade 5 students have different learning styles and interests. This should concern teachers so that they can immediately implement differentiated learning. In order to improve the effectiveness of the teaching and learning process, it is critical for the teacher to understand the learning styles of their students (Faigawati et al., 2023). The teacher's knowledge and application of differentiated learning affect the student's learning processes and outcomes because they pay more attention to their learning styles.

C. The Results of the English Textbook Analysis

The researcher examined the English textbook used for the learning process. This textbook is the official book issued by The Ministry of Education, Culture, Research, and Technology (2021). This textbook contains all learning topics taught to the 5th-grade students, and the researcher focused on analyzing the topics for the first semester. The topics and the language focus will be explained in Table 1. Below:

No	Topics	Language Focus
1	What delicious bakso!	Sweet, sour, bitter, and salty.
2	I want an ice cream cone!	A bottle, a hand, a bar, a loaf, etc.
3	How much is it?	A kilo of sugar is 11.000 rupiahs (the use of prices of foods/drinks)
4	I've got a stomachache	Stomachache, sore eyes, headache, toothache, sore throat, and cold.

5	What a nice skirt!	Blouse, shirt, hat, socks, uniform, tie, t-shirt, etc.
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CONCLUSION

Based on the research results from interviews with teachers show that the implementation of the emancipated curriculum has not been optimal and is still in the process of adjustment, especially in grade 5 elementary school. In addition, the learning process and assessment are not optimally differentiated. The results of the analysis of teacher and student needs based on learning styles conducted through questionnaires also show that each student in one class has a different learning style. This is evidenced by the results, which show that the visual learning style is the one students choose the most. With this result, teachers should pay more attention to their students, specifically in preparing differentiated learning materials.

The researcher also provides suggestions for further research. The researcher hopes that this research can be a reference for researchers who will examine the same topic and can be a reference for further researchers who want to develop differentiated assessments based on the different student learning styles in the emancipated curriculum.

References

- Abidin, D., Retnaningrum, E., Parinussa, J. D., Kuning, D. S., Manoppo, Y., & Kartika, I. M. (2023). Curriculum Development in Indonesia from a Historical Perspective. *Journal of Education Research*, 4(2 SE - Articles), 443–451. <https://jer.or.id/index.php/jer/article/view/175>
- Aringka, Y. (2023). (Diagnostic Assessment In Implementing Curriculum Merdeka On Senior High. 8(3), 913–917.
- Asadipiran, N. (2016). Identifying Young Learners' Learning Styles among Iranian EFL Learners. *Theory and Practice in Language Studies*, 6(7), 1444. <https://doi.org/10.17507/tpls.0607.16>
- Digna, D., & Widyasari, C. (2023). Teachers' Perceptions of Differentiated Learning in Merdeka Curriculum in Elementary Schools. *International Journal of Elementary Education*, 7(2), 255–262. <https://doi.org/10.23887/ijee.v7i2.54770>
- Education, E. L., & Ganesha, U. P. (2023). The Implementation Of Assessment In Teaching English . 6, 411–420.
- Faigawati, F., Safitri, M. L. O., Dwi Indriani, F., Sabrina, F., Kinanti, K., Mursid, H., & Fathurohman, A. (2023). Implementation of Differentiated Learning in Elementary Schools. *Jurnal Inspirasi Pendidikan*, 13(1), 47–58. <https://doi.org/10.21067/jip.v13i1.8362>
- Fleming, N.D., (2001) Teaching and Learning Styles: VARK Strategies
- Fleming, N. D., Robson, G., & Smith, R. (2005). Sports coaching and learning : using learning preferences to enhance performance. 76.

- Herdianto, F., Mudzanatun, M., Suneki, S., & Tunjungsari, D. R. (2023). Analysis of Students' Learning Style Profiles in 5th Grade Differentiate Learning in Elementary School. *Edunesia: Jurnal Ilmiah Pendidikan*, 4(2), 619–630. <https://doi.org/10.51276/edu.v4i2.417>
- 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>
- Himmah, F. I., & Nugraheni, N. (2023). Analisis Gaya Belajar Siswa untuk Pembelajaran Berdiferensiasi. *Jurnal Riset Pendidikan Dasar (JRPD)*, 4(1), 31. <https://doi.org/10.30595/jrpd.v4i1.16045>
- Ii, B. A. B., Teoretik, A. D., Pembelajaran, H., & Asing, B. (2003). 'Pembelajaran' Dan. 04(3), 9–47.
- Miles, M.B, Huberman, AM, & Saldana, J. (2014). *Qualitative Data Analysis, A Methods Sourcebook*, Edition 3. USA: Sage Publications. Terjemahan Tjetjep Rohindi Rohidi, UI-Press.
- Nurdiana, N. N. (2021). Language Teacher Assessment Literacy: A Current Review. *Journal of English Language and Culture*, 11(1), 66–74. <https://doi.org/10.30813/jelc.v11i1.2291>
- Ortega, D. P., Cabrera, J. M., & Benalcázar, J. V. (2018). Differentiating instruction in the language learning classroom: Theoretical considerations and practical applications. *Journal of Language Teaching and Research*, 9(6), 1220–1228. <https://doi.org/10.17507/jltr.0906.11>
- Subagja, S., & Rubini, B. (2023). Analysis of Student Learning Styles Using Fleming's VARK Model in Science Subject. *Jurnal Pembelajaran Dan Biologi Nukleus*, 9(1), 31–39. <https://doi.org/10.36987/jpbn.v9i1.3752>
- Supriatna, D., Nadirah, S., Aniati, Rahman, A., Aina, M., & Saefudin, A. (2023). Implementation of Merdeka Belajar Curriculum in Elementary Schools: How is Teachers' Perception? *International Journal Of Education*, 02(02), 30–40. <https://e-journal.citakonsultindo.or.id/index.php/IJEVSS/article/view/182>
- Tomlinson, C. A. (2017). *How to Differentiate Instruction in Academically Diverse Classrooms*.
- Tomlinson, C. A., & Moon, T. R. (2013). *Assessment and Student Success in a Differentiated Classroom*. www.ascd.org/memberbooks