A Case Study of Implementing Differentiated Instruction in Social Studies Teaching at a Junior High School in Banyuwangi

Sasi Andriani

Master of Education in Social Studies, Jember University, Jember, Indonesia

egarafandra@gmail.com

Abstract: The objective of this article is to examine a case study on the utilization of differentiated learning approach in teaching at a Junior High School located in the Singojuruh District, Banyuwangi, East Java. The author employs a case study as a research method grounded in an interpretive paradigm. The participants in this study are 30 seventh-grade students. They were requested by the school principal to engage in a demonstration of differentiated instruction alongside one of the teacher facilitators from Banyuwangi Regency. Data were collected through pre-observation interviews, direct observations, and post-observation interviews. The research findings indicate that well-designed lessons using the differentiated learning approach can provide maximum benefits for students with varying levels of abilities. Moreover, this approach also enhances student engagement in the classroom learning process. Additionally, this study also offers several suggestions for future research.

Keywords— differentiated instruction; classroom management; student engagement.

1. INTRODUCTION

The realm of education has attracted the interest of various stakeholders, such as policymakers, researchers, school administrators, teachers, parents, and students, due to the emergence of innovative practices. Although each stakeholder plays a distinct role, the common goal of these innovations is to improve the quality of education by implementing policies that promote teacher growth and establish a more engaging learning environment for students.

An example of educational innovation is the emergence of differentiated instruction as a teaching strategy. Differentiated instruction, as an instructional approach, acknowledges the significance of catering to variations in students' readiness, interests, and learning profiles to promote optimal learning [1]. This approach aims to address the diverse needs of students by designing instruction accordingly. In any classroom, it is inevitable to encounter variations among students, such as cultural backgrounds, socio-economic status, and family upbringing. Instead of disregarding these individual differences, they require special attention from teachers to ensure successful learning outcomes. Consequently, conducting studies on the implementation of differentiated instruction tailored to students' readiness, interests, and learning profiles is crucial as it offers numerous benefits.

Within the context of education in Indonesia, there is a pressing need for innovative policies. Approximately a year ago, the Ministry of Education introduced an independent curriculum to cater to the evolving educational goals of the new era. However, it is essential to acknowledge that Indonesia is a culturally diverse nation, encompassing numerous ethnicities with distinct socio-economic backgrounds and family dynamics. Despite the implementation of the new curriculum, it is crucial to not overlook the needs of students hailing from diverse backgrounds [2]. While the curriculum, like any other curriculum, aligns with national educational objectives, it has not fully adapted teaching strategies to accommodate various contextual differences [3]. Consequently, differentiated instruction emerges as a viable solution to address the demographic diversity present in Indonesian schools.

To steer this research, the researchers developed the subsequent research inquiries: (1) In what manner is differentiated instruction put into practice in mixed-ability classrooms, concerning content, process, and product? (2) How does the utilization of differentiated instruction contribute to the improvement of learning outcomes for students with diverse needs?

2. LITERATURE REVIEW

There are several underlying rationales for the implementation of differentiated instruction in education, primarily because students entering the classroom exhibit heterogeneity. They possess diverse characteristics within various contexts, encompassing cultural, social, and familial influences that shape their unique backgrounds. As a result, their abilities to actively participate in learning vary, highlighting the need to create meaningful learning experiences that cater to their individual learning processes.

From a constructivist standpoint, learning occurs when students actively construct knowledge through their experiences. According to Vygotsky's theory, students engage in learning within a specific sociocultural context, where they actively construct their own understanding. It is worth noting that what is taught may not always align with what students actually learn. This assertion stems from Vygotsky's belief that education is a process rather than a mere outcome. Therefore, it is crucial to consider the learning process as an experiential journey through which students develop their understanding.

Furthermore, comprehending the concept of the Zone of Proximal Development (ZPD), as introduced by Vygotsky, holds significant importance. The ZPD refers to the disparity between a student's current developmental level and their potential developmental level [4]. This concept is also referred to as "i+1," which implies that teachers must discern and identify what students already know and what they need to learn in order to bridge the gap for new learning. Consequently, students can derive maximum benefits from the lessons, as they are positioned at an appropriate level that neither overwhelms them nor leaves them disengaged. Thus, all students find themselves in a suitable position to acquire new knowledge based on their individual understanding.

Learning among students manifests in diverse ways. According to Gardner's theory, one approach to identify students' intelligence is through the concept of multiple intelligences. Students exhibit variation in terms of their intelligence profiles, highlighting the importance of acknowledging their diversity based on multiple intelligences. Traditional learning approaches often assess success solely within conventional contexts, such as through standardized tests. However, this perspective fails to capture the true essence of intelligence. Recognizing that intelligence cannot be measured by a single metric, students need to experience different approaches, techniques, and authentic as well as traditional assessments that embrace their differences and nurture their individual strengths [4].

Once the learning process is acknowledged, it becomes crucial to address student engagement concerns. Previous research indicates that students display diversity in terms of cultural, social, economic, ethnic, and racial backgrounds [1]; [5]. These distinctions should not be overlooked, as teachers should refrain from relying solely on uniform instructional methods that may resonate with a specific group of students but prove uninspiring for others. The aim is for all students to be academically engaged. Academic engagement is defined as the psychological and behavioral investment in learning, understanding, and mastering academic skills and knowledge [6]. Addressing students' willingness to invest psychological and behavioral efforts into learning is pivotal in creating meaningful learning experiences that foster the development of knowledge and promote engagement for every student.Previous research has shown that differentiated instruction has benefits and advantages as it is tailored to students' needs, but teachers face challenges [5]. Researchers have identified external and internal challenges, ranging from institutional support to teachers' self-confidence in implementing differentiated instruction. This indicates that current research can serve as a model for the implementation of differentiated instruction in real classrooms.

In addition to internal and external factors that hinder the implementation of differentiated learning, there are also issues regarding teachers' readiness and knowledge of differentiated instruction [7]. Several studies [8]; [9] have found that this can hinder the desired outcomes of differentiated instruction. Therefore, current research should contribute to identifying factors that need to be considered and how differentiated instruction can enhance student learning.

Acquiring maximum advantages from differentiated instruction poses a challenge, as teachers need to possess comprehensive knowledge regarding student diversity across various aspects, including their needs based on their abilities. Classes are typically assigned randomly, resulting in a mixture of students with varying language proficiency. Hence, teachers' proficiency in differentiated instruction becomes crucial [5]. Chien [8] emphasizes that thorough preparation is one of the issues teachers encounter, and implementing modeling techniques aligns with the principles of social learning theory [10]. Therefore, the objective of this research is to explore the application of differentiated instruction in diverse classrooms at a Junior High School in Singojuruh, Banyuwangi. Furthermore, this report investigates the implementation of differentiated instruction in mixed-ability classrooms and its potential benefits for students with diverse backgrounds in the three domains of differentiated instruction: content, process, and product [11].

3. RESEARCH METHOD

3.1 Research Design

This study employs a qualitative case study methodology, which centers on examining the experiences of small groups or individuals within a specific setting [12]. The research was conducted at a Junior High School situated in the Singojuruh District, Banyuwangi, East Java. Singojuruh District is considered to have a distinct student profile compared to students in other areas, influenced by their socioeconomic status, where some come from lower socioeconomic backgrounds.

3.2 Setting and Participants

The classes examined in this study are not regular classes, but rather specialized classes specifically designed to showcase differentiated learning. A highly experienced teacher with over 16 years of teaching experience was selected to demonstrate the process of differentiated learning. This teacher had completed a 9-month lead teacher education program and held the position of a lead teacher. The study involved a total of thirty students, who were randomly assigned by the school for the purpose of the demonstration. As a result, the teacher and students were not familiar with each other, leading to unclear profiles of the students. Throughout the two-hour observation of the demonstration, it was noted that certain groups of students were able to effectively communicate in the dynamic classroom environment, while others faced challenges in doing so. Among the students, there were 14 males and 16 females.

In conducting observations of differentiated learning, it was possible to identify student profiles (high-achieving students, moderate-achieving students, and low-achieving students) prior to the observation. However, due to the specific context, all student profiles were unidentified. The researched class was used as an example for teachers and academics. During the learning process, they were randomly assigned to six groups, each consisting of five members.

3.3 Data Collection

Prior to commencing the teaching observation, an interview was conducted with the teacher. The preobservation interview covered various topics, including lesson planning and the underlying philosophical foundations. These foundations encompassed aspects such as the school's curriculum, differentiated learning theory, constructivism theory in education, the zone of proximal development, and potential issues that could arise during the learning process along with their corresponding solutions.

Throughout the observation process, the researcher diligently took field notes. These notes captured the different activities conducted during the observation, the timing of each activity, the teacher's actions, the instructions provided, and the activities of the students at each stage. Additionally, the researcher recorded several videos to showcase the teacher's teaching approach and the activities of the student groups. Furthermore, the researcher utilized a differentiated learning classroom observation scale [13] to facilitate the assessment and evaluation of the observed classroom dynamics.

3.4 Data Analysis

The collected data from the pre-observation interviews, field notes during observations, video recordings, and postobservation interviews were thoroughly analyzed by the researcher. The data were systematically coded according to key themes encompassing student profiles, differentiated learning, interaction patterns, the zone of proximal development, and student engagement in problem-solving tasks. The interview data were transcribed and carefully adjusted to ensure clarity and accuracy of meaning. The data were cross-referenced with the video recordings and field notes to validate and enhance the analysis process. Through the coding process, narrative data relevant to the research questions and the theoretical foundations of this study were identified and extracted.

4. FINDINGS AND DISCUSSION

Differentiated learning encompasses various aspects, including content, process, and product:

4.1 Content

The instructional material utilized in the classroom is a textbook that aligns with the independent curriculum. The specific topic being covered is "Self-Existence and Family in the Social Environment." This material comprises a variety of resources such as reading texts, images, videos, case study articles, and simulation guides, which have been carefully designed to cater to the diverse needs of the students. To aid in comprehension of the reading texts, the teacher provides pre-reading activities that focus on essential vocabulary. This material plays a crucial role in supporting students as they engage with and grasp the content. The teacher ensures that the students are operating within the "i+1" context, where they can bridge the gap between their current knowledge and the knowledge they are yet to acquire.

There are two distinct designs for the pre-reading activities. The first design involves a brief dictation exercise that incorporates elements of reading, listening, visual aids, and writing. The second design entails a more comprehensive dictation exercise that includes reading, visual aids, and writing. These options are consistently available to cater to the diverse levels of ability and readiness among the students.

4.2 Process

To depict the classroom environment, a well-arranged setup has been established for observation. The desks are organized in groups of five, each group equipped with five chairs. Cameras have been positioned to capture the learning process, while an observer's seat is placed in the corner of the classroom. As the school bell rings, the students enter the room and take their seats in their assigned areas. An assistant teacher assists in setting up the classroom computer for a PowerPoint presentation. Once all the students are settled, the teacher initiates the lesson by greeting the class and delivering a brief introduction. Additionally, the teacher individually greets some students, as he explains during an interview session that this is done intentionally to foster a connection with the students, considering their relatively new relationship.

The learning process unfolds with three main themes accompanied by various smaller activities: building knowledge, introducing new knowledge, and evaluation. In the building knowledge phase, the teacher employs a quick dictation activity to teach vocabulary. This activity proves beneficial in assessing the students' comprehension. Drawing on Vygotsky's concept of "i+1," this crucial session aims to gauge the students' current level of knowledge, allowing the teacher to provide appropriate assistance. This process facilitates the identification of foundational knowledge and positively influences subsequent activities.

Upon completion of the identification process, it became apparent that the student groups were not homogeneous, exhibiting varying abilities across the five groups. The random distribution of students allows for the implementation of different instructions. As previously discussed, content has been prepared to cater to different levels and student needs, enabling instructions to address these variations. In a traditional approach, the teacher may deliver instruction in a moderate manner. However, with different instructions, the teacher can optimize engagement among students of different types. Students with lower abilities receive simpler

International Journal of Academic Pedagogical Research (IJAPR) ISSN: 2643-9123 Vol. 7 Issue 6, June - 2023, Pages: 52-57

instructions to increase their participation and reach the expected level. Intermediate-level students can enhance their abilities, while more advanced students can tackle more complex tasks. This perspective promotes social justice among students, enabling them to experience equality in deriving maximum benefits from the lessons.

The benefits gained by students are not limited to an individual perspective, but also extend to collaboration among peers. Given their diverse needs and readiness for the taught material, students are encouraged to engage in cooperative learning methods. They participate in a structured approach that encompasses diversity and random selection with equal participation. Each student can engage fairly in various classroom activities without concerns of unfair treatment based on their abilities. This was observed within the group of five, where a member with lower abilities experienced anxiety when asked to step forward. However, other team members provided encouragement and assistance, fostering positive communication among group members.

Interaction patterns were also observed during the study. The utilization of different instructions facilitated various interaction patterns between the teacher and students. These patterns encompassed teacher lectures, teacher-led lectures with periodic student discussions, group discussions, problem modeling by the teacher, quizzes, demonstrations, manipulations (translating abstract ideas into concrete form), individual work, group work, teacher-individual interaction, teacher-group interaction, teacher's use of technology, and assessment.

4.3 Product

In learning, the term "product" usually refers to the outcome of student work, but in this research, the context is slightly different. Although lessons could be further developed to have students produce various products, such as posters on how to interact well with friends or neighbors, the lesson sessions are too brief as they are intended for short observation-demonstrations. Nonetheless, student products can still be generated and accessed through authentic assessment in the form of portfolios collected at the end of the class. Students are required to submit these portfolios to the teacher. Throughout the learning process, differentiation is done in distinguishing the products. The teacher provides direct feedback during in-class activities that result in portfolio components as authentic assessments [4]. Since each student may have a different portfolio, the teacher cannot use the same criteria to score each student [14]. This was confirmed in the post-observation interview. The teacher emphasized that grading is not easy because task products can vary. Therefore, assessment guidelines for different student levels are needed. Differentiated instruction is the best solution to address the daily challenges faced by teachers in their teaching activities. The increasing student population or socio-economic dynamics occurring in society continuously affect the backgrounds, cultures, economies, ethnicities, genders, and racial profiles of students. This unavoidable fact must be considered by teachers in designing appropriate teaching approaches for diverse students. The various student profiles will influence how they understand the world, their academic abilities, and their interactions with teachers and peers. In this context, instruction that is tailored to each student's profile will benefit everyone, promoting equality, optimizing quality, and enhancing teaching effectiveness [15].

The findings from the observation indicate that differentiated instruction can be effectively applied in the domains of content, process, and product. Careful planning is essential for each of these domains to address the diverse needs of students with varying abilities, ultimately enhancing the significance of their learning journeys. Baecher et al. [11] highlighted several principles that should be taken into account when implementing differentiated instruction. These principles include identifying students' strengths and weaknesses, aligning common goals with the official curriculum while differentiating those goals, ensuring ease of management for both teachers and students, providing stages or assistance in the learning process, maintaining appropriateness, flexibility, and offering choices, as well as ensuring effective classroom management, particularly in terms of time management. It is important to consider students' readiness, interests, and learning profiles to effectively implement differentiated instruction [16]. Readiness refers to students' skills and prior knowledge related to the topic being taught. Interest reflects whether the tasks provided will enhance students' curiosity. Learning profiles describe how students prefer to engage with the tasks. The observation results revealed that the teacher has addressed students' readiness through a critical component, namely pre-teaching vocabulary. Acquiring essential vocabulary for the learning process is crucial in preparing students' readiness in terms of content. The concept of readiness can extend to all three domains, including content, process, and product. By acknowledging and implementing differentiation based on readiness, the teacher has assisted students in reaching a slightly higher level of understanding (i+1) in line with the zone of proximal development theory [17]. Students are challenged to work a little harder to grasp the concept, and their cognitive abilities are assessed in a measurable manner.

Considering the various interests of students is important, although it may not be feasible to address all of them. However, teachers should take student interests into account when implementing differentiated instruction. Student interests can serve as a tool to capture their attention and engage them in the lessons. By employing strategies that involve students in constructing knowledge, their interest can be sparked. When appropriate and engaging activities are utilized, it can foster active engagement among students. Meaningful engagement positively impacts their knowledge construction and facilitates the achievement of desired outcomes. This implies that changes in teaching practices should be driven by student appeal rather than personal teaching styles of the teachers.

Furthermore, understanding students' learning profiles, including their preferences for working with tasks, helps teachers ensure effective and efficient learning. Effectiveness pertains to how smoothly students engage in the learning process, sustaining their participation. Efficiency refers to learning within the designated timeframe, minimizing time wastage. In this regard, four aspects should be considered: student group orientation, learning environment, cognitive style, and intelligence preferences. Observation data indicate that student group orientation, learning environment, and cognitive style influence the smoothness of the learning process.

5. CONCLUSION

This study seeks to illustrate the implementation of differentiated instruction in a classroom with students of diverse abilities, focusing on content, process, and learning products, and examines its impact on enhancing learning for a heterogeneous student population. The findings demonstrate that differentiated instruction can effectively be applied across these three domains, offering a solution for addressing classrooms comprising students with varying abilities. In today's educational landscape, classrooms inevitably encompass students from diverse backgrounds in terms of culture, socioeconomic status, race, ethnicity, and gender. Therefore, teachers can incorporate differentiation into their lesson planning to cater to the needs of students across all dimensions. The research also highlights that despite the differences in ability levels, students can remain actively engaged in their own unique ways.

However, successful differentiation requires careful consideration of three key characteristics: readiness, interest, and students' learning profiles. These characteristics guide teachers in tailoring content, processes, and learning products to suit individual student needs.

This article suggests that while differentiated instruction involves a complex process encompassing planning, implementation, and evaluation, it can assist teachers and students in addressing the challenges encountered in everyday learning. Teachers can benefit from employing more effective approaches to achieve desired learning outcomes, while students can engage in meaningful ways and construct their knowledge.

Nevertheless, it is important to acknowledge the limitations of this research, as it served as a demonstration rather than actual implementation. Future studies should aim to explore realistic classroom practices and undertake longterm research to uncover unforeseen challenges. Additionally, further research can focus on investigating the effectiveness of differentiated instruction by employing controlled participant selection and measuring teachers' knowledge and attitudes to obtain comprehensive findings and detailed insights into its impact on specific learners. Furthermore, expanding research from an interpretive paradigm perspective can provide a deeper understanding of how teachers and students can derive maximum benefits from differentiated instruction, encompassing aspects of preparation and satisfaction.

6. ACKNOWLEDGEMENT

The author would like to express gratitude to all parties who have been willing to help by providing their time and cooperation during the learning practice, conducting interviews, providing data, access, and facilities needed to collect the necessary information. This research would not have been possible without their contributions.

The author acknowledges that this expression of gratitude may not encompass all individuals and institutions involved in the research process. Nevertheless, the author highly appreciates every contribution and support provided by all parties who have assisted in the completion of this article.

7. REFERENCES

- Tomlinson, C. A. (2005). Grading and differentiation: paradox or good practice? Theory into Practice, 44(3), 262-269.
- [2] Wei, B., & Ou, Y. (2019). A comparative analysis of junior high school science curriculum standards in Mainland China, Taiwan, Hong Kong, and Macao: Based on revised Bloom's taxonomy. International Journal of Science and Mathematics Education, 17(8), 1459-1474.
- [3] Chen, M. J., Fan, H. H., Guo, C. Y., & Kang, J. L. (2020). How do they transform? The story of two primary schools about curriculum leadership and development in Taiwan curriculum reform. International Journal of Social Sciences & Educational Studies, 7(1).
- [4] Subban, P. (2006). Differentiated instruction: A research basis. International education journal, 7(7), 935-947.
- [5] Lavania, M., & Nor, F. B. M. (2020). Barriers in differentiated instruction: A systematic review of the literature. Journal of Critical Reviews, 7(6), 293–297. <u>https://doi.org/10.31838/jcr.07.06.51</u>
- [6] Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. Review of Educational Research, 74(1), 59-109.
- [7] Jager, T. de. (2016). Perspectives of teachers on differentiated teaching in multi-cultural South African secondary schools. Studies in Educational Evaluation. 53, 115-121.

https://doi.org/10.1016/j.stueduc.2016.08.004

[8] Chien, Chin-Wen. (2015). Analysis of Taiwanese elementary school English teachers' perceptions of designs, and knowledge constructed about differentiated instruction in content, Cogent Education, 2(1), DOI: 10.1080/2331186X.2015.1111040

- [9] Lunsford, K. J. (2017). challenges to implementing differentiated instruction in middle school classrooms with mixed skill levels (Unpublished Dissertation). Walden University. Retrieved from https://scholarworks.waldenu.edu/dissertations
- [10] Bandura, A. (2005). The Evolution of Social Cognitive Theory. In K. G. Smith & M. A. Hitt (Eds.), Great Minds in Management (pp. 9–35). Oxford: University Press.
- [11] Baecher, L., Artigliere, M., Patterson, D. K., & Spatzer, A. (2012). Differentiated instruction for English language learners as "variations on a theme" teachers can differentiate instruction to support English language learners. Middle School Journal, 43(3), 14-21.
- [12] Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2010). Methods in educational research: From theory to practice (Vol. 28). John Wiley & Sons.
- [13] Cassady, J. C., Speirs Neumeister, K. L., Adams, C. M., Cross, T. L., Dixon, F. A., & Pierce, R. L. (2004). The differentiated classroom observation scale. Roeper Review, 26(3), 139-146.
- [14] Hapsari, A., Ammar, M. H., & Ghali, M. I. (2020). Student teachers' experiences on task-based language teaching: A narrative inquiry. Edulangue, 3(2), 103-126. <u>https://doi.org/10.20414/edulangue.v3i2.1953</u>
- [15] Tomlinson, C. A. (2001). How to differentiate instruction in mixed-ability classrooms. ASCD.
- [16] Valiandes, S. (2015). Evaluating the impact of differentiated instruction on literacy and reading in mixed ability classrooms: Quality and equity dimensions of education effectiveness. Studies in educational Evaluation, 45, 17-26.
- [17] Hedegaard, M. (2012). The zone of proximal development as basis for instruction. In An introduction to Vygotsky (pp. 234- 258). Routledge.
- [18] Hallam, S., & Ireson, J. (2005). Secondary school teachers' pedagogic practices when teaching mixed and structured ability classes. Research Papers in Education, 20(1), 3-24.
- [19] Rahman, K., Imansyah, I., & Utama, I. M. P. (2019). Investigating the effect of self-regulated strategy development on tertiary EFL students' writing skills. Edulangue, 2(1), 19- 35. <u>https://doi.org/10.20414/edulangue.v2i1.696</u>