

## DIFFERENTIATED INSTRUCTIONS: RELEVANT STUDIES ON ITS IMPLEMENTATION

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### ABSTRACT

*Differentiated instructions have been recommended for classrooms with students of different readiness, learning profiles, and backgrounds in English classrooms. This study aimed at elaborating the implementation of differentiated instruction in terms of its advantages and the challenges encountered by teachers and students in implementing differentiated instruction. The study was designed as library research, following George's ten steps (2008) model. Experts' opinions and previous studies were reviewed in this present study to provide a comprehensive mapping of the advantages and challenges in implementing differentiated instructions. The review revealed that differentiated instruction could motivate low-achieving students, increase students' participation, interaction, and cooperation, as well as build a better teacher-student relationship. However, differentiated instruction also poses challenges, such as time-consuming, misperception about unfair treatments, and class size. These results imply that better planning should be conducted before implementing differentiated instruction to gain its benefits.*

**Keywords :** *Benefits; Challenges; Differentiated Instructions; Implementation*

### INTRODUCTION

Teaching is seen as a process of sharing knowledge from teacher to students or students to students and teachers' effort to help the students to develop and expand their cognitive, physical, social, and emotional based on their different abilities (Al-Khayat et al., 2017). Students' diversity may influence teaching and learning activity's success (Suwastini et al., 2021; Tomlinson, 2000). The diversity in the classroom includes various ages, ethnicity, gender, students' abilities, religious orientation, socio-economic status, family status, and other diversity (Ginja & Chen, 2020). Different students have different characteristics, needs, abilities, ways of learning the content in the classroom (Danley & Williams, 2020), and levels of knowledge development (Ismajli & Imami-Morina, 2018). Student's differences encourage the teacher to choose the most suitable

strategies wisely to teach the students equally. Differentiated Instruction is a teaching strategy designed to suit learners' different conditions (Chen & Chen, 2018).

In a differentiated classroom, the teacher can use various contents, methods, products, and learning environments considering the students' condition: students' readiness, learning styles, and talents, skills, abilities, cultural and social background (Ismajli & Imami-Morina, 2018; Magableh & Abdullah, 2020). With these adjustments, the students are motivated and engaged actively in the learning process (Danley & Williams, 2020). Differentiated instruction is started by analyzing students' needs and knowing every student's characteristic (Tomlinson & Imbeau, 2010) through conducting pre-assessment or individual interviews between teacher and student (Suwastini et al., 2021). The teacher should help the students to build and possess a sense of group or community in the classroom and lead students to set positive vibes in the community, for example, by engaging them in some group activities. The last step is using appropriate methods and strategies to accommodate students needs in the classroom (Ersani et al., 2021).

Considering the proven advantages of differentiated instruction for students in terms of motivation and achievements, and the possible challenges teachers face during its implementation such as time restriction and students number, the present study aimed to synthesize experts' opinions and results of previous studies on differentiated instructions. The result of this study is expected to provide insights to teachers, educators, researchers, and parents about the benefits of differentiated instruction. Furthermore, a review of the challenges teachers have faced during its implementation may enlighten teachers to minimize problems during the implementation of differentiated instructions. Summary of these challenges may also inspire future teachers to conduct more experiments on how to reap the benefit of differentiated instruction without fewer challenges.

## **METHOD**

This study applied library research designed by George (2008). It involved previous expert opinions and related articles findings with the same topic with this current study. The steps started with choosing a general topic that would be discussed until drafting and revising (Ariantini et al., 2021) as illustrated in Figure 1.

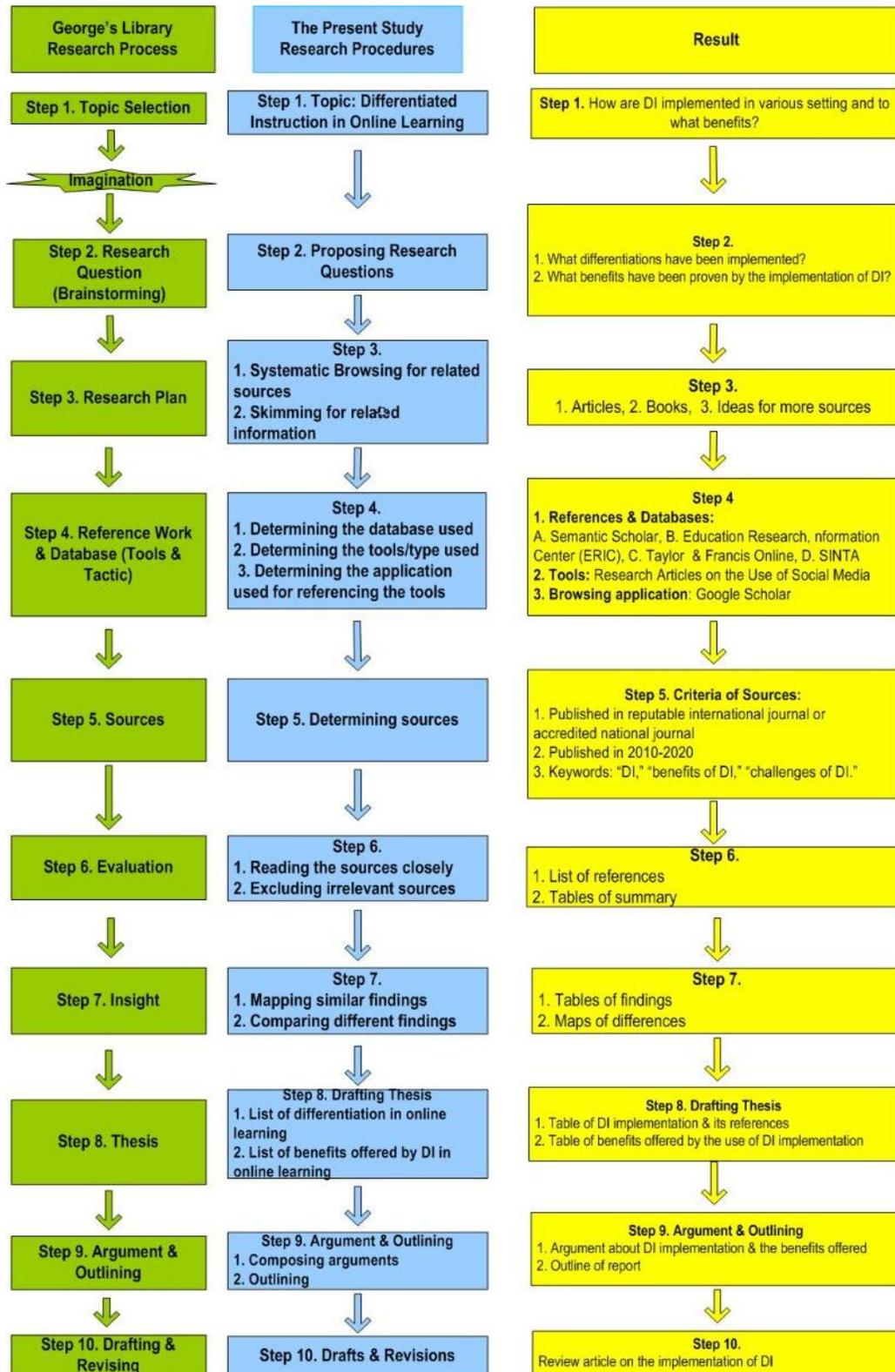


Figure 1. Research Procedures based on George's Library Research (2008)

The initial step was topic selection, and the general topic chosen in this study was “Differentiated Instruction”. The second step was proposing a research question in which the research question was how the implementation of differentiated instruction, the advantages of differentiated instruction, and the challenges in implementing differentiated instruction in the classroom. The third step was determining the research plan; reading some information from various trusted sources discussing related topic. The fourth step was choosing reference work and database, and Google Scholar was chosen in this study as the primary data sources. The fifth step was standardizing the sources or making criteria for the sources chosen. In this study, the sources were derived from trusted studies and articles discussing differentiated instruction in learning English, published in accredited journals such as Scopus and SINTA. Books used as references were six books from Tomlinson in 1999, 2000, 2010, 2011, 2013, and 2014. There were 23 articles on differentiated instruction included in this study which published from 2010 until 2021. The sixth step was evaluation in which the sources’ contents derived were evaluated and synthesized. The next step was reading the sources to get a deeper understanding, with which the research questions were answered in the eighth step. These answers gave the research the outline of the research report, where the arguments about the benefits and challenges of differentiated instructions are elaborated. The tenth step was drafting and revising, derived from the outline and the input from the reviewers.

## RESULT & DISCUSSION

This paper focused on analyzing the advantages and challenges of differentiated instruction implementation from 23 related studies. These articles focused on investigating and finding out the implementation of differentiated instruction and its advantages and challenges teachers and students face. The results were then grouped into the advantages and challenges categories and presented in Table 1.

Table 1. *Advantages and challenges in implementing Differentiated Instruction*

No	Advantages	No	Challenges
1	Motivating low achieving students	1	Time-consuming
2	Increasing students’ achievement	2	Prejudice on different treatment
3	Promoting students’ participation, interaction, and cooperation	3	Class size
4	Promoting better teacher-student relationship		

According to experts and previous research, the table shows three advantages of differentiated learning: motivating low-achieving students, increasing students’ achievement, promoting students’ participation, interaction, and cooperation, as well as promoting teacher-students relationships. Three challenges have also been identified during the review of differentiated instruction implementation: time-consuming, prejudice on different treatments toward the students, and class management with a large number of students.

### *Advantages of Implementing Differentiated Instruction*

A class whose students have different readiness, backgrounds, and learning profiles can be challenging (Suwastini et al., 2021). Thus, differentiated instruction has

been believed to benefit mixed-ability classrooms at every level of education (Magableh & Abdullah, 2020). A review of experts' opinions and previous research conducted in the present study reveals four main advantages of differentiated instruction as shown in Figure 2.

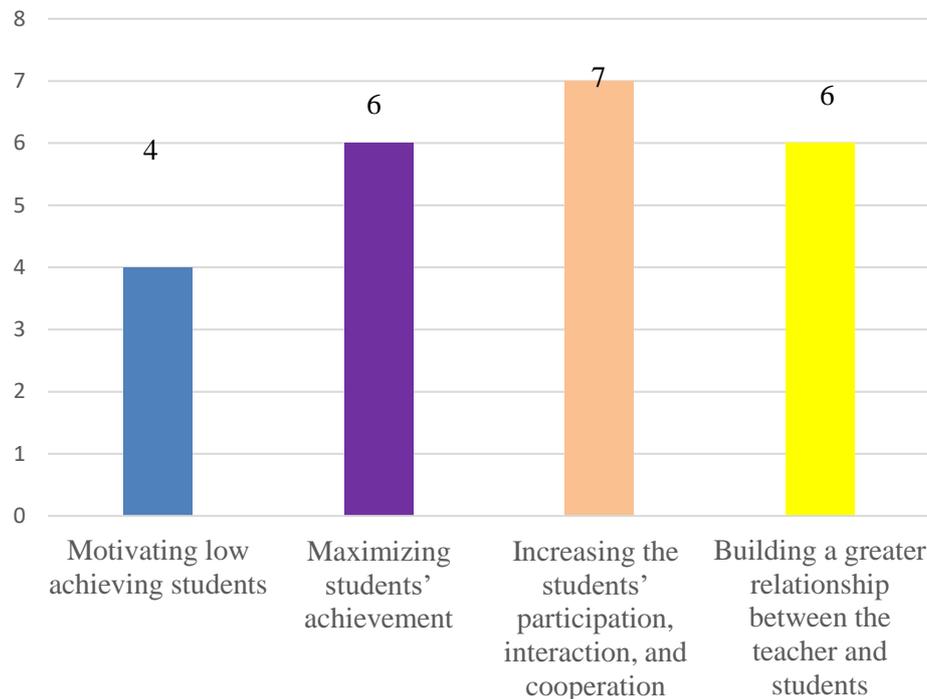


Figure 2. Advantages of Differentiated Instruction

The first advantage of differentiated instruction, according to previous studies, is motivating low-achieving students. Differentiated instruction can motivate students by suiting the teaching media and teaching strategy with students' needs (Aftab, 2016; Chen & Chen, 2018). Chen & Chen (2018) found that the students treated with differentiated instruction achieved better scores than those who were not. Implementing differentiated instruction increases the students' motivation, willingness to learn calculus, and understanding of the learning content. Differentiated instruction involves various activities, contents based on the students' needs, freedom to express feelings, appropriate, motivated, and exciting methods. Differentiated instruction is argued to motivate the students to participate actively during the discussion in the classroom, especially the low achievement students in mixed ability classrooms (Aftab, 2016). Differentiated instruction makes the low achieving students excited and engrossed in learning by providing various teaching media (Tomlinson & Imbeau, 2010), such as involving games and cooperative learning in the teaching strategies (Tomlinson & Moon, 2013).

Differentiated instruction has been deemed to optimize the students' learning process, leading to better achievement (Danley & Williams, 2020; Endal et al., 2013; Mitsi, 2017; Tulbure, 2011). It is argued that by treating the students with different strategies based on their learning styles makes the students achieve better score (Tulbure,

2011). The implementation of differentiated instruction also increase the students' achievement, especially in writing (Endal et al., 2013). It is also acknowledged that differentiated instruction can treat the students equally, especially in activating substantial participation during teaching that could maximize student achievement (Mitsi, 2017). The implementation of differentiated instruction considers every element in teaching, including teaching point, teaching context, learning readiness, students' interest, and learning of each student profile. It makes the differentiated instruction runs successfully and effectively besides using appropriate teaching strategies. It is added that learners' learning styles, interests, talents, abilities, and cultural and social background are supported by differentiated instruction to maximize their achievement (Ismajli & Imami-Morina, 2018). Tomlinson (2000) also states that differentiated instruction can maximize students' achievement by providing suitable learning methods that build students' comfortable learning.

The next advantage of differentiated instruction is increasing students' participation, interaction, and cooperation (Karadag & Yasar, 2010; Tomlinson & Imbeau, 2010). Differentiated instruction involves cooperative learning that trains the students' collaborative skills and motivation to participate in learning as part of a group (Ismajli & Imami-Morina, 2018). It allows the students to interact with their friends (Mitsi, 2017). The interaction involved in differentiated instructions allows the students to communicate with their friends during learning and maximizes students' awareness, which can benefit the students' cooperative learning (Joseph et al., 2013). According to Turner et al., (2017) students' participation also increases in the classroom with many students. When differentiated instruction is designed creatively to make every student feel welcome.

The welcoming situation in a differentiated class can induce a relaxed atmosphere that supports the building of conducive teacher-student relationships (Aftab, 2016; Lavania & Nor, 2020). According to Tomlinson & Moon (2013), a good teacher-student relationship is one of the essential benefits of differentiated learning. When students feel welcome, they can communicate better with the teacher, revealing their backgrounds, readiness, and learning profiles (Ginja & Chen, 2020). With this information, the teacher can adapt the design of his differentiated classroom in response to the students' backgrounds, readiness, and learning profiles. The teacher can monitor, facilitate, guide, and educate by designing differentiated instruction that the students prefer, including the teacher-student relationship to support the learning environment (Sari et al., 2020). To cope with the students' diversity, it is suggested applying various instructional strategies such as Graphic Organizers, Tic Tac Toe, RAFTs, Learning Interest Centers, Learning Contracts, Complex instruction: supported instruction. Those strategies emphasize teachers' involvement, making the relationship between the teacher and students grow stronger (Tomlinson & Moon, 2013). Building a teacher-student relationship is making the relationship a good "weather" for the students (Tomlinson, 2014).

In summary, differentiated instruction has been argued to improve the learning process, positively affecting students' learning achievement. Because the learning process is designed to suit the students' different characteristics, students feel they belong to the learning process. Thus, students participate, interact, and communicate more, building a productive classroom. When the teacher believes that every student is unique and accepts this uniqueness, the students will feel at ease to come to the teacher

and talk about their feelings, their problems in learning, and their inspirations. This process can be an initial and ongoing process for assessing the students' unique backgrounds, readiness, and learning profiles, which become the foundation for designing and adjusting the instruction.

### ***Challenges of Implementing Differentiated Instruction***

The ideal benefits of differentiated instruction are argued and proven well (Tomlinson, 2000). However, these advantages come with a set of challenges resulting from the basic principles of differentiated learning: the adjustment to each of the students' unique characteristics (Suwastini et al., 2021). At the school management level, the implementation of differentiated instruction should support the school and the parents (Siam & Al-Natour, 2016; Suwastini et al., 2021). Expert opinions and previous research on differentiated instruction have pointed to three main challenges in implementing differentiated instruction as shown in Figure 3.

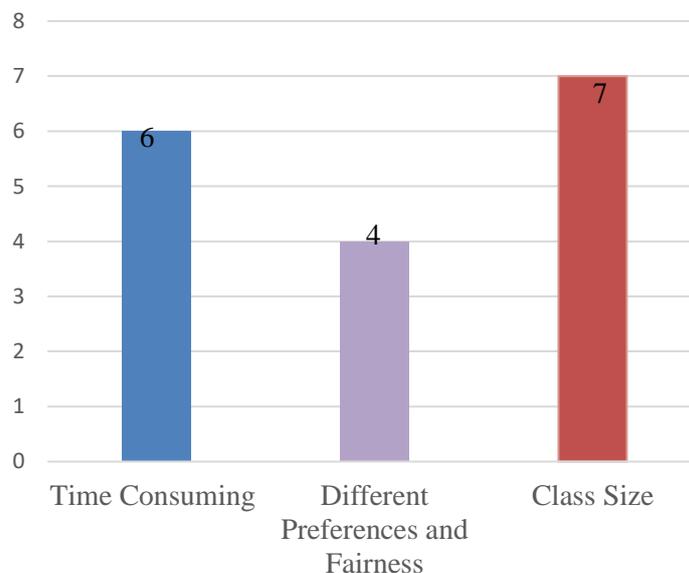


Figure 3. Challenges of Differentiated Instruction

The first challenge found by the previous researcher is time management. Differentiated instruction has been found time-consuming (Shareefa et al., 2019). It is stated that the teachers need extra time in preparing, conducting, and assessing the implementation of meaningful, differentiated instruction (Endal et al., 2013; Karadag & Yasar, 2010; Sari et al., 2020). Unfortunately, the teachers usually do not have enough time allotment (Shareefa et al., 2019). Additionally, assessing every student in a large class is difficult for the teachers (Danley & Williams, 2020). Teachers need extra time to implement and evaluate the differentiated classroom, whether or not the differentiated instruction is effectively designed and implemented (Karadag & Yasar, 2010). Moreover, if the assessments are modified and adjusted with differentiated instruction, as suggested by Endal et al. (2013) and Dwiyantri & Suwastini (2021), researchers have acknowledged that considering the students' readiness is also one time-consuming

challenge for the teacher (Chen & Chen, 2018). In addition, students need additional instruction to make deeper understanding and knowledge conveyed as the cause of time-consuming in differentiated instruction. For example, the students in middle grade should be given more advanced applications, which caused the learning process to take time to fix (Tomlinson, 2014).

The differentiated treatments toward each student can negatively impact the students' perception about fairness in assessment (Tulbure, 2011). It was acknowledged that in implementing differentiated instruction, students who do not understand the purpose of differentiated instruction may have a concept of different fairness in which teachers should focus on it by designing differentiated assessment (Tulbure, 2011). Differentiated instruction allows students to study, do their assignments, and collaborate according to their ability and styles (Siam & Al-Natour, 2016; Suwastini et al., 2021). Thus, students may have different platform or media for accomplishing their assignments, rendering "one-for-all fair evaluation" impossible. During collaborative works, students may also perform different task that can be perceived easier or harder to do, generating prejudices among students that they are treated unfairly (Lavania & Nor, 2020). Thus, better students' learning achievement in a differentiated classroom may be perceived as unfair assessment (Tulbure, 2011). This misconception is not unfounded. Students may perceive treatment to different preferences and fairness as partiality, even though the different treatment was based on the need analysis (Karadag & Yasar, 2010).

Another major challenge of differentiated instruction is the class size, which includes the number of students in a class and the physical dimension of the classroom space (Shareefa et al., 2019). Researchers have argued that the number of students in the classroom made differentiated instruction implementation ineffective (Aldossari, 2018). It is believed that differentiated instruction cannot accommodate any individual's space and intensity effectively when the class has many students (Tomlinson, 2000). Besides, many students that are allocated into one classroom will not make it compelling because the teacher cannot assist the students at the same time maximally (Dwiyanti & Suwastini, 2021; Shareefa et al., 2019). Teachers believe it was more challenging to implement differentiated instruction in a large class for several reasons. In a classroom with many students, the teacher needs to assess the best strategies for different students; thus, the more the students are, the longer the assessment will be (Turner et al., 2017). A differentiated classroom may require the teacher to move around, especially for reluctant and shy students (Suwastini et al., 2021). If there are many students in a limited space, the teacher will not have enough space to move around since the students will be sitting very close to one another (Aftab, 2016). Besides, the more students a class has, the higher the possibility of differences. Thus, the teacher will need to develop different strategies to approach the students, spatially and pedagogically, because an excellent differentiated classroom should consider every individual's space and maintain equal intensity (Tomlinson, 2000; Tomlinson & Moon, 2013).

In general, time, fairness, and space become the main issues in implementing differentiated instruction. The central tenet of differentiated instruction is adjusting the instruction to meet the students' characteristics. The teacher needs to design a specific material, strategy, media, and assessment for each student's readiness, learning profiles, and background. Despite the size of the class, this process will require more time than the "one-fits-all" instructional design. Unfortunately, the different treatments given to each unique student may render prejudice that the teacher is being partial. These

challenges intensify when the class is bigger and more diverse, especially if the classroom space is limited. With more personalized activities for unique students, the teacher may need to move around, which can be difficult in a small room with many students.

## CONCLUSION

The present study is aimed to summarize experts' opinions and results of previous research on differentiated instruction. The study revealed four main advantages and three significant challenges in implementing differentiated instruction. The advantages are brought by the principle that the instruction is designed to suit the students' unique characteristics. Differentiated instruction has been argued to raise the motivation of low-achieving students, optimize the students' learning achievement, and promote students' participation, interaction, and cooperation. Besides, differentiated instruction also promotes a more conducive teacher-student relationship, which may allow the teacher to assess the student's learning preferences and cultural background. Nevertheless, differentiated learning design, implementation, and assessment have been deemed time-consuming, especially in large classes. Besides, a differentiated treatment suitable to students' unique characteristics may also induce prejudice that the teacher is partial. These results imply that students, parents, and school management should understand differentiated learning principles to support its planning, implementation, and assessment. Understanding the principles is particularly important among students and their parents to avoid misconceptions of differentiated instruction as partiality. However, it should be noted that the present study is limited to review of advantages and challenges in implementing differentiated instruction in conservative classroom. Further research on differentiation made on more varied settings such as in blended learning or remote learning is recommended.

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