Challenges in Implementing Differentiated Learning in English Classes at SMP Sekolah Penggerak

Siska Oktawidya Wati¹, Jumrawarsi²

^{1,2}Universitas Islam Negeri Mahmud Yunus Batusangkar

*Corresponding Author, email: siskaoktawidya@gmail.com

Received: October 17, 2024

Revised: November 2, 2024

Accepted: November 6, 2024

Abstract

The Merdeka Curriculum is the current Indonesian curriculum that suggests the implementation of Differentiated Learning (DL) to cater to students with different learning styles, needs, and abilities. This study was designed to assess Teacher's understanding of DL concepts and challenges in implementing DL for English Classes at SMP Sekolah Penggerak. This study used a descriptive qualitative research design. The data of the study were collected through in-depth interviews. The collected data were then analysed by using content analysis The findings revealed that there is a strong theoretical grasp of DL principles among teachers, including the importance of accommodating diverse student needs, interests, and learning styles, and the use of technology to support these needs. Teachers acknowledged the value of conducting needs analyses to tailor their instructional strategies effectively. However, several practical challenges were revealed, including managing large class sizes, the substantial time and effort required for lesson preparation, and a lack of collaborative support among colleagues. These factors hinder the effective application of differentiated learning in the classroom. The study concludes that while teachers possess a solid foundational understanding of DL, addressing the identified challenges through strategic planning, professional development, and enhanced collaboration is crucial for bridging the gap between theoretical knowledge and practical implementation. This research provides insights into the necessary steps for improving the practice of differentiated learning, thereby better supporting diverse student needs in primary education. Future research can focus on developing and testing the effectiveness of these recommended strategies, particularly when integrated with the use of technology. Such research would be valuable in refining these strategies and providing further guidance for schools in successfully implementing differentiated learning.

Keywords: Differentiated learning, English teaching and learning, English classes, Sekolah Penggerak, Merdeka curriculum

Introduction

In today's English language schools, students come from a variety of linguistic, educational, socioeconomic, and many ethnic groups. Because the classroom's heterogeneity is growing, language Teachers may face difficulties because of this situation in effectively facilitating the language-learning experiences of various student communities. It represents the consequence of the one-size-fits-all strategy which may frequently be employed in the preparation of textbooks, additional materials, and Technology used which intend to serve a large market (Aldossari, 2018).

It might be difficult to learn English as a second language due to the dissimilar nature of the target language and the student's mother tongue (Maheswari et al., 2020; Manik & Suwastini, 2020). This problem is typically more severe when the individual qualities of each student are considered

(Uzair-ulHassan et al., 2019). Therefore, the learning process must be more considerate of the individual qualities of each student. Such a learning process would position students at the centre of the instructional process (Matra, 2014), with the teacher acting primarily as a facilitator who seeks out the most effective methods and strategies to aid students throughout their learning process (Bahous et al.,2011). As a result, Tomlinson (2001) popularized Differentiated Learning, which is a teaching approach made up of purposeful awareness to meet students' variety (Joseph, 2013). Furthermore, differentiated learning is defined as a process visionary, student-oriented, qualitative, and based on an assessment approach. It also consists of teaching whole-class, large/small group, and individual instruction (Tomlinson, 2001).

Quality education requires teaching that can accommodate the diverse learning needs of students (Tomlinson et al., 2003). However, many teachers feel unprepared to meet the needs of all students with different skill levels in one class (Grskovic & Trzcinka, 2011; Smith & Tyler, 2011). According to the theory of constructivism, knowledge is built based on experience and prior knowledge (Yilmaz, 2008). Therefore, teachers need to customize teaching to suit students' individual needs (Larson, 2005). One approach to accommodate individual differences is through differentiated instruction or Differentiated learning (Tomlinson, 1999). Differentiated learning is an approach that considers differences in learning styles, interests, and abilities of students (Wu, 2013). Teachers who implement Differentiated learning will provide materials and learning has the potential to improve learning outcomes for all students as their individual needs are met (King-Sears, 2008). However, there are still many challenges in implementing Differentiated learning in English classrooms. The results of the study are expected to provide insights to improve teachers' readiness in implementing Differentiated learning.

Differentiated learning is the strategy that is highlighted in the new Indonesian curriculum called the Merdeka Curriculum. Tomlinson (2000) defines differentiated learning as learning where students have many choices to receive information, understand ideas, and express what they learn. This strategy allows students to gain information based on their learning methods and styles, whether visual, auditory, or kinaesthetic. It also gives priority to students' need for personal expression, allowing them to demonstrate their understanding in a way that suits their different strengths and interests. Additionally, differentiated learning can assist students in developing critical and creative skills, which is exactly in line with the demands of 21st-century education (Mukhibat, 2023). Adaptability and innovative thinking are highly valued in this era. Implementing this strategy will encourage students to engage with the subject matter in various ways that can enhance creativity, critical thinking, and problem-solving skills. Thus, students will be able to deal with the evolving demands of this century. Teachers can utilize three different aspects of differentiated learning to help students understand learning materials: taught content, the process or activities students do outside class, and final product creation, which is used to measure the achievement of learning objectives (Putra, 2021). By considering these aspects, teachers can adapt their teaching to suit their needs to improve their understanding of the learning materials.

Ayuningtyas (2023) stated that the application of differentiated learning in online learning benefits language skills, involving reading, speaking, listening, and writing. The study also claimed that ten sources argued that differentiated learning could help students improve their reading skills, such as vocabulary, phonemic awareness, reading fluency, and comprehension. Thus, this strategy can be applied to optimize the potential development of language skills. By implementing differentiated learning, teachers can formulate learning activities that can improve students' reading skills. This approach allows teachers to provide facilities and materials that suit students' needs (Heningjakti & Surono, 2023). Teachers can also flexibly involve various reading materials while assisting students to understand the text. In addition, by implementing this differentiated learning strategy, teachers can more effectively accommodate students' different reading skills. This strategy ensures that each student gets a learning experience that suits their needs and ultimately improves reading comprehension, vocabulary acquisition, and critical thinking skills (Dafa, 2020). Furthermore, research on the use of differentiated learning is still limited. Research conducted by Maulana and Oktavia (2023) shows that differentiated learning can accommodate students' learning needs so that they are more motivated and easier to understand learning English. Unfortunately, the research did not mention what skills to improve using differentiated learning. Besides, research carried out by Ayuningtyas et al., (2023) examined the benefits

of differentiated learning in online learning. However, they did not mention how the use of differentiated learning can affect the development of reading skills in the current and expected times and that the application only focuses on online learning. Lastly, Mukhibat (2023) investigates the efficacy of junior high school teachers in utilizing the differentiation learning model to improve students' learning outcomes. However, the research only discussed the optimization and management of differentiated learning in learning to read in specific groups

The purpose of this study to assess the practices and challenges in implementing Differentiated Learning for English Classes at SMP Kab. Limapuluh Kota. The novelty of this study is that it will explore the challenges of DL implementation in a specific Indonesian context that has not been widely researched, particularly the challenges faced by high school English teachers in implementing DL in English classes. The findings of the study are expected to broaden the empirical and theoretical understanding of DL implementation challenges in Indonesia.

Methods

Descriptive design was applied in this research to reveal the way teachers implement teaching and learning as well as familiar problems encountered by teachers in English classes. Gay and Airasian (2000:11) state that a descriptive study is conducted to obtain information about the preferences, attitudes, and practices of some groups of people to answer a range of questions about the current status of the subject of the study. The population of this research included all English teachers who teach phase D (grade VIII) in the 5 schools identified as the Sekolah Penggerak in Kab. Lima Puluh Kota where the new curriculum has been implemented much earlier than the other schools. The samples have been taken from 3 out of 5 schools which were selected using purposive random sampling. In conducting this research, interview guides. Analysis activities include: Data reduction: choosing the main things that are under the focus of research. Presentation of data: presenting data in the form of brief descriptions, and relationships between categories. Concluding: comparing similarities and differences in data and determining their meaning which is then concluded. The analysis process takes place continuously from the beginning to the end of the research to get accurate and credible conclusions.

Result and Discussion

Teacher's understanding of differentiated learning concept

Based on the result of the interview, it was found that they have a good understanding of the basic concept of differentiated learning dealing with student differences such as different needs, interests, and learning styles. Teacher 1, for example, confirmed the need to implement differentiated learning by referring to Ki Hajar Dewantara, a prominent Indonesian educator and the father of Indonesian national education, who emphasized the importance of education that respects each student's individuality. One of his famous quotes, "*Ing ngarsa sung tulada, ing madya mangun karsa, tut wuri handayani*," which translates to "In front, a leader sets an example; in the middle, he builds the spirit and from behind, he supports," highlights the need for educators to adapt their roles to support each student's unique learning journey. Supporting teacher 1's opinion, teacher 2 said that the interests and characters of students are different so teachers should do observations or need analysis before commencing the teaching and learning process in the classroom.

Meanwhile, teacher 3 reported that she already conducted a need analysis to implement differentiated learning as she said "my students have different interests and needs in learning, and I have done analyzing the needs of my students in the classroom. The teachers' understanding of differentiated learning was also identified when they emphasized the importance of doing a need analysis to find out students' different learning needs. Teacher 2, for example, said "Differentiated learning must be based on the need to know the learning styles before carrying out the learning process". Having conducted a need analysis, teacher 1 reported that he could identify his students' learning styles which directed him to design learning materials and activities suitable for the different students. That the use of technology in teaching is important in differentiated learning was also realized by the teachers. This is clearly shown by teacher 3 statements "What I have observed, is students prefer to use auditory and visual styles in their learning. Students looked more interested in learning as I provided materials and activities suitable

for them. What is more, I make use of technology in teaching such as using video from YouTube to introduce the topic and to present the generic structure and language features of a specific text. It facilitated them in learning". From the interview results, it is clear that the teachers have a good understanding of the differentiated learning concept that students' different learning profiles lead them to design a teaching scenario accommodating all students. It is also apparent that they were aware of the need for incorporating technology in differentiated learning teaching and learning processes.

No	Knowledge Aspect	Descriptions
1	Conducting Needs analysis	Conducting a needs analysis involves systematically collecting and analyzing information to understand the specific learning needs, preferences, and gaps of students. Teachers use this information to tailor their instruction and resources to better meet the diverse needs of their students. This process helps in creating a more effective and personalized learning experience
2	Student Differences	Students have varied backgrounds, abilities, interests, and ways of learning. Recognizing these differences, teachers strive to create an inclusive learning environment that respects and addresses these diverse needs. This might involve differentiating instruction, using varied teaching methods, and providing multiple pathways for students to engage with the material and demonstrate their understanding.
3	Designing Learning Activities	Based on the insights gained from the needs analysis, teachers can design learning activities and materials that cater to the unique needs of each student. This might include creating differentiated tasks, using diverse instructional strategies, and developing resources that engage students with different learning styles and abilities. The goal is to ensure that all students have access to meaningful and challenging learning experiences.
4	Using Technology	Technology can play a significant role in enhancing the learning experience for diverse learners. Teachers recognize that incorporating digital tools and resources can support various learning styles, provide interactive and engaging content, and offer personalized learning opportunities. Technology can also facilitate access to a wide range of information and support collaborative learning, making it an essential component of modern education.

Table 1. Teacher's understanding of DL Concept

Teachers' knowledge of differentiated learning concepts the findings of this study revealed that the participating teachers had a good basic understanding of the concept of differentiated learning. This is evidenced by their recognition of the need to accommodate students' diverse learning styles, interests, and abilities in the classroom, which aligns with the core principles of DL highlighted in previous research (Tomlinson, 1999; Wu, 2013). Specifically, the teachers emphasized the importance of conducting needs assessments and analysis to identify students' learning profiles before instruction (De Jesus, 2012; Dixon et al., 2014). This finding reinforces Latz and Adams' (2011) characterization of DL as encompassing teachers' understanding of students' academic, social, emotional, and psychological needs. By conducting needs analyses, the teachers were better equipped to tailor instructional materials and activities to match their students' needs, interests, and learning styles (Tomlinson & Imbeau, 2010). As Robison et al. (2014) noted, such differentiation in the content, process, and product of learning is key for effective DI implementation.

Furthermore, the teachers recognized the value of incorporating technology into their DL approach, which echoes Aldossari's (2018) recommendation for utilizing various educational resources and tools. Integrating technology can help diversify the means through which students access and engage with content, thereby catering to different learning preferences (Chang. et.al, 2015). Overall, the teachers' knowledge aligned with the literature underscoring DI as a student-centred approach that caters to learner variability (Tomlinson et al., 2003). However, some gaps were apparent between the teachers' conceptual knowledge and practical application of DL. While they recognized the importance of adaptations based on needs analyses, they still reported facing challenges in actual implementation. This

Challenges Facing Teachers in Implementing Differentiated Learning

The results of data analysis revealed several challenges faced by teachers in implementing differentiated learning which included a big class size, a lot of time and energy in designing, creating, and preparing a lesson, and a lack of support among fellow teachers. Based on the data analysis, it was found that the main problem in implementing differentiated learning is when the number of students in the class is large. The teachers reported that they found it very difficult to manage a class with many students in differentiated learning implementation as it was hard to give equal attention to all students. Teachers also stated that the effect of too many students in the class makes it difficult for teachers to provide diverse students' needs because each student has a different learning style and a different level of student understanding which can be seen in the following results of interviews. "There are too many students in the class. I find it difficult to keep the students focused, while I need to know that my students have different learning styles and different levels of understanding." (Teacher 3) Another challenge facing the teachers in implementing differentiated learning in their English classes is dealing with a considerable amount of time and energy to prepare and design the DI teaching process. They reported that differentiated learning is quite challenging to implement because they must prepare learning according to the interests, talents, and abilities of each student. As a result, they needed a lot of time to think and create teaching innovations to get ready for having an English lesson with differentiated learning.

Teacher B clearly mentioned this challenge as follows: "In differentiated learning, we need to think, create, and plan our learning in the classroom, for example, the learning media, learning methods, content related to student life, and the most obvious challenge is Energy." A similar report was also made by teacher A who said: "Teachers need to read a lot of references and this is a challenge dealing with time and energy. However, this is the teacher's obligation to prepare effective learning for their students. Teachers should realize that when implementing differentiated learning in English classes, they will find it easier when good preparation is made to adjust to the needs of students, of course, accompanied by appropriate media and methods. From the results of interviews conducted with class teachers, it can be seen that time and energy are a big issue when implementing differentiated learning in English classes. Lack of support from other teachers is another challenge facing the teachers in implementing differentiated learning in English classes. The teachers reported that they seldom exchanged ideas and teaching experiences in the classroom, meaning that each teacher brings their own methods and experiences. For example, Teacher 3 said: "Of course, when teachers exchange experiences related to learning in the classroom it will be easier, but there are some teachers who do not implement Differentiated Instruction in the classroom. Other teachers are reluctant to innovate to develop differentiated learning, let alone to apply it. Some other teachers even ignore differentiated learning." This is one of the challenges for me and other teachers. Maybe they still enjoy teaching using old oldfashioned approach to teaching English. This means that not all teachers have implemented this Differentiated Instruction learning. From this data, it is apparent that even though teachers realized the benefits of using differentiated learning in English classes, they did not get sufficient support from their colleagues in implementing differentiated learning due to a lack of teachers' willingness to share or exchange teaching ideas and experience.

No	Knowledge Aspect	Descriptions
1	Time Constraints	Catering to individual learning needs adequately requires more time than is typically available in a standard class period. The need to use all available class time impacts the ability of teachers to use flexible
2	Student Differences	grouping and alternate assignments effectively. In large classes, teachers find it challenging to keep all students
		focused and to provide individual attention to meet each student's

 Table 2. Challenges facing teachers in Implementing Differentiated Learning

		needs. This can hinder the effective implementation of differentiated learning, which requires understanding and addressing diverse student needs.
3	Conducting Needs analysis	Teachers need significant time and energy to think about, create, and prepare tailored learning activities and materials. Conducting a thorough needs analysis to determine the appropriate differentiation strategies for each student can be a demanding process.
4	Designing Learning Activities	Teachers often report a lack of willingness among colleagues to share ideas and experiences related to the implementation of differentiated learning. This can limit the pool of resources and strategies available for creating effective learning activities.
5	Assessment Challenges	Evaluating varied student products within the constraints of short class times presents a significant challenge. Since each group produces unique outputs, it becomes difficult to observe behaviours and assess the use of flexible grouping and alternate assignments. The complexity of the assessment process in a differentiated learning environment can be overwhelming for teachers.

The research identified several key challenges faced by teachers in implementing differentiated learning (DL). Firstly, time constraints emerged as a significant barrier, with teachers struggling to adequately cater to individual learning needs within the limited class periods. This lack of time also impacted the use of flexible grouping and alternate assignments, which are essential components of DL. Secondly, student differences posed a challenge, particularly in large classes where maintaining student focus and providing personalized attention were difficult. Teachers found it hard to meet the diverse needs of all students, which is crucial for effective DL. Thirdly, conducting needs analysis was observed to be a labour-intensive and time-consuming process. Teachers expressed that they often lacked the necessary time and resources to thoroughly assess each student's needs and tailor learning activities accordingly. Fourthly, the design of learning activities was hindered by a lack of collaboration among teachers. Many teachers reported a reluctance to share ideas and experiences related to DL, limiting the exchange of effective strategies and resources. Finally, assessment challenges were prominent, with teachers finding it difficult to evaluate varied student products within the constraints of short class periods. The unique nature of each group's outputs made standard assessments impractical, adding to the complexity of the assessment process.

Addressing the challenge of time constraints is crucial for the successful implementation of differentiated learning. Schools could consider extending class periods or providing additional planning time for teachers, alongside professional development focused on efficient differentiation techniques. To manage student differences, especially in large classes, schools might invest in additional support staff or reduce class sizes, and offer professional development that equips teachers with effective strategies for diverse classrooms. Streamlining the needs analysis process with technology or standardized tools can reduce the burden on teachers, while collaborative efforts to develop and share resources for needs analyses can improve efficiency. Encouraging a culture of collaboration among teachers is essential for designing effective learning activities. Schools could facilitate regular meetings or workshops where teachers share their experiences and strategies for DL, and create a repository of shared resources and best practices. Lastly, developing flexible and adaptable assessment methods is crucial to managing the complexities of DL assessments. Professional development focused on alternative assessment strategies, such as project-based assessments and portfolios, can help teachers effectively evaluate varied student products. while the implementation of differentiated learning poses several challenges, addressing these issues through strategic planning, professional development, and fostering a collaborative environment among teachers can enhance the effectiveness of DL practices in the classroom. Which constrained teachers' ability to provide individualized attention and accommodate diverse learning needs (Chien, 2015; Dixon et al., 2014; Al-Natour et. al, 2016). This aligns with previous studies identifying large classes as a major logistical impediment to DL implementation (Aldossari, 2018; Jager, 2016; Tobin & Tippett, 2014). As Wan (2016) found, large class sizes coupled with the demands of differentiated lessons can be overwhelming for teachers. Additionally, teachers reported lacking sufficient time and energy for the preparation and planning required to effectively differentiating instruction (De Neve & Devos, 2016; Lunsford, 2017).

Conclusion

Overall, the research reveals that teachers have a solid grasp of the differentiated learning concept, recognizing the importance of accommodating diverse student needs, interests, and learning styles. Their understanding is aligned with established principles of differentiated instruction, which stress the necessity of conducting needs analyses and incorporating technology to tailor teaching practices. Teachers' awareness of these principles is commendable; however, challenges remain in translating this knowledge into practical application. The integration of differentiated learning principles reflects a strong theoretical foundation but underscores the need for continuous professional development to bridge the gap between conceptual understanding and effective implementation.

Despite their knowledge, teachers face significant obstacles in applying differentiated learning in the classroom. Major challenges include managing large class sizes, which impede their ability to provide personalized attention and the considerable time and effort required for designing and preparing differentiated lessons. Additionally, the lack of collaboration among colleagues limits the sharing of resources and ideas, complicating the development of effective learning activities. Addressing these issues through strategic planning, professional development, and fostering a collaborative teaching environment is essential for improving the practical application of differentiated learning and enhancing its effectiveness in meeting diverse student needs

References

- Aldossari, A. T. (2018). The Challenges of Using the Differentiated Instruction Strategy: A Case Study in the General Education Stages in Saudi Arabia. International Education Studies, 11(4), 74-83.
- Ayuningtyas, L. P. S., Suwastini, N. K. A., & Dantes, G. R. (2023). Differentiated Instruction in Online Learning: Its Benefits and Challenges in EFL Contexts. Jurnal Pendidikan Teknologi dan Kejuruan, 20(1), 80-94.
- Chien, W. C., & Chang, D. F. (2015). Determining the relationship between academic selfefficacy and Student engagement by meta-analysis. 2nd International Conference on Education Reform and Modern Management (EERM), 142-145.
- Dapa, A. N. (2020). Differentiated Learning Model For Student with Reading Difficulties. Jurnal Teknologi Pendidikan, 22(2). <u>https://doi.org/10.21009/jtp.v22i2.15814</u>
- Bahous, R., Bacha, N., & Nabhani, M. (2011). Motivating Students in the EFL Classroom: A Case Study of Perspectives. English Language Teaching, 4(3), p33. https://doi.org/10.5539/elt.v4n3p33
- De Jesus, O. (2012). Differentiated instruction: Can differentiated instruction provide success for all learners? National Teacher Education Journal, 5(3), 5-11.
- De Neve, D., Devos, G., & Wan. (2016). The importance of job resources and self-ef fi cacy for beginning teachers ' professional learning in differentiated instruction. Teaching and Teacher Education, 47, 30--41. <u>https://doi.org/10.1016/j.tate.2014.12.003</u>.
- Gay, L. and Airasian, P. (2000) Educational Research: Competencies for Analysis and Experience. 6th Edition, Prentice-Hall, Upper Saddle River.
- Heningjakti, E. P. M., & Surono. (2023). Differentiated Learning to Facilitate Students' Interests in the Content of English Language Learning. JADEs Journal of Academia in English Education, 4(1), 34-35. <u>https://doi.org/10.32505/jades.v4i1.5916</u>
- Grskovic, J., & Trzcinka, S. (2011). Essential standards for preparing secondary content teachers to effectively teach students with mild disabilities in included settings. American Secondary Education, 39(2), 94-106.
- Joseph, S. (2013). Differentiating instruction: Experiences of pre-service and in-service trained teachers. Caribbean Curriculum, 20, 31–52.
- Larson, N. (2005). "The time has come," the walrus said, "To speak of many things!". Learning Disability Quarterly, 28(4), 247. doi: 10.2307/4126963.
- Maheswari, P. A. M., Adnyani, N. L. P. S., & Suwastini, N. K. A. (2020). Interlanguage Analysis on Indonesian EFL Learners' Compositions. Lingua Didaktika: Jurnal Bahasa Dan Pembelajaran Bahasa, 14(2), 121. <u>https://doi.org/10.24036/ld.v14i2.108643</u>
- Matra, S. D. (2014). Teacher Questioning In Classroom Interaction. Journal of Culture, English Language Teaching, and Literature, 14(1), 82–111.

- Manik, N. P. I. M. C., & Suwastini, N. K. A. (2020). Analyzing Grammatical Error in Students' Recount Text Writing in Junior High School. Humanis, 24(3), 238. https://doi.org/10.24843/JH.2020.v24.i03.p02
- Maulana, H., & Oktavia, W. (2023). Indonesian EFL Students' Perceptions on Implementing Differentiated Learning in Learning English. Journal of English Language Teaching, 12(3), 649-702. <u>https://doi.org/10.24036/jelt.v12i3.124763</u>
- Mukhibat, M. (2023). Differentiate Learning Management To Optimize Student Needs And Learning Outcomes In An Independent Curriculum. QALAMUNA: Jurnal Pendidikan, Sosial, dan Agama, 15(1), 73-82. <u>https://doi.org/10.37680/qalamuna.v15i1.2386</u>
- Putra, I. M. Y. T. (2021). Implementasi pembelajaran flipped classroom berbasis strategi diferensiasi untuk meningkatkan keterampilan berpikir kritis peserta didik. Indonesian Journal of Educational Development (IJED), 2(3), 461-471. <u>https://doi.org/10.5281/zenodo.5681318</u>
- Smith, D., & Tyler, N. (2011). Effective inclusive education: Equipping education professionals with necessary skills and knowledge. Prospect: Quarterly Review of Comparative Education, 41(3), 323-339. doi: 10.1007/s11125-011-9207-5.
- Suwastini, N. K. A., Rinawati, N. K. A., Jayantini, I. G. A. S. R., & Dantes, G. R. (2021). Differentiated Instruction Across EFL Classrooms: A Conceptual Review. TELL-US Journal, 7(1), 14–41. <u>https://doi.org/10.22202/tus.2021.v7i1.4719</u>
- Uzair-ul-Hassan, M., Kazim, B., & Parveen, I. (2019). Teachers' Practices of Differentiated Instructions, Fair Interactions and Fair Assessment of Students in Sargodha. Journal of Educational Sciences & Research, 6(1), 47–62.
- Tomlinson, C. A. (2000). Differentiation of instruction in the elementary grades. ERIC Digests, 1–7.
- Tomlinson, C. A. (2001). How to Differentiate Instruction in Mixed-Ability Classrooms (2. ed). Association for Supervision & Curriculum Development.
- Tomlinson, C. A., & Imbeau, M. B. (2010). Leading and managing a differentiated classroom. ASCD
- Wu, E. (2013). The path leading to differentiation: An interview with Carol Tomlinson. Journal of Advanced Academics, 24(2), 125-133. doi: 10.1177/1932202x13483472.
- Yilmaz, K. (2008). Constructivism: Its theoretical underpinnings, variations, and implications for classroom instruction. Educational Horizons, 86(3), 161-172.