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Comparative Analysis of Differentiation Among Students in Higher Education Versus Elementary Education

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Abstract

Diverse student populations with varying learning skills and linguistic barriers exist throughout elementary and higher education settings. Poorer learning outcomes are observed when students are not engaged or motivated to learn. This study aimed to determine techniques used in the classroom such as discussion and debate, research and inquiry or small group instruction that could lead to a positive effect when instructing students in these settings. The analysis included a review of the literature for the years 2000 through 2023 with a focus on learning outcomes. This literature review is limited to differentiation with small group instruction, with researcher highlighting the importance of individual learning proficiency. Based on the findings of this study, it can be implied that there is a return on the teacher's time invested using the five fundamental principles of differentiation for achieving better student learning outcomes.

Introduction

Small group differentiation is a promising pedagogical strategy for enhancing learning outcomes and fostering inclusivity in elementary and higher education settings, particularly for diverse student populations with varying learning skills and linguistic barriers. Of importance are the comments found in Miller's (2020) research noting the benefit of differentiation to all students, not just those struggling or challenged. This is important since education systems in the United States and worldwide are becoming increasingly diverse, with students from various cultural, linguistic, and socio-economic backgrounds entering elementary and higher education settings. To illustrate, in fall 2018, of the 50.7 million students enrolled in United States public elementary and secondary schools, 47 percent were White (a decrease from 54 percent), 15 percent were Black (a decrease from 17 percent), and 27 percent were Hispanic (an increase from 22 percent). Between fall 2009 and fall 2018, public school enrollments among White students decreased from 26.7 million to 23.8 million while the number of Hispanic students increased from 11.0 million to 13.8 million. In both fall 2009 and fall 2018, Asian students accounted for 5 percent of public elementary and secondary enrollment (National Center for Education Statistics, 2023). Moreover, the number of languages spoken within the United States known as language diversity also influences learning outcomes. There are three key determinants of English language fluency among individuals, foreign born from non-English speaking countries. The time in the United States, the age of arrival and years of education play a role in English proficiency. It is important to understand increased exposure to English occurs in education and it is easier for human beings to learn language prior to adolescence (Rumbaut and Massey, 2014).

The percentage speaking only English at home has steadily fallen in recent decades, declining from 89.1% in 1980 to 79.7% in 2010, while the share speaking a language other than English correspondingly rose from 11% to 20.3% occurring during an age of mass migration. The percentage of public-school students who were English language learners (ELLs) was 10.0 percent or more in ten states (National Center for Education Statistics, 2023). Of note, the number of persons 5 years and older speaking a language other than English at home rose from 23.1 to 59.5 million, with over two-thirds of the increase attributable to the increasing number of people speaking Spanish at home. This data is impactful as it illustrates classroom diversity (Rumbaut & Massey, 2013).

Since students enter school with varying abilities, educators can utilize differentiation to close such gaps and help students achieve better learning outcomes. Schools must determine the strategy they will implement to meet student needs while ensuring effective communication between the student and teacher. “Given the increasing diversity of the student body, teachers are called to appropriately address students’ various learning needs by means of differentiated instruction” (Pozas et al., 2020). According to Carol Ann Tomlinson, “Differentiation is simply a teacher attending to the learning needs of a particular student or small group of students, rather than teaching a class as though all individuals in it were basically alike.” The one-size-fits-all method is insufficient in the diverse classrooms of today. Thus, it matches a required curriculum with the learning styles, interests, and abilities of students.

Method

A systematic literature search was undertaken of the following databases: Ebsco, Embase, Google Scholar, Microsoft Academic Search, and ProQuest. All papers reviewed were from the years 2000 to 2023 with an emphasis on differentiation, student diversity in the United States and learning outcomes. All papers reviewed provided discussion on differentiation techniques that impact learning outcomes in elementary or higher education settings.

Theory

Constructivism Theory and Sociocultural Theory guide this research. Constructivism is ‘an approach to learning that holds that people actively construct or make their own knowledge and that reality is determined by the experiences of the learner’ (Elliott et al., 2000, p. 256). Constructivism posits that learners actively construct knowledge by building upon their prior experiences and mental frameworks. As such, learning is seen as a process of meaning-making and constructing personal understanding.

Sociocultural Theory suggests that individuals learn by observing and modeling the behaviors, attitudes, and cognitive processes of others. Furthermore, it highlights the role of social interactions and cultural contexts in shaping learning. It emphasizes the importance of collaborative learning and scaffolding by more knowledgeable others. According to Cherry (2022) this theory can be applied in educational settings as well as in socialization and play. The impact of society in development, this theory focuses on how the human mind works. A sound understanding of this theory suggests that teachers play a key role in a learning environment. They can scaffold a

learning process by giving helpful suggestions in the process of doing tasks, asking questions, drawing tables and charts, and giving feedback concerning the students' group work (Behroozizad, Nambiar & Amir, 2014).

Findings and Discussion

Differentiation often carries different meanings because it can be applied to many disciplines (Eikeland & Ohna, 2022). Differentiation in education is an instructional approach aimed at tailoring teaching methods, content, and assessment to meet the diverse needs of students. While the core principles of differentiation apply to both elementary and higher education settings, there are notable differences in these educational settings. "Differentiation instruction isn't new, but its essential emphases on empathy and meeting students' needs never have been more important" (Westman, 2021, para. 1). Diverse student populations, including ELLs, students with disabilities, and those from marginalized communities, often face challenges that hinder their academic progress. The question arises: How can educators effectively engage and support these students to ensure better learning outcomes?

Learning gaps have a lasting impact on students, making it crucial to assist in bringing them up to speed. Effective differentiation functions on the premise that every student can do remarkable things with the appropriate guidance and support (Welcome, 2021). Content, process, products and learning environment are four classroom elements the teachers can implement to differentiate. For example, content can be influenced by modifying what students learn and can be accomplished by using different resources such as texts or other materials. Varying levels of complexity helps to address the different abilities among the students (NSW, 2023).

Educators must consider student profiles, including linguistic needs, learning skills, and cultural backgrounds when forming small groups to ensure heterogeneity and effective differentiation. There are unique challenges associated with the elementary student environment versus the higher education. Students in K through twelve have different challenges depending on the grade level and class size (Wang, 2019). Further, many of these student groups transition year to year with the same students. Thus, they become familiar with each other and may be more comfortable with the learning environment. Of importance, both high and low achievers frequently slip through the cracks of our educational system when pupils are treated as a single entity (Martinez and Plevyak, 2020).

Through process teachers could use different instructional strategies such as scaffolding to adapt how students learn. For example, assigning tasks or assignments that scaffold learning and provide opportunities for students to demonstrate their proficiency progressively (Taylor, 2017). Starting with easier tasks and gradually increasing the complexity to assess how well students adapt and apply their knowledge is important when assessing learning outcomes (NSW, 2023). Lynch (2020) suggests that teachers scaffold instruction by giving clear explicit explanations with visuals. The use of anchor charts, drawings, diagrams, and reference guides to foster a clearer understanding. If applicable, providing a video clip for students to watch helps visual learners to understand the topic.

In elementary education, students are typically less independent, and teachers play a more active role in guiding learning. Thus, differentiation often involved adjusting instruction to address various learning levels within the same classroom. Moreover, the content in elementary education is foundational and focuses on building fundamental skills whereas content in higher education is more specialized and more complex. In higher education the environment is complex as student groups change depending on course sequencing, enrollment dates, cohort size, degree requirements, etc. (Turner, Solis & Kincade, 2017).

Although challenging for larger classes, differentiation is essential to accommodate student backgrounds and abilities to achieve competency development. Of importance are studies showing that integrating international students into the campus community and academic culture can have a positive impact on their linguistic development and overall learning experience (Turner, Solis & Kincade, 2017). In higher education the environment is complex as student groups change depending on course sequencing, enrollment dates, cohort size, degree requirements, etc. There is often a greater emphasis on student independence and self-directed learning. Differentiation may involve providing a variety of resources and assignments, allowing the students to choose their learning paths and take responsibility for their education (Eikeland & Ohna, 2022). Thus, the challenges are different based on group and settings. Although challenging for larger classes, differentiation is essential to accommodate student backgrounds and abilities to achieve competency development (Turner, Solis & Kincade, 2017).

Differentiated instruction is rooted in the belief that students have diverse learning needs and should be provided with instruction tailored to their individual requirements (Tomlinson, 2017). It is grounded in constructivist and socio-cultural learning theories, emphasizing student-centered learning and active engagement. According to Sutton (2021), social-emotional learning practices can build positive relationships between students and teachers and improve student's sense of belonging in their school and classroom community. By embracing diversity and creating an atmosphere where all students feel valued and respected, educators can help students from various cultural backgrounds succeed academically and develop cross-cultural competencies.

According to Martinez and Plevyak (2020), quality instruction comes from meeting students at their individual levels to ask higher-order thinking questions. Teachers should use challenging reading materials and open-ended questions while instructing these children. At times, these groups can be self-directed to enable students to practice problem-solving strategies. According to Miller (2020), small group education must be viewed by students as a dynamic learning environment that works for both filling in gaps and challenging their ideas.

Educators can create more personalized and effective learning experiences for their students adhering to the five fundamental principles of differentiation. This not only supports students in reaching their full potential but also fosters a positive and inclusive classroom environment where all learners can thrive and achieve better learning outcomes. The five principles of differentiated learning are (1) Flexibility in learning goals, content, process, and product based on student readiness, interest, and learning profile (2) Effective and ongoing assessment of student needs and adjustment of tasks accordingly (3) Respectful and challenging learning experiences for all students (4) Collaboration between students and teacher as well as among students (5) Student autonomy and responsibility in

the learning process (Reis & Renzulli, 2018).

After gaining a stronger understanding of the students and conducting assessments, the teacher can choose which materials are suitable for each group. Ferlazzo (2021) claims that a well-designed lesson enables teachers to evaluate each student's proficiency with new knowledge. Students must be given instructionally appropriate resources for these groups to be effective. Teachers should present content relevant to the student's instructional level because these groups focus on the needs of the students, and the purpose is to enhance the student's academic skills. According to Ankrum et al. (2017), using texts at the student's instructional level and verbal scaffolding is best for small group instruction. When students work on instructional-level resources in small groups, it is an excellent time to evaluate their progress and see if they are on track to reach their objectives. Mahoney & Hall (2017) believe teachers must use assessment to inform and guide instruction and learning activities to account for student variability.

According to Martinez and Plevyak's research (2020), students are held to the same standards and assessed for mastery of those standards at the end of the school year. Teachers want to give their students the best learning experience possible, and small groups allow them to do so. Students of all academic levels can benefit from this type of teaching because teachers can focus on the needs of each student and modify learning based on those needs. Young (2019) underlines the significance of regularly assessing students' progress and adapting instruction as necessary. Encouraging students to take ownership of their learning by setting goals, making choices, and taking responsibility for their progress within the small groups is a student-centered approach.

Engagement

Teachers can also tailor lessons to each student's needs through small groups and move on to new concepts as soon as students show signs of understanding the previous ones. Further, through ability grouping and ongoing assessments, teachers should be able to keep students engaged during small group differentiated instruction (Bouchrika, 2022). Children appear to be more accountable for their work and more engaged in their studies when taught in small groups. Notably, small group education offers plenty of opportunities for modeling for struggling students. Many students who struggle to learn in whole group lessons benefit from the skill practice in this small group setting.

Bouchrika (2002) describes how teachers might deliver instruction that aligns with students' needs by grouping students based on their abilities. These children will frequently benefit from repeated exposure to skills needed to be successful in the classroom. Many of the weaker students can meet grade-level goals by receiving small group reinforcement of lessons. Additionally, "we can structure our lessons to provide additional instruction and practice to students at their readiness level while simultaneously expanding them to grade-level content and skills" (Westman, 2021, section 1).

Instruction in higher education is dominated by a one-size-fits-all pedagogical method, which poorly serves a diverse student body (Ernst & Ernst, 2005). The learning environment influences student engagement in the

classroom. Students are more likely to feel at ease and confident in their work if they are aware of the expectations in the classroom. Teachers can connect with their students and get to know them better through small group instruction. Students are more likely to be interested in their learning when they feel safe, included, and trusted. According to Ferlazzo (2021), thoughtfully planned and implemented small-group instruction is essential in meeting students' varied needs. Thus, for these small groups to be effective, teachers must first establish a plan for how their classroom will be structured while working with these groups.

Teachers can allow these groups to be student-led when the students are ready. Student-led groups present opportunities for independent learning. Students can converse with one another to share knowledge and have meaningful exchanges. Handsfield and Valente (2021) emphasize that small group work encourages student discussion. Students actively involved in their education are more likely to be motivated and focused. Westman (2018) adds that the design of cooperative learning gives each group member an equal chance to participate in challenging learning activities. Using small group instruction is one approach to keep children interested. Working in smaller groups allows students to participate in an effective learning environment. Children feel more at ease speaking up and taking risks in a smaller group environment than in a larger one.

According to Handsfield and Valente (2021), small group work invites students to engage in dialogue. Students are more inclined to interact, respond, and ask questions in small groups. Because there are fewer children, students can offer their thoughts more frequently. Students can discuss ideas with their classmates through activities like turn-and-talk and think-pair-share. According to Wyatt and DeSousa (2017), small group learning has many advantages, including fostering relationships. During small groups, students can also develop deeper relationships. Interest-based small groups can be formed, which can aid in developing those peer relationships. If the subject matter is one students are familiar with, they may be more willing to participate in conversations. Sutton (2021) adds that creating connections between academic material and real-world events is a fantastic strategy for increasing cognitive engagement.

In a culturally diverse graduate student setting, fostering an inclusive and culturally responsive learning environment is essential for promoting effective learning. Some research suggests that adapting curriculum materials and teaching methods to accommodate linguistic diversity can lead to improved learning outcomes. Engaging graduate students can have a significant positive effect on learning outcomes by asking students to complete reflection exercises after small group differentiated activities (Turner, Solis & Kincade, 2017). These can be brief questions or prompts that require students to summarize what they have learned or share their insights thus gaining insights into individual student comprehension and critical thinking (NSW, 2022). Further, developing an inclusive curriculum appeals to diverse cultural backgrounds by ensuring learning materials reflect diverse perspectives, authors, and cultural contexts. Culturally responsive learning environments respect and value the experiences and backgrounds of all students where diverse viewpoints are valued (Samuels, 2018).

Challenges

Differentiating instruction in the classroom requires an investment of time in planning and preparation for this

instruction method to be successful. According to Dixon et al. (2014), teachers frequently struggle to give every student access to the learning activities that are most effective for them as individuals. Student diversity in heterogeneous classrooms requires a flexible approach to teaching offering challenges that support all students regardless of differences in interests, readiness, or learning profile.

According to Tomlinson (2014), this is the rationale behind differentiated instruction. Demographics are important in understanding this diversity and associated challenges in schools. The overall composition of students in United States public schools were impacted by enrollment trends. For example, between fall 2010 and fall 2021, there were percentage decreases noted in student enrollment with white students (from 52 to 45 percent); Black students (from 16 to 15 percent); and American Indian/Alaska Native (from 1.1 to 0.9 percent). Conversely, there was an increase in Hispanic (from 23 to 28 percent), Asian (from 4.6 to 5.4 percent); and two or more races (from 2 to 5 percent) during this same period (National Center for Education Statistics, 2023).

Further, differences related to handicap or disability are important to consider as they challenge the teachers, learning outcomes, no child left behind, and test scores (Schaeffer, 2023). In 2021–22, the number of students ages 3–21 who received special education and/or related services under the Individuals with Disabilities Education Act (IDEA) was 7.3 million, or the equivalent of 15 percent of all public-school students. Among students receiving special education and/or related services, the most common category of disability was specific learning disabilities (32 percent) (National Center for Education Statistics, 2023).

The Individuals with Disabilities Education Act (IDEA) enacted in 1975, mandates the provision of a free and appropriate public-school education for eligible students ages 3–21. Eligible students are those identified by a team of professionals as having a disability that adversely affects academic performance and as needing special education and/or related services. Among students who received special education and/or related services under IDEA in school year 2021–22, the disability types with the largest reported percentages of students were 32 percent with specific learning disabilities, 19 percent with speech or language impairments, 15 percent with other health impairments, and 12 percent with autism (National Center for Education Statistics, 2023).

Students with developmental delays, intellectual disabilities, and emotional disturbances each accounted for between 5 and 7 percent of students served under IDEA. In fall 2021, there were more than two-thirds of students with speech or language impairments (88 percent), specific learning disabilities (75 percent), other health impairments (70 percent), developmental delays (70 percent), and visual impairments (70 percent) (Schaeffer, 2023). Between the 2000-01 and 2021-22 school years, all but twelve states experienced growth in their disabled student populations. The biggest increase occurred in Utah, where the disabled student population rose by 65%. Rhode Island saw the largest decline of 22%. These differences by state are likely the result of inconsistencies in how states determine which students are eligible for special education services and challenges in identifying disabled children (National Center for Education Statistics, 2023).

The most common type of disability for students in prekindergarten through 12th grade involves “specific learning disabilities,” such as dyslexia. In 2021-22, about a third of students (32%) receiving services under IDEA had a

specific learning disability. Further, 19% had a speech or language impairment, while 15% had a chronic or acute health problem that adversely affected their educational performance. Chronic or acute health problems include ailments such as heart conditions, asthma, sickle cell anemia, epilepsy, leukemia, and diabetes. Students with autism made up 12% of the nation's schoolchildren with disabilities in 2021-22, compared with 1.5% in 2000-01 (National Center for Education Statistics, 2023).

To effectively differentiate instruction, teachers must have a deep understanding of their students before they can adequately assign them. According to Ferlazzo (2021), careful preparation and setting up learners' expectations in advance are essential to achieving outstanding results. This includes their prior knowledge, learning styles, interests, strengths, and areas where they may struggle.

The elementary school environment allows teachers opportunities to become more familiar with the student population as they transition from one grade to the next. Thus, building relationships with students to understand their interests and motivations or to continuously gather data on student performance is more feasible. Educators can provide individualized support, promote engagement, and address the unique needs of students from diverse backgrounds (Taylor, 2017).

It is imperative that support from the school administration is in place. Significant time is required in developing learning plans, assigning small group participants, preparing lesson plans, and measuring individual student outcomes. Wyatt and Chapman-DeSousa (2017) noted that teachers lack adequate support when implementing smaller groups. Large class sizes and time constraints are problematic for teachers to effectively plan differentiated instruction. In higher education, setting academic pressures to meet research and other requirements of a research university impact professors.

Limitations

Small group differentiation is a promising pedagogical strategy for enhancing learning outcomes and fostering inclusivity in elementary and higher education settings, particularly for diverse student populations with varying learning skills and linguistic barriers. Despite advancements in understanding the challenges posed by linguistic barriers, there are still research gaps in determining the most effective strategies and interventions for improving learning outcomes in graduate school settings. Of note, instruction in higher education is dominated by one-size-fits-all pedagogical method, which poorly serves a diverse student body (Ernst & Ernst, 2005).

A major limitation in this study is the lack of data on pedagogy related to analyses of differentiated instruction or small group instruction in different settings; therefore, a comparative analysis could not be completed. Furthermore, the relationship between small group instruction, student learning outcomes, and benchmarks are challenging to assess, given the design of studies found in the literature. In addition, studies evaluating the effectiveness of small group instruction compared to test scores are lacking. This lack of empirical evidence and scholarly research limited comparisons; however, it provides valuable information for the design of future studies.

Conclusion

In summary, while differentiation is a concept that applies to both higher and elementary education, the implementation and goals can differ significantly due to factors such as student independence, content complexity, assessment methods, class size, teaching philosophy, available resources, and teacher training. The overarching aim in both settings is to promote effective learning by accommodating the diverse needs of students. Flexibility and adaptation are critical to the evolving needs of differentiation. Educators must develop clear rubrics or scoring guides that outline expectations and criteria for proficiency. It is essential to use a combination of these assessment methods to gain a comprehensive understanding of each student's learning proficiency within the small group differentiation context. By regularly assessing and adjusting instruction based on individual student needs, educators can optimize the benefits of small group differentiation and support student growth effectively. To measure learning outcomes and demonstrate understanding, a variety of assessments such as written assignments, presentations, projects, or discussions, including individual and group assessments could be implemented. As such, content or activities should be adjusted based on student feedback, reflections, and progress. Furthermore, students are motivated when faculty create an inclusive and respectful environment where diverse viewpoints are valued, student achievements are recognized, and outstanding contributions are rewarded. These techniques enhance student learning outcomes and prepare students for success in their academic and professional pursuits.

Recommendations

Future research could include longitudinal studies following students exposed to differentiating instruction from elementary school through higher education to demonstrate if learning outcomes surpass those who enter higher education with no exposure to differentiation. Currently, there are no studies of this nature identified in the research. In addition, studies evaluating differentiated instruction learning outcomes based on visual, auditory, kinesthetic, or read/write learning styles could offer insight on best practices.

References

- Ankrum, J., Genest, M., & Morewood, A. (2017). A description of contrasting discourse patterns used in differentiated reading instruction. *Journal of Research in Childhood Education, 31*(3), 313-323. <https://doi.org/10.1080/02568543.2017.1319442>
- Cherry, K. (2022). What is Sociocultural Theory? Verywell mind. *Development Psychology*. <https://www.verywellmind.com/what-is-sociocultural-theory-2795088>
- Dixon, F., Yssel, N., & Hardin, T. (2014). Differentiated instruction, professional development, and teacher efficacy. *The Journal for the Education of the Gifted, 37*(2). <https://doi.org/10.1177/0162353214529042>
- Eikeland, I. & Ohna, S. (2022) Differentiation in education: a configurative review. *Nordic Journal of Studies in Educational Policy, 8*(3), 157-170, DOI: 10.1080/20020317.2022.2039351
- Ferlazzo, L. (2021). Small-group instruction: Work it for your students and you. *Education Week*. <https://www.edweek.org/teaching-learning/opinion-small-group-instruction-work-it-for-your-students-and-you/2021/11>

- Mahoney, J., & Hall C. (2017). Using technology to differentiate and accommodate students with disabilities. *E-Learning and Digital Media*. <https://doi.org/10.1177/2042753017751517>
- Martinez, K., Plevyak, L. (2020). Small versus whole group reading instruction in an elementary reading classroom. *Humanising Language Teaching*, 22(1). <https://www.hltmag.co.uk/feb2020/small-versus-whole-group-reading>
- Miller, A. (2020). Strategies for improving small group instruction. *Edutopia*. <https://www.edutopia.org/article/strategies-improving-small-group-instruction>
- National Center for Education Statistics. (2023). Students With Disabilities. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. Retrieved [date], from <https://nces.ed.gov/programs/coe/indicator/cgg>.
- NSW Department of Education. (2023). *Differentiating Learning*. <https://education.nsw.gov.au/teaching-and-learning/professional-learning/teacher-quality-and-accreditation/strong-start-great-teachers/refining-practice/differentiating-learning>
- Pozas, M., Letzel, V., & Schneider, C. (2020). Teachers and differentiated instruction: exploring differentiation practices to address student diversity. *The Journal of Research in Special Education Needs*, 20(3), 217-230. <https://doi.org/10.1111/1471-3802.12481>
- Reis, S. & Renzulli, J. (2018). *Five Dimensions of Differentiation*. <https://files.eric.ed.gov/fulltext/EJ1296874.pdf>
- Rumbaut, R. G., & Massey, D. S. (2013). Immigration & language diversity in the United States. *Daedalus*, 142(3), 141-154.
- Schaeffer, K. (2023). *What federal education data shows about students with disabilities in the U.S.*. <https://www.pewresearch.org/short-reads/2023/07/24/what-federal-education-data-shows-about-students-with-disabilities-in-the-us/>
- Sutton, E. (2021). Student Engagement: Why it's important and how to promote it. *Branching Minds*. <https://www.branchingminds.com/blog/student-engagement-remote-in-person>
- Turner, W., Solis, O. & Kincade, D. (2017). Differentiating Instruction for Large Classes in Higher Education. *International Journal of Teaching and Learning in Higher Education*, 29(3), 490-500. <http://www.isetl.org/ijtlhe/> ISSN 1812-9129
- Wang, K. (2019). Differentiation: Achieving Success in a Mixed-Ability Classroom. *Science of Learning*. <https://www.scilearn.com/differentiation-achieving-success-mixed-ability-classroom/>
- Welcome, A. (2021). Learning Gaps: Types, examples, and tips to solve them. *Sphero*. <https://sphero.com/blogs/news/learning-gaps>
- Westman, L. (2018). Succeeding with differentiation. *Edutopia*. <https://www.edutopia.org/article/succeeding-differentiation>
- Westman, L. (2021). What differentiated instruction really means. *ascd.org*. <https://www.ascd.org/el/articles/what-differentiated-instruction-really-means>
- Wyatt, T., & Chapman-DeSousa, B. (2017). Teaching as interaction: Challenges in transition teachers' instruction to small groups. *Early Childhood Education Journal*, 45, 61-70. <https://doi.org/10.1007/s10643-015-0758-6>
- Young, C. (2019). Increased frequency and planning: A more effective approach to guided reading in grade 2. *The Journal of Educational Research*, 112(1), 121-130. <https://doi.org/10.1080/00220671.2018.1451814>

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