Vol 14, Issue 8, (2024) E-ISSN: 2222-6990

Navigating Challenges and Strategies in Implementing Differentiated Instruction: A Conceptual Overview

Sharulniza Ab Hajis, Norasmah Othman

Faculty of Education, National University of Malaysia, Selangor, Malaysia Email: p121085@siswa.ukm.edu.my, lin@ukm.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v14-i8/22153 DOI:10.6007/IJARBSS/v14-i8/22153

Published Date: 11 August 2024

Abstract

Differentiated instruction has become a pivotal approach in modern education, focusing on adapting teaching strategies to meet the diverse needs of students. However, implementing differentiated instruction does not run as smoothly as anticipated, encountering various challenges. Therefore, this conceptual paper aims to explore the fundamentals of differentiated instruction, the challenges and barriers encountered in its implementation, and the strategies employed to navigate these challenges. The paper begins by exploring the evolution of differentiated instruction, tracing its shift from traditional methods to modern and student-centered approaches. It delves into theoretical foundations such as Multiple Intelligence Theory and Sternberg's Triarchic Theory to offer a deeper understanding of the underlying framework. The paper then discusses the challenges in implementing differentiated instruction, including difficulties faced by teachers, issues with school administration and management, and infrastructure limitations. To navigate these challenges, targeted strategies are proposed, including continuous professional training, effective classroom management, fostering creativity, ensuring fairness in task distribution, providing robust supervision and guidance, involving Parent-Teacher Associations and planning for new school constructions. This overview offers teachers, administrators and policymakers a comprehensive understanding of the challenges and strategies associated with differentiated instruction, providing practical insights to enhance its effectiveness and create more inclusive learning environments.

Keywords: Differentiated Instruction, Challenges, Strategies, Diversity, Inclusive Classroom.

Introduction

With the rapid changes in education, the traditional 'one-size-fits-all' teaching model is becoming increasingly outdated. Today's classrooms are filled with students from diverse backgrounds, each bringing unique strengths, challenges and learning styles. To address this diversity, a more student-centered approach known as differentiated instruction has gained significant attention. Differentiated instruction goes beyond traditional teaching strategies, embodying a transformative educational philosophy (McCray, 2022; Graham et al., 2021). This

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

approach celebrates each student's individuality, striving to cultivate an inclusive learning environment that fosters personal growth on multiple levels—academically, intellectually, and emotionally (Swargiary, 2024; Tomlinson & Imbeau, 2023).

In Malaysia, a significant shift occurred in 2018 when the Ministry of Education (MOE) abolished streaming classes in all schools (MOE, 2018). This change eliminated the traditional division of students, placing individuals with varying attitudes, interests, and abilities together in the same classroom (Mustaffa et al., 2021). This shift sparked considerable debate and raised important questions about how teachers can effectively instruct such diverse groups. The study by Hashim & Mohamad (2020), explored both the benefits and drawbacks of the former streaming system. On the positive side, streaming made it easier for teachers to design standard lessons tailored to specific student levels and reduced peer pressure by grouping students with similar abilities. However, it also fostered a culture of segregation where weaker students felt marginalized. In an education system heavily focused on exam results, weaker students often felt demotivated and inferior, negatively impacting their self-esteem and motivation (Chzin & Surat, 2021).

Recognizing these drawbacks, the Ministry of Education Malaysia took decisive action to eliminate the practice of categorizing students based on their learning levels. This initiative aligns with the first shift of the Malaysian Education Blueprint (MEB) 2013–2025, which aims to provide equal access to quality education for all students (MOE, 2018). To support this change, the Ministry introduced differentiated instruction, requiring teachers to tailor their lesson plans, learning approaches, resources, activities, and student outcomes to meet each student's unique learning needs (Tomlinson, 2022; Ginja & Chen, 2020; Mustaffa et al., 2021). By embracing this approach, teachers can maximize each student's potential, particularly those with diverse intelligences (Derbala & M.Yasin, 2022).

Differentiated instruction fosters an inclusive and supportive learning environment, addressing varied student needs and bridging educational gaps. This method promotes equality and inclusion within the classroom, ensuring equal opportunities for all students to meet their learning needs and cultivating a balanced and fair educational experience (Cerna et al., 2021; Pozas et al., 2021; Abdul Muttalip, 2020). By embracing differentiated instruction, teachers can create a classroom atmosphere where diversity is celebrated, and every student is empowered to achieve their full potential (Tomlinson, 2022; Norman, 2020).

Research into differentiated instruction has gained significant traction over the past five years within Malaysia's education system. Previous research has primarily explored various facets within the realm of differentiated instruction, including assessments of teachers' knowledge (Ladjaharun & Ahmad, 2023; Ayten Pinar et al., 2022), readiness (Nadarajah & Wan Mohammad, 2023; Derbala & Yasin, 2022; Agus, 2021), instructional methods (Mustaffa et al., 2021; Wee & Mahamod, 2023; Santangelo & Tomlinson, 2012), and challenges they encounter (Radi & Amran, 2023; Jawan & Mahamod, 2021). Furthermore, some studies have focused on the implementation of differentiated instruction in subject-specific domains such as English language (Yusoff, 2022), Malay language (Michael, 2023; Agus, 2021; Abdul Mutallip, 2020), Mathematics (Majid et al., 2022), and Islamic Education (Zaki & Razak, 2022; Mustaffa et al., 2021). Drawing on these research insights, this concept paper aims to comprehensively explore:

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

- 1. Conceptual foundations of differentiated instruction.
- 2. Challenges and barriers encountered in its implementation within school settings.
- 3. Strategies employed to effectively navigate these challenges and enhance the application of differentiated instruction in classrooms.

The Overview of Differentiated Instruction.

Evolution of Differentiated Instruction

Over a century ago, American education featured "one-room schoolhouses," where students aged six to sixteen learned together. In this setting, teachers balanced their time and energy to instruct a diverse group—from beginners struggling with reading and writing to advanced learners with more complex needs (Tomlinson, 2014).

The conversation around student diversity gained momentum in 1943 with the launch of Educational Leadership, a magazine by the Association for Supervision and Curriculum Development (ASCD). The article "The Challenge of Individual Difference" published in 1953 encouraged revisiting Carleton W. Washburne's key article "Adjusting the Program to the Child." It also recognized contributions by Frederic Burk in the 1910s and others who aimed to foster individual student growth. This ideology aligns with the "No Child Left Behind Act of 2001," which sought to uplift disadvantaged students and improve individual educational outcomes through differentiated instruction principles.

Over the years, differentiated instruction has evolved as a dynamic approach to cater to diverse student capabilities. In the 1990s, a shift began with teachers adapting their methods to diverse learning styles. Carol Ann Tomlinson became a key figure in popularizing differentiated instruction. Introduced in the United States in 1995, her framework provided teachers with principles of differentiation, aiming to meet the unique learning needs of all students (Tomlinson, 1999).

Understanding the Concept of Differentiated Instruction

Differentiated instruction is a pedagogical approach that emphasizes tailoring teaching methods, lesson plans, and learning activities to meet the diverse needs of students. Popularized by Carol Ann Tomlinson in the late 1990s, it has become a cornerstone of modern educational practices. The concept of differentiated instruction is built on five key principles:

- 1. High-Quality Curriculum: Ensures that the content delivered is rigorous and relevant.
- 2. **Supportive Environment**: Fosters a classroom atmosphere conducive to diverse learning needs.
- 3. **Ongoing Assessment**: Allows teachers to regularly evaluate student progress and adapt instruction accordingly.
- 4. **Responsive Teaching**: Actively addresses the diverse backgrounds and abilities of students.
- 5. **Flexible Management**: Encourages adaptable classroom practices that can shift based on students' needs

The framework not only defines the core principles of differentiated instruction but also highlights key elements that teachers must consider when designing their lessons. These

INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS AND SOCIAL SCIENCES Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

elements include content, which refers to the specific knowledge and skills that are to be taught. Process involves the instructional methods and strategies used to facilitate student learning. Product denotes the outcomes or evidence that students produce. The classroom environment encompasses the physical and emotional setting in which learning takes place.

To effectively adapt these elements, teachers should tailor their approach based on students' learning styles (Kholidah et al., 2024; Moser & Zumbach, 2018). This involves considering students' interests to boost motivation and engagement, their readiness to gauge their current level of understanding and skill, and their learning profiles to align with their preferred ways of learning. By incorporating these factors, teachers can craft a more personalized and impactful learning experience (Chen & Wang, 2021; Taylor et al., 2021; Tomlinson, 1999). Ultimately, mastering and applying the principles of differentiated instruction empowers teachers to enhance student achievement and fosters an inclusive classroom environment where every learner can thrive within the dynamic landscape of education.

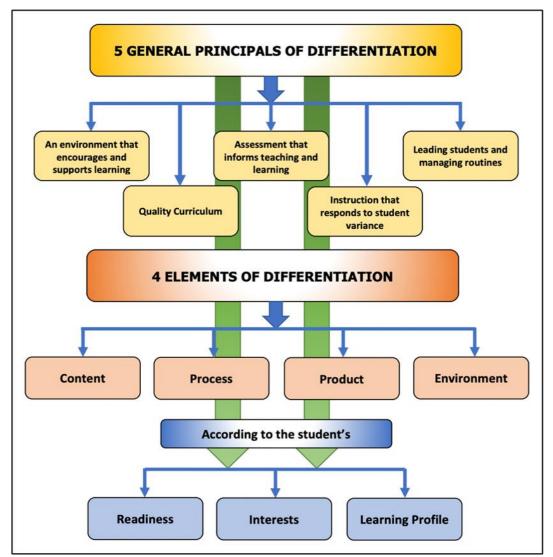


Figure 1: The Differentiated Classroom : Responding to the Needs of All Learner. Source: Tomlinson (2014).

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

Underpinning Theories of Differentiated Instruction

Multiple Intelligence Theory

Imagine a classroom where every student's unique strengths are recognized and nurtured. This vision is at the heart of Howard Gardner's Multiple Intelligence Theory, introduced in 1983 in his seminal work *Frames of Mind*. Gardner identified nine distinct intelligences: verballinguistic, logical-mathematical, visual-spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, naturalistic, and existential.

- Verbal-linguistic: Talent for reading, writing, and storytelling.
- Logical-mathematical: Strength in problem-solving and numbers.
- Visual-spatial: Ability to visualize and manipulate objects.
- **Bodily-kinesthetic**: Emphasis on physical expression and dexterity.
- **Musical**: Sensitivity to rhythm and sound.
- Interpersonal: Skill in understanding and interacting with others.
- Intrapersonal: Focus on self-awareness and emotional understanding.
- **Naturalistic**: Appreciation for the natural world.
- Existential: Concern with deep philosophical questions.

Recognizing and cultivating these intelligences can transform education, making learning more inclusive and personalized (Gardner, 2021; Muñoz-Martínez et al., 2020; Gregory & Chapman, 2012). By embracing this diversity, teachers can tailor their strategies to match students' strengths, promoting individual growth and enhancing educational outcomes (Khan et al., 2024; Markey et al., 2021; Asgarpoor et al., 2021).

Sternberg's Triarchic Theory

Sternberg's Triarchic Theory of Intelligence highlights three elements: analytical, creative, and practical intelligence (Sternberg et., 2023).

- Analytical intelligence: Ability to evaluate, analyze, and solve problems.
- Creative intelligence: Ability to generate new ideas and innovative solutions.
- **Practical intelligence**: Application of knowledge to real-world scenarios.

Creative intelligence is particularly fascinating as it involves exploring and generating new ideas. Students with high creative intelligence excel in projects requiring inventiveness and thrive in environments that encourage brainstorming and experimentation (Sternberg, 2003). By fostering creative intelligence, teachers can help students develop essential skills for innovation and adaptability (Adeoye, 2024; Sawyer, 2019). Differentiated instruction incorporating Sternberg's Triarchic Theory enhances academic achievement and empowers students to leverage their unique strengths, promoting a well-rounded and dynamic educational experience (Grigorenko et al., 2002).

Challenges in Implementing Differentiated Instruction

Differentiated instruction aims to customize teaching methods and materials to meet the diverse learning needs of students. By providing multiple pathways for acquiring content, processing information, and demonstrating understanding, this method seeks to maximize each student's learning potential. However, the journey toward implementing differentiated instruction is fraught with challenges (Heng & Song, 2020; Lavania & Nor, 2020; Onyishi &

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

Sefotho, 2020; Ginja & Chen, 2020). This section delves into these challenges, focusing on the roles of teachers, school management, and the facilities that support them.

Challenges Faced by Teachers

Differentiated instruction has been widely implemented in countries such as the United States, Hong Kong, Ethiopia, China, and Indonesia (Suprayogi & Valcke, 2016; Silva et al., 2017). However, this method was only introduced in Malaysia in 2018. Research indicates that many teachers remain unaware of differentiated instruction (Abdul Muttalip, 2020; Sulaiman & Wok, 2018). A limited understanding of the principles and components of these methods contributes to misconceptions and a lack of confidence among teachers regarding its implementation (Shareefa et al., 2019; Lavania & Nor, 2021). Insufficient training and support for teachers further hinder the effective and comprehensive adoption of differentiated teaching practices (De Jager, 2017; Lunsford, 2017).

Recent studies highlight persistent challenges in teachers' ability to effectively deliver learning content to students (Ouyang & Ye, 2023). These challenges often arise when instructional strategies fail to address the diverse learning needs of students (Pozas et al., 2021; De Jager, 2017). For instance, research in Ethiopia has shown that teachers struggle to adjust their instruction to accommodate varying student learning levels (Melesse, 2019). As a result, students may encounter difficulties engaging meaningfully with the learning process in the classroom (Taole & Cornish, 2017; Filgona et al., 2020).

Classrooms today are characterized by a mix of student abilities and learning styles, with no separation based on learning levels. This shift presents significant challenges for teachers in managing diverse student behaviors and characteristics effectively (Galton & Simon, 2023). Many teachers struggle to maintain control over students with varied behaviors, which hinders effective teaching (Porter, 2020). Engaging all students meaningfully becomes difficult due to the wide range of academic abilities and personal traits. The traditional one-size-fitsall teaching approach is insufficient for meeting the individual needs of each student. Therefore, teachers must adopt more flexible and adaptive teaching methods to address these diverse needs.

To captivate students' attention effectively, teachers must employ a range of engaging teaching methods. Poorly planned lessons can result in boredom and disruptions (Park & Ramirez, 2022). Masingan and Sharif (2021), observe that some teachers continue to rely on teacher-centered methods. Similarly, Milinga (2023), identifies a reluctance among teachers to adopt differentiated pedagogy, with many preferring traditional approaches. This resistance is often due to a longstanding reliance on outdated teaching techniques. Many teachers remain committed to the 'chalk and talk' style, where the teacher controls the learning process and depends heavily on textbooks (Gautam & Raj, 2022; Leo, 2021; Mahamod et al., 2020). These traditional methods persist because they simplify lesson preparation and do not require adjustments for the diverse abilities of students.

Challenges in School Administration and Management

Some school administrators still adhere to traditional management practices, often issuing instructions without fully considering the challenges faced by teachers. Consequently, teachers are frequently burdened with non-academic tasks such as extracurricular activities

INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS AND SOCIAL SCIENCES Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

and maintaining the cleanliness of the school environment, including the field, canteen, classrooms, and teachers' rooms (Vyas et al., 2024; Gul et al., 2023; Yusoff et al., 2022). These additional responsibilities distract teachers from focusing on differentiated instruction, making it difficult for them to tailor their teaching strategies to meet the diverse needs of their students.

Moreover, a shortage of subject-specialist teachers leads to increased teaching hours and additional non-teaching duties, demanding a high level of commitment from teachers. This situation also diminishes the effectiveness of classroom teaching and hinders teachers' ability to implement differentiated instruction effectively (Markelj et al., 2024; Guiaselon et al., 2022). To facilitate differentiated instruction, school administrators should prioritize supporting teachers by reducing non-academic burdens and ensuring adequate staffing. By doing so, administrators can enable teachers to focus on developing and applying tailored instructional methods that meet the diverse needs of their students.

Confronting Infrastructure Challenges

Implementing differentiated instruction presents unique challenges, particularly in rural schools where infrastructure is often inadequate (Daka, 2020). In these settings, the limited availability of resources significantly hampers teachers' ability to create engaging and effective teaching aids. Essential tools such as projectors, LCD screens, computers, and televisions are crucial for delivering dynamic and responsive lessons. Many teachers in rural areas lack these vital supports, making it difficult to meet the diverse needs of their students (Jawan & Mahamod, 2021).

However, inadequate infrastructure is not confined to rural schools; it affects many schools overall. A widespread shortage of essential educational tools and materials impacts the effectiveness of differentiated instruction across various contexts. This lack of infrastructure stifles teachers' creativity and limits their ability to explore and implement innovative teaching methods (Emeka et al., 2021; Edukasia, 2022).

Additionally, overcrowded classrooms are a pressing issue in education (Osai et al., 2021). This problem raises serious questions about the suitability of current class sizes. Many schools lack sufficient classrooms to accommodate the growing student population, leading to overcrowded spaces that exceed their intended capacity. This situation contributes to social issues and escalates dropout rates (Warsi et al., 2024; Charles & Mkulu, 2020; Du Plessis & Letshwene, 2020). Teachers face difficulties in devising methods that cater to the diverse abilities of their students. A study by Onyishi and Sefotho (2020), highlights that large class sizes limit teachers' ability to effectively implement differentiated instruction for all learners.

Navigating Strategies to Overcome Challenges in Differentiated Instruction

Differentiated instruction is vital as it addresses the diverse learning needs, abilities, and interests of students, fostering a more effective and inclusive educational environment. By customizing teaching methods and materials, teachers can ensure that every student engages with the curriculum and reaches their full potential (Suryati & Ratih, 2024; Kettler & Taliaferro, 2022). In today's varied classrooms, where traditional teaching methods often fall short, differentiated instruction is essential. To make this approach effective, it's crucial to implement innovative solutions and strategies to overcome its challenges. Addressing these

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

obstacles will allow differentiated instruction to thrive and lead to better educational outcomes for all students. The following sections will explore specific strategies to overcome these challenges in the educational context.

Tackling Teacher-Related Challenges

Continuous Professional Training and Development

In diverse classrooms, where students exhibit a wide range of intelligences, teachers must enhance their professionalism through innovative planning and adaptable teaching strategies. Research indicates that some teachers still lack essential skills and knowledge related to differentiated instruction (Shareefa, 2021; Ginja & Chen, 2020; Anderson & Putman, 2020). Prioritizing teacher training is crucial for fostering skilled educators. Fairman et al (2022), emphasize the importance of ongoing, specialized training courses. These programs equip teachers with the tools to face new challenges confidently. Engaging workshops and training sessions enable teachers to embrace new strategies, moving beyond traditional approaches (Martinez, 2022). This evolution allows teachers to craft creative instructional methods tailored to each student's unique abilities, maximizing learning outcomes and fostering a more inclusive educational environment.

Effective Classroom Management

In classrooms with diverse intelligences, proactive behavior management and creating an effective learning environment are essential. Strong classroom management ensures that students are fully engaged in the learning process. Establishing control and offering stimulating activities help students focus and prepare for instruction. Incorporating Visual, Auditory, Kinesthetic, and Tactile (VAKT) elements can enhance engagement (Elemer, 2022; Duquette, 2022). Ahmad and Othman (2020), highlight the importance of edutainment strategies in differentiated instruction. Interactive and entertaining methods make learning more engaging and student-centered (Tzenios, 2022; Samaranayake, 2020). This approach not only creates a dynamic learning environment but also aids in effective behavior management.

Cultivating Creativity in Differentiated Instruction

Traditional, teacher-centered methods are becoming obsolete. While changing teaching styles may seem daunting, relying on the old 'chalk and talk' approach can lead to disengagement. To engage students more effectively, teaching methods should incorporate creativity. Jasni et al (2020), emphasize that infusing creativity into teaching techniques enhances learning outcomes and stimulates student interest and motivation. Differentiated instruction can foster creativity in both teachers and students, helping them achieve educational goals. As Sternberg (2023), notes, teachers' creativity can serve as a powerful model, encouraging students to develop their own creative potential. Embedding creative elements into the teaching process nurtures students' imaginative thinking (Cremin, 2022) and transforms them into imaginative problem-solvers (Ibrahim et al., 2023; Said et al., 2020). This underscores the need to move away from traditional methods, which can stifle students' creative and critical thinking.

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

Strategies for Addressing School Administration and Management Issues

Fostering Fairness in Task Distribution

The role of a teacher extends beyond the classroom. Research by Beymer et al (2022), highlights that teachers often face numerous tasks unrelated to teaching, including administrative duties, supervision of extracurricular activities, and maintaining school facilities. This added pressure can detract from their primary role of educating students, leading to a frantic pace and compromised lesson planning and delivery, ultimately impacting student learning outcomes.

Moreover, responsibilities are frequently imbalanced within schools, with some teachers overwhelmed by their workload while others have comparatively lighter duties. This disparity can result in frustration and burnout among overburdened teachers, while those with fewer responsibilities may feel underutilized and disconnected from the school community. To address this issue, school administrators must proactively ensure a fair and balanced distribution of tasks (Mohammad et al., 2024; Chuaidi & Wahab, 2024). Effective management practices should involve regularly assessing and adjusting the allocation of duties to align with teachers' positions, experience, and skills. Lang & Mohd Nor (2024) suggest that considering these factors can help establish a more equitable work environment where all teachers feel valued and their contributions are recognized.

By fostering a supportive and balanced work environment, schools can enhance teacher satisfaction and retention. When teachers feel appreciated and have manageable workloads, they are more likely to be motivated and committed to their profession. This positive atmosphere benefits both teachers and students, as teachers can focus more on delivering high-quality instruction.

Empowering Through Supervision and Guidance

Supervision is a crucial element of professional development, as emphasized by Glickman et al (2018). Despite its importance, many schools fail to prioritize the supervision of teaching and learning processes (Hassan & Ghani, 2022; Stronge, 2021). This oversight prevents teachers from gaining insights into their instructional strengths and areas for improvement. To bridge this gap, school leaders must prioritize effective supervision. By engaging in collaborative monitoring, administrators can work closely with teachers to observe instructional activities, provide guidance, and offer constructive feedback. This approach enhances the teaching experience and ensures that all students' needs are adequately met (Chuah & Al Amin, 2022).

Effective supervision acts as both a quality control mechanism and a platform for professional growth (Saihu, 2020). It provides opportunities for sharing best practices, fostering a culture of continuous improvement, and developing a supportive professional community. Administrators who prioritize effective supervision help teachers address instructional challenges constructively. Instead of merely pointing out mistakes, administrators should focus on equipping themselves with the skills to guide teachers towards better practices (Kiral, 2020). This approach builds teachers' confidence and self-efficacy, enabling them to implement teaching strategies more effectively.

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

Overcoming Infrastructure Barriers

The Role of Parent-Teacher Associations

The Parent-Teacher Association (PTA), as outlined in Shift 9 of the Malaysian Education Blueprint 2013-2025, is instrumental in fostering strong partnerships between schools and families. By encouraging active parental involvement, the PTA plays a crucial role in advancing school development and student success (MOE, 2013; Villegas, 2021). With PTA funds and community resources, schools can acquire necessary tools and materials for implementing differentiated instruction effectively. This might include technology, learning aids, or specialized training for teachers to better address diverse learning needs. Additionally, parental engagement can help reduce the workload of teachers by sharing responsibilities related to student development (Yulianti et al., 2021; O'Toole et al., 2019). For example, parents can volunteer for extracurricular activities, classroom events, or administrative tasks, allowing teachers to focus more on instructional planning and delivery.

Strong school-family relationships facilitated by the PTA are also vital for supporting differentiated instruction. By working closely with teachers, parents can help reinforce and extend the differentiated strategies used in the classroom (Ismajli & Imami-Morina, 2018). When parents understand and support the tailored learning approaches being employed, they can provide additional reinforcement at home, contributing to a more cohesive and supportive learning environment. This collaboration ensures that differentiated instruction is effectively implemented, allowing teachers to better address the diverse needs of their students and ultimately improving educational outcomes for all.

New School Construction Plans

In Malaysia, overcrowded classrooms present a significant barrier to effectively implementing differentiated instruction (Kanapathy, 2024; Ismail & Aziz, 2019). When classrooms are overburdened with students, teachers often struggle to provide individualized attention and adapt their teaching strategies to meet the diverse learning styles and abilities of each student. This challenge is compounded by limited space and resources, which can dilute the effectiveness of tailored instruction.

To address these issues, proactive measures are being undertaken to overcome overcrowding and enhance educational delivery. One such initiative involves the identification and establishment of new schools in areas with rapidly growing student populations (Jidin, 2022). This strategy aims not only to distribute students more evenly across a broader range of facilities but also to integrate educational infrastructure with community development plans.

Conclusion

In the vibrant world of modern education, differentiated instruction is becoming an essential tool that recognizes the unique tapestry of students' diverse abilities. This innovative approach moves beyond the restrictive "one-size-fits-all" model, which often leaves struggling learners behind. Traditional teacher-centered methods may constrain students' potential for creative and critical thought, but through embracing differentiated pedagogy, teachers can tailor their strategies to meet the diverse needs of their classrooms.

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

This study is motivated by the pressing need to enhance teaching effectiveness in increasingly diverse classrooms. Despite the theoretical appeal of differentiated instruction, its practical application often faces challenges due to a lack of comprehensive understanding and effective strategies. By addressing these gaps, this paper makes a valuable contribution to the field by offering a detailed examination of both the theoretical underpinnings and practical challenges of differentiated instruction. Additionally, it provides actionable strategies for teachers, administrators, and policymakers to overcome these challenges, ultimately aiming to create more inclusive and effective learning environments.

Educational leaders—such as the District Education Office, State Education Department, and Ministry of Education—play a crucial role in ensuring the smooth implementation of differentiated instruction in schools. Teachers need ongoing support and guidance to effectively adopt these methods. Through careful monitoring, school administrators can identify the challenges teachers face and create opportunities for meaningful dialogue that leads to solutions. This collaborative process not only provides valuable insights into teaching practices but also assists in designing impactful professional development programs for teachers. Through these efforts, the study contributes to transforming educational practices, making them more adaptive and responsive to diverse learning needs.

In summary, differentiated instruction represents a transformative step forward in education, equipping both teachers and students with the skills necessary for success in the 21st century. By integrating differentiated approaches into teaching and learning, teachers can explore innovative ideas tailored to the diverse intelligences of their students. Moreover, this shift fosters a more dynamic and enjoyable classroom environment, promoting creative learning and empowering students to thrive according to their unique abilities. Therefore, it is crucial to continue strengthening the implementation of differentiated instruction, ensuring its effectiveness and contributing to a future where every student can excel and achieve their fullest potential.

Acknowledgment

I would like to extend my heartfelt appreciation to the Ministry of Education, Malaysia, for their generous support through the *Hadiah Latihan Persekutuan* (HLP) scholarship. I am also deeply grateful to the Research Project Grant GG-2021-031 for sponsoring the publication of this research. Their support has been invaluable in the completion of this work.

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

References

- Abdul Muttalip, D. A. (2020). The Implementation Ddiffrentiated Instruction Approaches among Malay Language Teachers's in RuraL Elementary School Category 3. Jurnal Pendidikan Bahasa Melayu, 10(2), 29-42.
- Adeoye, M. A. (2024). Education in flux: nurturing minds for the future. In *Proceeding Of International Conference On Education, Society And Humanity, 2*(1), 73-82.
- Agus, A. N. A. (2021). Tahap Pengetahuan Dan Kesediaan Guru Bahasa Melayu Dalam Melaksanakan Pendekatan Terbeza Dalam Pengajaran Dan Pembelajaran Di Rumah Semasa Tempoh Perintah Kawalan Pergerakan. *Jurnal Pendidikan Bahasa Melayu*, *11*(1), 75-87.
- Ahmad, N., & Othman, S. (2020). Penggunaan kaedah didik hibur dalam pengajaran kemahiran membaca guru bahasa Melayu sekolah rendah. *International Journal of Education and Training (InjET), 6*(2), 1-11.
- Anderson, S. E., & Putman, R. S. (2020). Special education teachers' experience, confidence, beliefs, and knowledge about integrating technology. *Journal of Special Education Technology*, *35*(1), 37-50. https://doi.org/10.1177/0162643419836409
- Asgarpoor, J. S., Handley, M., Sarang-Sieminski, A. L., Slaughter, J. B., Pollock, M. C., Murzi, H., & Cox, M. F. (2021, July). Embracing diversity, equity, and inclusion in our classroom and teaching. In 2021 ASEE Virtual Annual Conference Content Access.
- Ayten Pinar, B., Yilmaz, R., & Atas, V. (2022). Development of self-efficacy scale of differentiated instruction for teachers. *JRAMathEdu (Journal of Research and Advances in Mathematics Education)*, 7(2), 93-104.
- Beymer, P. N., Ponnock, A. R., & Rosenzweig, E. Q. (2022). Teachers' perceptions of cost: Associations among job satisfaction, attrition intentions, and challenges. *The Journal of Experimental* https://doi.org/10.1080/00220973.2022.2039997
- Cerna, L., Mezzanotte, C., Rutigliano, A., Brussino, O., Santiago, P., Borgonovi, F., & Guthrie, C. (2021). Promoting inclusive education for diverse societies: A conceptual framework. https://doi.org/10.1787/94ab68c6-en
- Charles, A., & Mkulu, D. G. (2020). Management challenges facing school administrators and pupils' academic performance in public primary schools in Sengerema District Mwanza, Tanzania. International Journal of Humanities and Education Development (IJHED), 2(3), 191-207.
- Chen, S. Y., & Wang, J. H. (2021). Individual differences and personalized learning: a review and appraisal. *Universal Access in the Information Society, 20*(4), 833-849. https://doi.org/10.1007/s10209-020-00753-4
- Chuah, S. M., & Al Amin, M. (2022). Pengaruh amalan penyeliaan terhadap pengajaran kreatif guru. *Jurnal kepimpinan pendidikan*, 30-40.
- Chuaidi, M., & Wahab, J. A. (2024). Distributive Leadership Practices Of Administrators And It Relationship With Job Stress Of Elementary School Teachers. *International Journal of Contemporary Education, Religious Studies and Humanities, 4*(1), 55-64.
- Chzin, D. T. J., & Surat, S. (2021). Sorotan literatur bersistematik: Faktor-faktor mempengaruhi pencapaian akademik pelajar. *Malaysian Journal of Social Sciences and Humanities (MJSSH), 6*(12), 137-157. https://doi.org/10.47405/mjssh.v6i12.1210
- Cremin, T. (2022). Teaching English creatively. In *Teaching English Creatively* (pp. 1-11). Routledge.

- Daka, H. (2020). Linking teacher effectiveness to school performance: evidence from rural day secondary schools in the Western province of Zambia.
- De Jager, T. (2017). 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
- Derbala, R., & Yasin, R. M. (2022). Tahap pengetahuan, penerimaan, kesediaan dan amalan pengajaran guru pemulihan khas terhadap pengajaran terbeza. *Malaysian Journal of Social Sciences and Humanities (MJSSH), 7*(4), e001445-e001445. https://doi.org/10.47405/mjssh.v7i4.1445
- Du Plessis, E. C., & Letshwene, M. J. (2020). A reflection on identified challenges facing South African teachers. *The Independent Journal of Teaching and Learning*, *15*(2), 69-91.
- Duquette, C. (2022). *Finding a Place for Every Student: Inclusive practices, social belonging, and differentiated instruction in elementary classrooms*. Pembroke Publishers Limited.
- Edukasia, J. P. (2022). How to Improve the Performance of Public Elementary Schools? Empirical Evidence from Indonesia. *Jurnal Prima Edukasia*, 11(2), 235-246. http://dx.doi.org/10.21831/jpe.v11i2.60290
- Elmer C, I. (2022). Differentiated Assessment in Araling Panlipunan 10: Enhanced Learning Activities. International Journal of Trend in Scientific Research and Development, 6(6), 971-986.
- Emeka, A., Margaret, A. F., Jacob, O. N., & Olatunde-Aiyedun, T. G. (2021). Problems facing science teachers in public secondary schools in Nigeria and way forward. *International Journal of Discoveries and Innovations in Applied Sciences*, *1*, 118-129.
- Fairman, J. C., Smith, D. J., Pullen, P. C., & Lebel, S. J. (2022). The challenge of keeping teacher professional development relevant. In *Leadership for Professional Learning* (pp. 251-263). Routledge.
- Filgona, J., Sakiyo, J., Gwany, D. M., & Okoronka, A. U. (2020). Motivation in learning. Asian Journal of Education and social studies, 10(4), 16-37. https://doi.org/10.9734/ajess/2020/v10i430273
- Galton, M., & Simon, B. (2023). *Progress and performance in the primary classroom*. Routledge. https://doi.org/10.4324/9781003361268
- Gardner, H. (1983). Frames of Mind: A Theory of Multiple Intelligences. New York: Basic Books.
- Gardner, H. (2021). *Disciplined mind: What all students should understand*. Simon & Schuster.
- Gautam, N. R., & Raj, N. (2022). *Exploration Of Teachers' practices Of Teaching With/Out Textbooks In Community Schools In Dhading* (Doctoral dissertation, Kathmandu University School of Education).
- Ginja, T. G., & Chen, X. (2020). Teacher Educators' Perspectives and Experiences towards Differentiated Instruction. *International Journal of Instruction*, *13*(4), 781-798. https://doi.org/10.29333/iji.2020.13448a
- Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2018). *SuperVision and instructional leadership: A developmental approach*. New York, NY: Pearson.
- Graham, L. J., De Bruin, K., Lassig, C., & Spandagou, I. (2021). A scoping review of 20 years of research on differentiation: Investigating conceptualisation, characteristics, and methods used. *Review of Education*, *9*(1), 161-198. https://doi.org/10.1002/rev3.3238
- Gregory, G. H., & Chapman, C. (2012). *Differentiated Instructional strategies: One size doesn't fit all.* Corwin press.

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

- Grigorenko, E. L., Jarvin, L., & Sternberg, R. J. (2002). School-based tests of the triarchic theory of intelligence: Three settings, three samples, three syllabi. *Contemporary educational psychology*, *27*(2), 167-208. https://doi.org/10.1006/ceps.2001.1087
- Guiaselon, B., Luyugen-Omar, S., Mohamad, H., Sinsuat, D. R. R., Samson, C., Maidu, N., & Maguid, N. (2022). Mismatch of Teachers' Qualifications and Subjects Taught: Effects on Students' National Achievement Test. *Psychology and Education: A Multidisciplinary Journal, 6*(7), 573-590.
- Gul, F., Ishtiaq, A., Amjad, F., Aslam, S., Afzaal, H. M., & Ahmad, S. (2023). Issues Faced By Academies Attending Students Alongside School Classes: A Survey Study At Secondary Level. *Russian Law Journal, 11*(12S), 724-732.
- Hashim, M. I., & Mohamad, W. M. R. W. (2020). Faktor ketidaksediaan guru terhadap pelaksanaan kelas bercampur aras murid. *Jurnal Dunia Pendidikan, 2*(2), 196-204.
- Hassan, H., & Ghani, M. F. A. (2022). Pengaruh komitmen guru dan penyeliaan guru besar terhadap pengurusan bilik darjah di sekolah rendah daerah Tenom, Sabah. *JuPiDi: Jurnal Kepimpinan Pendidikan, 9*(1), 56-76.
- Heng, T. T., & Song, L. (2020). A proposed framework for understanding educational change and transfer: Insights from Singapore teachers' perceptions of differentiated instruction. *Journal of Educational Change*, 21(4), 595-622. https://doi.org/10.1007/s10833-020-09377-0
- Ibrahim, S. N. N., Kassim, S. N. I. A., Kamel, A. K. M., & Damanhuri, Z. (2023). Pelaksanaan Inovasi Bahan Kreatif Dalam Kalangan Guru Pendidikan Awal Kanak-Kanak. *Jurnal Kesidang, 8*(1), 371-379.
- Ismail, M. I. H., & Aziz, A. (2019). TS25 schoolteachers' perceptions of differentiated learning in diverse ESL classrooms. *Journal of Education and Social Sciences*, 1(13), 95-107.
- Ismajli, H., & Imami-Morina, I. (2018). Differentiated instruction: Understanding and applying interactive strategies to meet the needs of all the students. *International journal of Instruction*, *11*(3), 207-218. https://doi.org/10.12973/iji.2018.11315a
- Jasni, S. R., Zailani, S., & Zainal, H. (2020). Impak pendekatan kreatif dalam pengajaran dan pembelajaran kosa kata arab. *Bitara International Journal Of Civilizational Studies And Human Sciences (E-Issn: 2600-9080), 3*(1), 10-21.
- Jawan, H., & Mahamod, Z. (2021). Kaedah dan cabaran pengajaran terbeza dalam meningkatkan penguasaan membina ayat Bahasa Melayu murid sekolah rendah. *Jurnal Dunia Pendidikan*, *3*(1), 67-77.
- Jidin, M. R. (2022, June 25). Pembukaan sekolah baharu di kawasan kepadatan tinggi: KPM. Sinar Harian.

https://www.sinarharian.com.my/article/208623/berita/nasional/pembukaan-sekolah-baharu-di-kawasan-kepadatan-tinggi-kpm.

- Kanapathy, S. (2024). Differentiated Instruction: A Survey of Novice Teachers' Understanding and Barrier to Implementation. *Malaysian Journal of Social Sciences and Humanities (MJSSH), 9*(4), e002778-e002778. https://doi.org/10.47405/mjssh.v9i4.2778
- Kettler, T., & Taliaferro, C. (2022). *Personalized learning in gifted education: differentiated instruction that maximizes students' potential.* Routledge. https://doi.org/10.4324/9781003237136
- Khan, A. S., Alnmer, S., & Khan, S. A. (2024). Maximizing Learning Potential: Integrating Multiple Intelligences Theory In EFL Teaching And Learning. *Educational Administration: Theory and Practice*, 30(2), 852-858. https://doi.org/10.53555/kuey.v30i2.2509

- Kholidah, N., Maryani, I., & Latifah, A. (2024). Effectiveness of Differentiated Learning Approaches Based on Learning Styles in Improving Science Learning Outcomes: A Case Study at SD Muhammadiyah Noyokerten, Sleman. *Journal of Social and Community Development*, 1(1), 33-44. https://doi.org/10.56741/jscd.v1i01.653
- Kiral, E. (2020). Excellent Leadership Theory in Education. *Journal of Educational Leadership and Policy Studies, 4*(1), n1.
- Ladjaharun, H., & Ahmad, A. (2023). Pengajaran Terbeza: Kajian Tinjauan Terhadap Guru
 Sejarah Sekolah Menengah di Sabah. *Malaysian Journal of Social Sciences and Humanities* (*MJSSH*), 8(1), e002050-e002050.
 https://doi.org/10.47405/mjssh.v8i1.2050
- Lang, A., & Noor, M. Y. (2024). Gaya Kepimpinan Demokratik Pentadbir Sekolah dan Hubungannya dengan Kerja Berintegriti dalam kalangan Guru. *Malaysian Journal of Social Sciences and Humanities (MJSSH), 9*(2), e002686-e002686. https://doi.org/10.47405/mjssh.v9i2.2686
- Lavania, M., & Nor, F. (2020). Barriers in differentiated instruction: A systematic review of the literature. Journal of Critical Reviews, 7(6), 293-297. http://dx.doi.org/10.31838/jcr.07.06.01
- Leo, S. (2021). *A challenging Book to practice Teaching in English*. Penerbit Andi.
- Lunsford, K. J. (2017). Challenges to implementing differentiated instruction in middle school classrooms with mixed skill levels.
- Mahamod, Z., Razak, K. A., & Rahman, A. A. (2020). Pengenalan tentang profesion keguruan dan pembangunan insan dalam konteks pendidikan.
- Majid, N. A., Basri, A. H., Manogaran, L., Wahab, R. A., Raduan, I. H., Gani, H., & Sabudin, S. N.
 M. (2022). Tahap Penguasaan Guru-Guru Novis (Lanjutan) Matematik Sekolah Rendah
 Dalam Perlaksanaan Pengajaran Dan Pembelajaran Terbeza Kandungan. *ICELAM*, 2(2-12), 498-509.
- Markelj, N., Kovac, M., Leskosek, B., & Jurak, G. (2024). Occupational Health Disorders Among Physical Education Teachers Compared to Classroom and Subject Specialist Teachers. *Frontiers in Public Health*, *12*, 1390424. https://doi.org/10.3389/fpubh.2024.1390424
- Markey, K., O'Brien, B., Kouta, C., Okantey, C., & O'Donnell, C. (2021). Embracing classroom cultural diversity: Innovations for nurturing inclusive intercultural learning and culturally responsive teaching. *Teaching and Learning in Nursing*, *16*(3), 258-262. https://doi.org/10.1016/j.teln.2021.01.008
- Martinez, C. (2022). Developing 21st century teaching skills: A case study of teaching and learning through project-based curriculum. *Cogent Education, 9*(1), 2024936. https://doi.org/10.1080/2331186X.2021.2024936
- Masingan, C., & Sharif, S. (2021). Amalan Pengintegrasian Teknologi Guru Bukan Pengkhususan Mata Pelajaran Reka Bentuk Dan Teknologi (RBT) Di Sekolah Menengah Berdasarkan Model SAMR. *Jurnal Dunia Pendidikan, 3*(3), 13-20.
- McCray, C. R. (2022). Equitable Instruction, Empowered Students: A Teacher's Guide to Inclusive and Culturally Competent Classrooms (Create an equitable instruction classroom culture that encourages equity and justice). Solution Tree Press.
- Melesse, S. (2019). Teacher Educators' Contribution to Prospective Teachers' Multicultural Competence Development in Ethiopia.
- Michael, J. (2023). Amalan dan masalah pendekatan pengajaran terbeza berpandukan MoLIB oleh guru Bahasa Melayu sekolah rendah kebangsaan. *Jurnal Dunia Pendidikan*, *5*(1), 1-13.

INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS AND SOCIAL SCIENCES Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

- Milinga, J. R., Amani, J., & Lyakurwa, S. E. (2023). Teachers' perceptions of differentiated instruction for academically high-achieving secondary school students in Tanzania. *Journal of Advanced Academics, 34*(1), 68-102. https://doi.org/10.1177/1932202X221129970
- Ministry of Education Malaysia [MOE]. (2013). *Malaysian Education Blueprint (MEB) 2013 2025*. Putrajaya: Ministry of Education Malaysia.
- Ministry of Education Malaysia [MOE]. (2018). *Circular letter of the Ministry of Education Malaysia No. 14 of 2018*. Putrajaya: Ministry of Education Malaysia.
- Mohammad, H., Razali, F. N., & Mahamod, Z. (2024). The Factors of Early Retired Teachers: A Case Study among Malay Language Teacher at Three Type Primary School in Gemencheh Zone. *Jurnal Pendidikan Bahasa Melayu*, *14*(1), 76-88.
- Moser, S., & Zumbach, J. (2018). Exploring the development and impact of learning styles: An empirical investigation based on explicit and implicit measures. *Computers & Education, 125*, 146-157.
- Munoz-Martinez, Y., Monge-Lopez, C., & Torrego Seijo, J. C. (2020). Teacher education in cooperative learning and its influence on inclusive education. *Improving Schools, 23*(3), 277-290. https://doi.org/10.1177/1365480220929440
- Mustaffa, Z., Hussin, Z., & Sulaiman, A. M. (2021). Pedagogi Terbeza untuk pengajaran guru terhadap kepelbagaian murid. *Malaysian Journal of Social Sciences and Humanities (MJSSH), 6*(9), 202-214. https://doi.org/10.47405/mjssh.v6i9.997
- Nadarajah, S. & Muhammad, W. M. R. (2023). Tahap Pengetahuan Pendekatan Terbeza dalam Kalangan Guru Bahasa Melayu. *Jurnal Dunia Pendidikan 5*(1), 570-581.
- Norman, T. R. (2020). *Creating inclusive classrooms through culturally responsive pedagogy.* Rowan University.
- O'Toole, L., Kiely, J., & McGillicuddy, D. (2019). Parental involvement, engagement and partnership in their children's education during the primary school years. National Parents Council.
- Onyishi, C. N., & Sefotho, M. M. (2020). Teachers' Perspectives on the Use of Differentiated Instruction in Inclusive Classrooms: Implication for Teacher Education. *International Journal of Higher Education*, 9(6), 136-150. https://doi.org/10.5430/ijhe.v9n6p136
- Osai, J. A., Amponsah, K. D., Ampadu, E., & Commey-mintah, P. (2021). Teachers' experiences With Overcrowded Classrooms In A Basic School In Ghana. *International Online Journal of Primary Education*, *10*(1), 73-88.
- Ouyang, J., & Ye, N. (2023). Differentiated Instruction: Meeting the Needs of All Learners. *Curriculum and Teaching Methodology, 6*(11), 57-61.
- Park, D., & Ramirez, G. (2022). Frustration in the classroom: Causes and strategies to help teachers cope productively. *Educational Psychology Review*, 34(4), 1955-1983. https://doi.org/10.1007/s10648-022-09707-z
- Porter, L. (2020). *Student behaviour: Theory and practice for teachers*. Routledge.
- Pozas, M., Letzel, V., Lindner, K. T., & Schwab, S. (2021). DI (differentiated instruction) does matter! The effects of DI on secondary school students' well-being, social inclusion and academic self-concept. In *Frontiers in Education* (Vol. 6, p. 729027). Frontiers Media SA. https://doi.org/10.3389/feduc.2021.729027
- Radi, N. and Amran, S. (2023). Strategi dan Cabaran Pelaksanaan Pendekatan Pembelajaran Terbeza dalam Kalangan Guru di Sekolah Rendah. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 8(5), p. e002336. https://doi.org/10.47405/mjssh.v8i5.2336

- Said, I., Ahmad, K., Seman, R., Ahmad, R. S., & Fadzil, M. F. (2020). 4K 1N Applications in 21st Century Learning and Facilitation: A Study of the Teaching of Form Six Teachers in Kubu Pasu District. *Journal of Advanced Research in Social and Behavioural Sciences*, 19(1), 64-79. https://doi.org/10.37934/arsbs.19.1.6479
- Saihu, S. (2020). The urgency of total quality management in academic supervision to improve the competency of teachers. *Edukasi Islami: Jurnal Pendidikan Islam, 9*(02), 297-323.
- Samaranayake, P. N. (2020). Student-centered learning with technology. *Journal of Instructional Technology*, *45*(6), 459-467.
- Santangelo, T., & Tomlinson, C. A. (2012). Teacher educators' perceptions and use of differentiated instruction practices: An exploratory investigation. *Action in Teacher Education 34*(4), 309-327. https://doi.org/10.1080/01626620.2012.717032
- Sawyer, K. (2019). *The creative classroom: Innovative teaching for 21st-century learners.* Teachers College Press.
- Shareefa, M., Zin, R. H. A. M., Abdullah, N. Z. M., & Jawawi, R. (2019). Mainstream and special education teachers' implementation of differentiated instruction.
- Silva, R. B. da, Moura & Cestari, L. A. dos S. (2017). Learning at institution of higher education versus the teacher's role in classroom. *American Journal of Educational Research* 5(7), 762–769. https://doi.org/10.12691/education-5-7-11.
- Sternberg, R. J. (2003). *Wisdom, intelligence, and creativity synthesized.* Cambridge University Press.
- Sternberg, R. J., Kaufman, J. C., & Karami, S. (Eds.). (2023). *Intelligence, Creativity, and Wisdom: Exploring Their Connections and Distinctions*. Springer Nature.
- Stronge, J. H., & Xu, X. (2021). Qualities of effective principals. ASCD.
- Sulaiman, M., & Wok, W. C. (2018). Tinjauan tentang pengetahuan dan penerimaan terhadap pengajaran berbeza dalam kalangan siswa pendidik Program Ijazah Sarjana Muda Perguruan. In Prosiding Seminar Kebangsaan Majlis Dekan Pendidikan Universiti Awam (pp. 283-294).
- Suprayogi, M. N., & Valcke, M. (2016). Differentiated instruction in primary schools: Implementation and challenges in Indonesia. *Ponte Journal*, 72(6), 2-18.
- Suryati, I., & Ratih, K. (2024). How Can Teachers Tailor Success? Innovative Strategies for Content, Process, and Product in EFL Classrooms. *Voices of English Language Education Society*, 8(1), 150-162. https://doi.org/10.29408/veles.v8i1.24451
- Swargiary, K. (2024). Navigating the Modern Classroom: A Teacher's Journey. LAP.
- Taole, M. J. & Cornish, L. 2017. Identifying the professional knowledge base for multi-grade teaching. *The Online Journal of New Horizons in Education* 7(4): 42-51.
- Taylor, D. L., Yeung, M., & Bashet, A. Z. (2021). Personalized and adaptive learning. *Innovative learning environments in STEM higher education: Opportunities, Challenges, and Looking Forward*, 17-34.
- Tomlinson, C. A. (1999). Mapping a route toward differentiated instruction. *Educational leadership*, *57*, 12-17.
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners.* Ascd.
- Tomlinson, C. A. (2022). *Everybody's classroom: differentiating for the shared and unique needs of diverse students*. Teachers College Press.
- Tomlinson, C. A., & Imbeau, M. B. (2023). *Leading and managing a differentiated classroom. Ascd.*

- Tzenios, N. (2022). Learner-centered Teaching. International Research Journal of Modernization in Engineering Technology and Science, 4(12), 916-919. https://www.doi.org/10.56726/IRJMETS32262.
- Villegas, M. F. (2021). Parent-teachers association: Its contribution to school development. International Journal of Advanced Research in Management and Social Sciences, 10(7), 1-30.
- Vyas, Meghana & Gupta, Manisha. (2024). Teaching quality and Non-academic responsibilities of Teachers. *The Empirical Economics Letters*, *22*, 342-353.
- Warsi, L. Q., Naseer, R., & Asghar, M. (2024). Causes of Deterioration of Elementary Education and Potential Solutions. *Qlantic Journal of Social Sciences and Humanities*, 5(2), 243-253. https://doi.org/10.55737/qjssh.5011978450
- Wee, K. Q., & Mahamod, Z. (2023). Pengetahuan, Sikap Dan Amalan Guru Bahasa Melayu Sekolah Jenis Kebangsaan Cina Terhadap Pendekatan Pengajaran Terbeza. *International Journal of Education and Pedagogy*, 5(2), 1-14.
- Yulianti, K., Denessen, E., Droop, M., & Veerman, G. J. (2021). Transformational leadership for parental involvement: How teachers perceive the school leadership practices to promote parental involvement in children's education. *Leadership and Policy in Schools, 20*(2), 277-292. https://doi.org/10.1080/15700763.2019.1668424
- Yusoff, A. (2022). Tahap kefahaman guru bahasa inggeris terhadap pedagogi terbeza. *International Online Journal of Language, Communication, and Humanities,* 112-121.
- Yusoff, K. M., Hamid, A. H. A., & Othman, N. (2022). Hubungan amalan kepimpinan transformasional guru besar dan kepuasan kerja guru sekolah transformasi 25 di Daerah Jerantut. Jurnal Dunia Pendidikan, 3(4), 388-402. https://doi.org/10.55057/jdpd.2022.3.4.31