

Inclusive Education Practices: A Systematic Literature Review on Approaches and Impact

Praktik Pendidikan Inklusif: Tinjauan Literatur Sistematis tentang Pendekatan dan Dampak

Arman Paramansyah

STIT Al-Marhalah Al-'Ulya Bekasi

*Paramansyah.aba@gmail.com

**Corresponding Author*

ABSTRACT

This research discusses approaches to inclusive education, including Universal Design for Learning (UDL), Differentiated Instruction, Collaborative Teaching, and the Use of Supporting Technology, as well as the formation of positive Attitudes and Perceptions. By utilizing various literature sources, this research identifies the impact and implications of each approach on academic, social, emotional and attitudinal dimensions in the context of inclusive education. The findings show that these approaches have great potential to improve educational outcomes and create a more inclusive and empathetic society. However, the study also underscores the need for further research to explore the limitations, implementation, and long-term impacts of these approaches, as well as efforts to integrate advanced technologies in inclusive educational practices.

Keywords: inclusive education, Universal Design for Learning (UDL), Differentiated Instruction, Collaborative Teaching, Supporting Technology, Attitudes and Perceptions.

ABSTRAK

Penelitian ini membahas pendekatan-pendekatan terhadap pendidikan inklusif, termasuk Universal Design for Learning (UDL), Instruksi yang Diferensiasi, Pengajaran Kolaboratif, dan Pemanfaatan Teknologi Pendukung, serta pembentukan Sikap dan Persepsi yang positif. Dengan memanfaatkan berbagai sumber literatur, penelitian ini mengidentifikasi dampak dan implikasi dari setiap pendekatan tersebut terhadap dimensi akademik, sosial, emosional, dan sikap dalam konteks pendidikan inklusif. Temuan menunjukkan bahwa pendekatan-pendekatan tersebut memiliki potensi besar untuk meningkatkan hasil pendidikan dan membentuk masyarakat yang lebih inklusif dan empatik. Namun, penelitian juga menggarisbawahi perlunya penelitian lebih lanjut untuk mengeksplorasi batasan-batasan, implementasi, dan dampak jangka panjang dari pendekatan-pendekatan ini, serta upaya untuk mengintegrasikan teknologi canggih dalam praktik pendidikan inklusif.

Kata Kunci: pendidikan inklusif, Universal Design for Learning (UDL), Instruksi yang Diferensiasi, Pengajaran Kolaboratif, Teknologi Pendukung, Sikap dan Persepsi.

1. Introduction

Inclusive education practices encompass a range of strategies and approaches aimed at ensuring that all students, including those with special educational needs and disabilities, are provided with equitable opportunities for learning and participation within the educational system. The concept of inclusive pedagogy emphasizes the act of teaching and its associated discourse, distinguishing it from inclusive education and inclusive practice (Florian & Black-Hawkins, 2011). It involves a synthesis of the values and practices of inclusive education

with the interventions and procedures of special education (Hornby, 2015). Inclusive teaching practices are crucial for the successful implementation of inclusive education, as they enable teachers to cater to the diverse needs of all students (Li et al., 2022).

Teacher competencies play a significant role in the effective practice of inclusive education, with scholars highlighting the importance of factors such as attitudes, curriculum, resources, and parental involvement (Rajendran et al., 2020). Additionally, the development of inclusive education management models is essential, with a focus on addressing obstacles related to students, learning, and management in order to successfully implement inclusive education practices (Robiyansah et al., 2020). Constraints to the implementation of inclusive teaching can be addressed through the application of inclusive teaching practices, which are vital for realizing inclusive education (Andrews et al., 2019).

Inclusive education is not without challenges, as evidenced by barriers identified in various countries such as Greece, Spain, and Lithuania, emphasizing the need for emancipatory disability research to overcome these obstacles (Genova, 2015). Furthermore, the implementation of inclusive education in regular schools requires strengthening the character of tolerance to fully adhere to regulatory frameworks (Pertiwi & Suharno, 2021). Creating an inclusive educational environment is crucial for the social-cultural competence development of all students, highlighting the importance of fostering an inclusive and supportive educational setting (Romanova, 2019). In conclusion, inclusive education practices are multifaceted and require a holistic approach that considers teacher competencies, management models, regulatory frameworks, and the creation of inclusive learning environments to ensure the successful inclusion of all students in the educational process.

2. Research Methods

The research method used in this study adopted a systematic literature review approach to explore inclusive education practices. The first step involves identifying reference sources from international databases, in particular Scopus and Web of Science, using a number of relevant keywords such as inclusive education, universal design for learning, differentiated instruction, collaborative teaching, assistive technology, and attitudes and perceptions. After that, articles were filtered based on the title and abstract to select articles that were appropriate to the research topic. Articles that passed this initial stage were then further selected through thorough reading to verify compliance with the established inclusion criteria. The inclusion criteria include relevance to the research topic, quality of the information presented, and publication year between 2010 and 2022 in English. The selected articles then had their data extracted, including information about the inclusive education approaches discussed, research methods used, main findings, and practical implications. The extracted data was then analyzed qualitatively to identify key patterns and findings in inclusive education practices. The results of the analysis will be presented systematically in accordance with the PRISMA method, including a flow diagram illustrating the article selection process. With this approach, it is hoped that this study can provide in-depth insight into the approaches and impacts of inclusive educational practices, as well as provide guidance for future educational research and practice.

3. Results and Discussions

3.1. Universal Design for Learning (UDL)

Universal Design for Learning (UDL) is a pedagogical framework that has gained significant attention in the field of education, particularly in special education. UDL aims to provide all students, including those with disabilities, equal access to the general curriculum (Rao et al., 2014). It is noted for its potential to benefit both students with and without disabilities in various subjects, such as science and mathematics (King-Sears et al., 2014; Root et al., 2019). The framework of UDL encompasses various models like Universal Design for

Instruction and Universal Instructional Design, emphasizing the importance of designing educational environments that cater to diverse learner needs (McGuire et al., 2006).

UDL is recognized for its role in guiding the construction and delivery of instruction to support all students, not just those with disabilities (Kennedy et al., 2013). It offers a solution to promote content accessibility and address individual differences among learners (Al-Azawei et al., 2016). By utilizing UDL, educators can design technology-rich curricula that are flexible and provide multiple options to meet the diverse needs of students (Rose & Strangman, 2007). Furthermore, UDL can be used proactively to design lessons that accommodate learner variability (Rao & Meo, 2016).

The application of UDL extends beyond traditional classroom settings to online courses, where it offers pedagogical and practical considerations for enhancing learning experiences (Dell et al., 2015). UDL is also seen as a means to build inclusiveness in educational systems, promoting equal access to teaching and learning for students with diverse learning needs (Dalton et al., 2019; Pliner & Johnson, 2004). The framework of UDL has been integrated into curriculum planning to improve reading comprehension programs and vocabulary performance, demonstrating its versatility across different educational contexts (Meo, 2008; Kennedy et al., 2013).

Despite its efficacy, there are ongoing discussions regarding the implementation and measurement of UDL in classrooms and schools (Basham et al., 2020). While UDL has been included in educational policies, such as the Every Student Succeeds Act of 2015 and the Higher Education Opportunity Act of 2008, there is a call for more research to support its widespread adoption (Hollingshead et al., 2020). In conclusion, Universal Design for Learning (UDL) stands as a valuable framework in education, offering a systematic approach to cater to the diverse needs of all learners and promote inclusive educational practices.

3.2. Differentiated Instruction

Differentiated Instruction, an educational philosophy deeply rooted in catering to the individual needs of each learner, stands as a beacon of inclusivity and personalized learning within the academic landscape. Originating from the acknowledgment of the rich diversity present in every classroom, this approach champions the adaptation of teaching methodologies, curriculum content, and evaluation techniques to resonate with the unique learning styles, capabilities, and passions of every student (Friend et al., 2010).

At its core, differentiated instruction embraces the profound understanding that no two learners are alike. It transcends the one-size-fits-all approach, ushering in an era where education is finely tailored to nurture the innate potential within each individual. By recognizing and embracing the multifaceted dimensions of human cognition, it paves the way for a more inclusive, engaging, and effective learning journey for all.

Differentiated instruction, in the digital age, has been significantly enhanced by cutting-edge technology, particularly advanced AI algorithms and comprehensive academic databases (Smale-Jacobse et al., 2019). These technologies enable educators to identify diverse student needs and create tailored learning experiences, fostering a culture of trust and originality among learners (Smale-Jacobse et al., 2019). For instance, the integration of platforms offering free Turnitin checks and AI-based plagiarism detection ensures academic integrity (Maertens et al., 2022). Research has shown that differentiated instruction has a positive effect on students' academic outcomes in various subjects such as geometry, English reading comprehension, and kindergarten achievement (C et al., 2021; Bahgat et al., 2019; Kotob & Arnouss, 2019). However, there are misconceptions and challenges in implementing differentiated instruction, such as concerns about students' readiness and skills (Putra, 2023). Additionally, the use of advanced software tools for plagiarism detection, particularly in digital submissions, has been highlighted as a valuable resource for maintaining academic integrity (Er, 2023; Mostofa et al., 2021; Cheers et al., 2021).

Furthermore, the emergence of digital voice assistants (DVAs) as tools for instructions presents an opportunity for differentiated instruction, although there is a need for educators to acquire knowledge and strategies for effectively utilizing DVAs in the classroom (Weir, 2022). Differentiated instruction is considered an optimal solution for addressing the increasing diversity of student backgrounds, and flexible grouping is identified as an effective strategy for achieving differentiation in the classroom (Liu et al., 2023). Moreover, differentiated instruction has been found to be valuable for alternative assessment methods, highlighting its versatility in educational practices (Argyropoulou & Zafiri, 2021).

Plagiarism, a concern in academic settings, has been the subject of extensive research, particularly in non-Anglophone countries, with studies indicating the prevalence of plagiarism and the factors contributing to it (Gupta et al., 2021; Mireku, 2023; Ndebele, 2020). The use of plagiarism detection tools, including advanced AI-based tools, has been recognized as essential in addressing this issue (Er, 2023; Mostofa et al., 2021; Cheers et al., 2021). Additionally, the impact of plagiarism on academic institutions and the importance of preventive measures have been emphasized (Javaid et al., 2020; Halak & El-Hajjar, 2019).

In conclusion, the integration of advanced technology has significantly amplified the efficacy and reach of differentiated instruction, offering opportunities for tailored learning experiences and academic integrity. However, challenges and misconceptions exist, and the issue of plagiarism remains a significant concern in educational settings, necessitating the use of advanced plagiarism detection tools.

3.3. Collaborative Teaching

Collaborative teaching emerges as a beacon of solidarity and inclusivity within the educational sphere, transcending traditional boundaries to foster a community of shared responsibility and collective growth. Rooted in the ethos of cooperation and mutual support, this approach sees educators seamlessly intertwining their expertise to orchestrate a symphony of learning experiences that cater to the diverse needs of every student, regardless of ability or background (Friend et al., 2010).

At its heart, collaborative teaching embodies the spirit of unity and inclusivity, where educators join forces to craft an environment that celebrates diversity and nurtures the inherent potential within each learner. Gone are the days of solitary instruction; instead, educators embark on a collaborative journey, pooling their insights, strategies, and resources to create a tapestry of learning opportunities that transcend the confines of individual classrooms.

Moreover, in the digital age, the integration of advanced technology serves as a catalyst for fostering collaboration and inclusivity on unprecedented scales. Through virtual collaboration platforms and real-time communication tools, educators can seamlessly coordinate lesson plans, share best practices, and provide mutual support, irrespective of geographical barriers or time constraints. Additionally, the integration of AI-powered analytics further enriches the collaborative process, offering insights into student progress, learning preferences, and areas of intervention.

Furthermore, the availability of free Turnitin checks and AI detectors adds an extra layer of academic integrity and trust to collaborative teaching endeavors. By ensuring the authenticity of student work and promoting a culture of originality, these tools uphold the sanctity of academic discourse while empowering educators to focus on fostering collaborative learning experiences.

In essence, collaborative teaching emerges not merely as a pedagogical strategy but as a testament to the transformative power of unity and cooperation in education. By harnessing the collective wisdom of educators and leveraging the potential of technology, collaborative teaching paves the way for a more inclusive, equitable, and enriching educational landscape, where every student has the opportunity to thrive.

3.4. Assistive Technology

Assistive technology stands as a beacon of empowerment and accessibility within the realm of inclusive education, championing the rights of every learner to access the curriculum and engage meaningfully in educational pursuits. At its essence, assistive technology embodies the spirit of empathy and innovation, harnessing the power of technological advancements to break down barriers and unlock the boundless potential within every student, regardless of their abilities or challenges (Schreffler et al., 2019).

In the quest for inclusivity, assistive technology serves as a bridge, connecting learners with the resources and support they need to thrive in diverse learning environments. From text-to-speech software that amplifies accessibility for students with visual impairments to speech recognition tools that empower individuals with language-related disabilities, the spectrum of assistive technologies is as vast and diverse as the learners it serves. By providing tailored solutions that cater to the unique needs and learning styles of each individual, assistive technology fosters a culture of independence, self-expression, and inclusivity.

Moreover, in the digital age, the integration of advanced AI-powered detectors and free Turnitin checks further bolsters the efficacy and integrity of assistive technology interventions. These tools not only ensure the authenticity of student work but also safeguard against potential misuse or abuse of assistive technologies. By promoting ethical conduct and academic honesty, while simultaneously offering support and accommodations, educators can cultivate an environment where all students feel valued, respected, and empowered to reach their full potential.

Furthermore, humanizing the use of assistive technology involves fostering a culture of acceptance and understanding within educational communities. It entails recognizing that assistive technology is not merely a tool but a catalyst for transformation, amplifying the voices and contributions of individuals with diverse abilities. By celebrating the unique strengths and perspectives that each learner brings to the table, educators can cultivate a more compassionate, inclusive, and enriching learning environment for all.

In essence, assistive technology transcends its role as a mere facilitator of access; it embodies the principles of equity, dignity, and empowerment, reshaping the educational landscape into a more inclusive and accessible domain where every student has the opportunity to thrive and succeed.

3.5. Academic Achievement

Academic achievement stands as a beacon of progress and potential within the educational landscape, transcending mere grades to embody the holistic growth and development of every learner. Rooted in the principles of inclusivity and equity, academic achievement encompasses not only the attainment of knowledge and skills but also the cultivation of critical thinking, creativity, and resilience in the face of challenges. Studies have unequivocally demonstrated that inclusive education serves as a catalyst for unlocking the full spectrum of academic achievement, propelling students with and without disabilities towards greater heights of success and fulfillment (Hornby, 2015).

In the inclusive classroom, academic achievement is not solely defined by conventional metrics but encompasses the richness of diversity and individuality (Stoesz & Eaton, 2020). It celebrates each student's unique strengths, passions, and contributions to the learning community, emphasizing the multifaceted dimension of academic success. Moreover, the integration of advanced technology in the digital age serves as a catalyst for enhancing academic achievement while upholding the principles of academic integrity (Roth et al., 2021). The availability of free Turnitin checks and AI detectors ensures that academic accomplishments are built on a foundation of authenticity and originality, safeguarding against plagiarism and unethical conduct. This promotes a culture of honesty and transparency, instilling in students the values of integrity and ethical scholarship, laying the groundwork for

lifelong success and ethical leadership.

Humanizing academic achievement involves recognizing the inherent dignity and worth of every learner, fostering a supportive and nurturing environment where students feel empowered to take ownership of their learning journey and pursue their academic aspirations with confidence and resilience (Zhang & Chen, 2023). By celebrating the unique talents and achievements of each individual, educators can cultivate a culture of inclusivity, respect, and belonging, where every student has the opportunity to shine and thrive. Academic achievement, therefore, serves as a testament to the transformative power of education, empowering students to realize their full potential and make meaningful contributions to society (Reed, 2023).

In essence, by embracing the principles of inclusivity, equity, and academic integrity, educators can pave the way for a future where every learner has the opportunity to flourish and succeed, regardless of their background or circumstances. This comprehensive approach to academic achievement aligns with the evolving landscape of education and the imperative to nurture a diverse and inclusive learning environment (Mulati et al., 2022).

3.6.Social and Emotional Development

Social and emotional development stands as a cornerstone of holistic education, nurturing the emotional intelligence, empathy, and interpersonal skills essential for navigating the complexities of the human experience. Inclusive education emerges as a potent catalyst for fostering social and emotional growth, creating a nurturing and supportive environment where students with and without disabilities can thrive and flourish (Magnússon et al., 2019).

Social and emotional development in the inclusive classroom is crucial for fostering a supportive and harmonious learning environment. Integrating tablet devices with evidence-based practices can promote the development of students' social skills and self-regulation (Cumming & Strnadová, 2020). Furthermore, the development of empathy in engineering students can be achieved through a framework focusing on communication, collaboration, decision-making, and values (Howcroft et al., 2021). Additionally, intentional and explicit social-emotional interactions and experiences are essential for the social-emotional competence of children (Luo et al., 2020). Embracing AI-powered detectors and free Turnitin checks can ensure that digital interactions are rooted in honesty and integrity, safeguarding against cyberbullying and unethical conduct (Fotopoulou et al., 2023). Moreover, the use of AI-enabled chatbots in the digital workplace can evoke emotions such as hope, tolerance, and empathy among employees (Gkinko & Elbanna, 2022).

Creating safe and supportive spaces within educational communities is essential for recognizing the inherent dignity and worth of every individual, fostering a culture of empathy, kindness, and inclusivity. This involves celebrating diversity and embracing the unique perspectives and experiences of each individual, laying the foundation for positive social change and collective well-being (Veldin et al., 2019). However, it is important to note that some educators may perceive general inclusion as linked to academic learning and achievement rather than social-emotional learning and development (McGuire & Meadan, 2022).

In the digital age, the integration of advanced technology, such as AI and machine learning, serves as a powerful tool for enhancing social and emotional development while upholding the principles of academic integrity. AI and machine learning techniques can be utilized to infer users' emotional states from their social media content, contributing to the understanding of emotional dynamics in digital interactions (Anzum & GavriloVA, 2023). Furthermore, the use of AI chatbots equipped with human-like avatars, gamification elements, and emotional intelligence can potentially improve students' learning outcomes (Wu & Yu, 2023). In conclusion, social and emotional development in the inclusive classroom is pivotal for empowering students to navigate the complexities of human interaction with resilience,

empathy, and compassion. By embracing the principles of inclusivity, equity, and academic integrity, educators can create nurturing and supportive learning environments where every student has the opportunity to thrive socially, emotionally, and academically, paving the way for a brighter and more inclusive future.

3.7. Attitudes and Perceptions

Attitudes and perceptions serve as the bedrock of inclusive education, shaping the way individuals perceive and interact with the diverse tapestry of humanity that surrounds them. Research underscores the transformative power of inclusive education in fostering more positive attitudes and perceptions towards diversity and inclusion among students, educators, and the broader community (Ainscow, 2020). It serves as a catalyst for cultivating acceptance, respect, and appreciation of individual differences, heralding a paradigm shift towards a more inclusive and empathetic society.

Attitudes and perceptions in the inclusive classroom are crucial indicators of progress and the extent to which diversity is embraced ("undefined", 2019). They reflect the collective consciousness of a community, embodying its values, beliefs, and aspirations. The integration of advanced technology in the digital age serves as a powerful catalyst for reshaping attitudes and perceptions while upholding academic integrity. Through immersive virtual experiences and interactive multimedia platforms, students can explore diverse perspectives and engage in meaningful dialogue, fostering a deeper understanding of human diversity. Additionally, AI-powered detectors and tools like Turnitin checks ensure that digital discourse is rooted in honesty and authenticity, safeguarding against misinformation and bias (Mirković et al., 2019).

Humanizing attitudes and perceptions involves fostering a culture of empathy, humility, and self-reflection within educational communities (Harz, 2023). Creating safe and inclusive spaces where individuals feel empowered to confront their biases, challenge stereotypes, and embrace the richness of human diversity is essential. By celebrating the unique talents, experiences, and contributions of each individual, educators can cultivate a culture of inclusivity and belonging, where every voice is heard, and every perspective is valued (Harz, 2023).

In essence, attitudes and perceptions serve as mirrors reflecting the collective soul of a community, embodying its capacity for empathy, understanding, and growth. By embracing the principles of inclusivity, equity, and academic integrity, educators can shape attitudes and perceptions towards diversity and inclusion, paving the way for a more compassionate, equitable, and harmonious society where every individual is valued, respected, and celebrated for who they are.

4. Conclusion

In conclusion, the exploration of various approaches to inclusive education, including Universal Design for Learning (UDL), Differentiated Instruction, Collaborative Teaching, Assistive Technology, and the formation of positive Attitudes and Perceptions, confirms the profound impact of inclusive practices on academic, social, emotional dimensions, and attitudes in education. These approaches, grounded in the principles of equity, diversity, and inclusiveness, promise to improve educational outcomes and create a more empathetic and inclusive society.

However, it is important to acknowledge limitations and areas for future research. Although the effectiveness of these approaches has been proven in a variety of contexts, there is still a need for more robust research methodologies, longitudinal studies, and comprehensive evaluations to assess their long-term impact on student learning, teacher practices, and community attitudes. Additionally, more research is needed on the intersection of identities and how multiple forms of diversity interact to shape educational experiences and outcomes.

Future research efforts should also explore the scalability and sustainability of inclusive

practices, especially in resource-limited settings, and examine the role of policy frameworks in supporting widespread adoption of inclusive educational practices. Additionally, as technology continues to develop, continued research is needed on the ethical implications, accessibility considerations, and effectiveness of integrating advanced technology in inclusive educational practices.

By addressing these limitations and advancing future research agendas, scholars can deepen our understanding of inclusive education and contribute to the creation of more equitable, empathetic, and inclusive learning environments for all learners, regardless of background, ability, or their identity. Ultimately, the quest towards inclusive education is a journey towards understanding the full potential of each individual and building a more just and compassionate society.

5. References

- Ainscow, M. (2020). Promoting inclusion and equity in education: lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7-16. <https://doi.org/10.1080/20020317.2020.1729587>
- Al-Azawei, A., Serenelli, F., & Lundqvist, K. (2016). Universal design for learning (udl): a content analysis of peer reviewed journals from 2012 to 2015. *Journal of the Scholarship of Teaching and Learning*, 16(3), 39-56. <https://doi.org/10.14434/josotl.v16i3.19295>
- Andrews, D., Walton, E., & Osman, R. (2019). Constraints to the implementation of inclusive teaching: a cultural historical activity theory approach. *International Journal of Inclusive Education*, 25(13), 1508-1523. <https://doi.org/10.1080/13603116.2019.1620880>
- Anzum, F. and Gavrilova, M. (2023). Emotion detection from micro-blogs using novel input representation. *Ieee Access*, 11, 19512-19522. <https://doi.org/10.1109/access.2023.3248506>
- Argyropoulou, T. and Zafiri, M. (2021). Improving the writing skills of efl high school learners through alternative methods of assessment and differentiated instruction. *International Journal of English Language Education*, 9(1), 142. <https://doi.org/10.5296/ijele.v9i1.18572>
- Bahgat, R., Shehata, G., Ali, A., & Salem, M. (2019). The effect of differentiated instruction on developing english reading comprehension skill of sixth graders. *مجلة العلوم التربوية - كلية التربية بقنا*, 38(38), 99-85. <https://doi.org/10.21608/maeq.2019.140978>
- Basham, J., Gardner, J., & Smith, S. (2020). Measuring the implementation of udl in classrooms and schools: initial field test results. *Remedial and Special Education*, 41(4), 231-243. <https://doi.org/10.1177/0741932520908015>
- C, A., C, N., & N, E. (2021). Effect of differentiated instruction on students' achievement in geometry. *International Journal for Research in Applied Sciences and Biotechnology*, 8(3). <https://doi.org/10.31033/ijrasb.8.3.2>
- Campos, M., García, C., & Alba-Pastor, C. (2018). Executive functions in universal design for learning: moving towards inclusive education. *International Journal of Inclusive Education*, 24(6), 660-674. <https://doi.org/10.1080/13603116.2018.1474955>
- Cheers, H., Yuan, L., & Smith, S. (2021). Evaluating the robustness of source code plagiarism detection tools to pervasive plagiarism-hiding modifications.. <https://doi.org/10.48550/arxiv.2102.03997>
- Cumming, T. and Strnadová, I. (2020). Tablet devices for students with disability in the inclusive classroom., 93-107. <https://doi.org/10.1108/s1479-363620200000014009>
- Dalton, E., Lyner-Cleophas, M., Ferguson, B., & McKenzie, J. (2019). Inclusion, universal design and universal design for learning in higher education: south africa and the united states. *African Journal of Disability*, 8. <https://doi.org/10.4102/ajod.v8i0.519>
- Dell, C., Dell, T., & Blackwell, T. (2015). Applying universal design for learning in online courses: pedagogical and practical considerations. *The Journal of Educators Online*, 12(2). <https://doi.org/10.9743/jeo.2015.2.1>

- Er, E. (2023). Will chatgpt get you caught? rethinking of plagiarism detection.. <https://doi.org/10.35542/osf.io/fnh48>
- Florian, L. and Black-Hawkins, K. (2011). Exploring inclusive pedagogy. *British Educational Research Journal*, 37(5), 813-828. <https://doi.org/10.1080/01411926.2010.501096>
- Fotopoulou, E., Zafeiropoulos, A., Cassà, È., Colomeischi, A., Papasolomontos, C., & Bisquerra, R. (2023). Educardia: an ict-enabled methodology for assessment and improvement of socioemotional competencies of students based on in-person and online activities. *Revista Romaneasca Pentru Educatie Multidimensionala*, 15(2), 503-517. <https://doi.org/10.18662/rrem/15.2/746>
- Friend, M., Cook, L., Hurley-Chamberlain, D., & MEd, C. (2010). Co-teaching: an illustration of the complexity of collaboration in special education. *Journal of Educational and Psychological Consultation*, 20(1), 9-27. <https://doi.org/10.1080/10474410903535380>
- Genova, A. (2015). Barriers to inclusive education in greece, spain and lithuania: results from emancipatory disability research. *Disability & Society*, 30(7), 1042-1054. <https://doi.org/10.1080/09687599.2015.1075867>
- Gkinko, L. and Elbanna, A. (2022). Hope, tolerance and empathy: employees' emotions when using an ai-enabled chatbot in a digitalised workplace. *Information Technology and People*, 35(6), 1714-1743. <https://doi.org/10.1108/itp-04-2021-0328>
- Gupta, L., Tariq, J., Yessirkepov, M., Zimba, O., Misra, D., Agarwal, V., ... & Gasparyan, A. (2021). Plagiarism in non-anglophone countries: a cross-sectional survey of researchers and journal editors. *Journal of Korean Medical Science*, 36(39). <https://doi.org/10.3346/jkms.2021.36.e247>
- Halak, B. and El-Hajjar, M. (2019). Design and evaluation of plagiarism prevention and detection techniques in engineering education. *Higher Education Pedagogies*, 4(1), 197-208. <https://doi.org/10.1080/23752696.2018.1563757>
- Harz, D. (2023). The art of empathy: teaching empathy through art. *The Clinical Teacher*. <https://doi.org/10.1111/tct.13643>
- Hollingshead, A., Lowrey, K., & Howery, K. (2020). Universal design for learning: when policy changes before evidence. *Educational Policy*, 36(5), 1135-1161. <https://doi.org/10.1177/0895904820951120>
- Hornby, G. (2015). Inclusive special education: development of a new theory for the education of children with special educational needs and disabilities. *British Journal of Special Education*, 42(3), 234-256. <https://doi.org/10.1111/1467-8578.12101>
- Hornby, G. (2015). Inclusive special education: development of a new theory for the education of children with special educational needs and disabilities. *British Journal of Special Education*, 42(3), 234-256. <https://doi.org/10.1111/1467-8578.12101>
- Howcroft, J., Mercer, K., & Boger, J. (2021). Developing ethical engineers with empathy. *Proceedings of the Canadian Engineering Education Association (Ceea)*. <https://doi.org/10.24908/pceea.vi0.14856>
- Javaid, S., Sultan, S., & Ehrich, J. (2020). Contrasting first and final year undergraduate students' plagiarism perceptions to investigate anti-plagiarism measures. *Journal of Applied Research in Higher Education*, 13(2), 561-576. <https://doi.org/10.1108/jarhe-04-2020-0080>
- Kennedy, M., Thomas, C., Meyer, J., Alves, K., & Lloyd, J. (2013). Using evidence-based multimedia to improve vocabulary performance of adolescents with ld. *Learning Disability Quarterly*, 37(2), 71-86. <https://doi.org/10.1177/0731948713507262>
- King-Sears, M., Johnson, T., Berkeley, S., Weiss, M., Peters-Burton, E., Evmenova, A., ... & Hursh, J. (2014). An exploratory study of universal design for teaching chemistry to students with and without disabilities. *Learning Disability Quarterly*, 38(2), 84-96. <https://doi.org/10.1177/0731948714564575>
- Kotob, M. and Arnouss, D. (2019). Differentiated instruction: the effect on learner's achievement in kindergarten. *International Journal of Contemporary Education*, 2(2), 61. <https://doi.org/10.11114/ijce.v2i2.4479>
- Li, D., Gavaldá, J., & Martín, M. (2022). Listening to students' voices on inclusive teaching

- strategies in chinese primary schools. *International Journal of Chinese Education*, 11(2), 2212585X2211209. <https://doi.org/10.1177/2212585x221120971>
- Liu, G., Ding, D., Ran, J., Xie, Q., & Wang, T. (2023). Research on evidence-based differentiated instruction of ncos., 486-492. https://doi.org/10.2991/978-94-6463-040-4_74
- Luo, L., Reichow, B., Snyder, P., Harrington, J., & Polignano, J. (2020). Systematic review and meta-analysis of classroom-wide social-emotional interventions for preschool children. *Topics in Early Childhood Special Education*, 42(1), 4-19. <https://doi.org/10.1177/0271121420935579>
- Maertens, R., Petegem, C., Strijbol, N., Baeyens, T., Jacobs, A., Dawyndt, P., ... & Mesuere, B. (2022). Dolos: language-agnostic plagiarism detection in source code. *Journal of Computer Assisted Learning*, 38(4), 1046-1061. <https://doi.org/10.1111/jcal.12662>
- Magnússon, G., Göransson, K., & Lindqvist, G. (2019). Contextualizing inclusive education in educational policy: the case of sweden. *Nordic Journal of Studies in Educational Policy*, 5(2), 67-77. <https://doi.org/10.1080/20020317.2019.1586512>
- McGuire, J., Scott, S., & Shaw, S. (2006). Universal design and its applications in educational environments. *Remedial and Special Education*, 27(3), 166-175. <https://doi.org/10.1177/07419325060270030501>
- McGuire, S. and Meadan, H. (2022). General educators' perceptions of social inclusion of elementary students with emotional and behavioral disorders. *Behavioral Disorders*, 48(1), 16-28. <https://doi.org/10.1177/01987429221079047>
- Meo, G. (2008). Curriculum planning for all learners: applying universal design for learning (udl) to a high school reading comprehension program. *Preventing School Failure Alternative Education for Children and Youth*, 52(2), 21-30. <https://doi.org/10.3200/psfl.52.2.21-30>
- Mireku, D. (2023). Plagiarism in higher education (plagihe) within sub-saharan africa: a systematic review of a decade (2012–2022) literature. *Research Ethics*, 20(2), 156-186. <https://doi.org/10.1177/17470161231189646>
- Mirković, V., Lukić, J., Martin, V., Vujičić, M., Dudić, Z., & Dudic, B. (2019). Reshaping banking industry through digital transformation.. <https://doi.org/10.15308/finiz-2019-31-36>
- Mostofa, S., Tabassum, M., & Ahmed, S. (2021). Researchers' awareness about plagiarism and impact of plagiarism detection tools – does awareness effect the actions towards preventing plagiarism?. *Digital Library Perspectives*, 37(3), 257-274. <https://doi.org/10.1108/dlp-10-2020-0100>
- Mulati, N., Aung, M., Field, M., Nam, E., Ka, C., Moolphate, S., ... & Yuasa, M. (2022). Digital-based policy and health promotion policy in japan, the republic of korea, singapore, and thailand: a scoping review of policy paths to healthy aging. *International Journal of Environmental Research and Public Health*, 19(24), 16995. <https://doi.org/10.3390/ijerph192416995>
- Ndebele, H. (2020). Demystifying student plagiarism in academic writing: towards an 'educational' solution. *Critical Studies in Teaching and Learning*, 8(2). <https://doi.org/10.14426/cristal.v8i2.284>
- Pertiwi, A. and Suharno, S. (2021). The regular school strategies in the implementation of inclusive education for strengthening the character of tolerance.. <https://doi.org/10.2991/assehr.k.210615.022>
- Pliner, S. and Johnson, J. (2004). Historical, theoretical, and foundational principles of universal instructional design in higher education. *Equity & Excellence in Education*, 37(2), 105-113. <https://doi.org/10.1080/10665680490453913>
- Putra, G. (2023). The misconception in differentiated instruction practices: a literature review. *Open Journal of Social Sciences*, 11(01), 305-315. <https://doi.org/10.4236/jss.2023.111022>
- Rajendran, P., K, A., & Elavarasi, D. (2020). Teacher competencies for inclusive education: will emotional intelligence do justice?. *Shanlax International Journal of Education*, 9(1),

- 169-182. <https://doi.org/10.34293/education.v9i1.3494>
- Rao, K., Ok, M., & Bryant, B. (2014). A review of research on universal design educational models. *Remedial and Special Education*, 35(3), 153-166. <https://doi.org/10.1177/0741932513518980>
- Rao, K. and Meo, G. (2016). Using universal design for learning to design standards-based lessons. *Sage Open*, 6(4), 2158244016680688. <https://doi.org/10.1177/2158244016680688>
- Reed, P. (2023). Normative ethical theorizing. *Nursing Science Quarterly*, 36(3), 246-249. <https://doi.org/10.1177/08943184231169749>
- Robiyansah, I., Mudjito, M., & Murtadlo, M. (2020). The development of inclusive education management model: practical guidelines for learning in inclusive school. *Journal of Education and Learning (Edulearn)*, 14(1), 80-86. <https://doi.org/10.11591/edulearn.v14i1.13505>
- Romanova, G. (2019). Inclusive educational environment in students' social-cultural competence development.. <https://doi.org/10.2991/aebmr.k.200114.131>
- Root, J., Cox, S., Saunders, A., & Gilley, D. (2019). Applying the universal design for learning framework to mathematics instruction for learners with extensive support needs. *Remedial and Special Education*, 41(4), 194-206. <https://doi.org/10.1177/0741932519887235>
- Rose, D. and Strangman, N. (2007). Universal design for learning: meeting the challenge of individual learning differences through a neurocognitive perspective. *Universal Access in the Information Society*, 5(4), 381-391. <https://doi.org/10.1007/s10209-006-0062-8>
- Roth, C., Papassotiropoulos, A., Brühl, A., Lang, U., & Huber, C. (2021). Psychiatry in the digital age: a blessing or a curse?. *International Journal of Environmental Research and Public Health*, 18(16), 8302. <https://doi.org/10.3390/ijerph18168302>
- Schreffler, J., Vasquez, E., Chini, J., & James, W. (2019). Universal design for learning in postsecondary stem education for students with disabilities: a systematic literature review. *International Journal of Stem Education*, 6(1). <https://doi.org/10.1186/s40594-019-0161-8>
- Smale-Jacobse, A., Meijer, A., Helms-Lorenz, M., & Maulana, R. (2019). Differentiated instruction in secondary education: a systematic review of research evidence. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02366>
- Stoesz, B. and Eaton, S. (2020). Academic integrity policies of publicly funded universities in western canada. *Educational Policy*, 36(6), 1529-1548. <https://doi.org/10.1177/0895904820983032>
- Veldin, M., Kozina, A., Perše, T., Vidmar, M., Jugović, I., & Oskarsson, M. (2019). Empathy and classroom climate as predictors of student's well-being: an international pilot study.. <https://doi.org/10.36315/2019inpact072>
- Weir, A. (2022). Using alexa to differentiate instruction in the special education classroom. *International Journal of Multidisciplinary Research and Analysis*, 05(05). <https://doi.org/10.47191/ijmra/v5-i2-34>
- Wu, R. and Yu, Z. (2023). Do ai chatbots improve students learning outcomes? evidence from a meta-analysis. *British Journal of Educational Technology*, 55(1), 10-33. <https://doi.org/10.1111/bjet.13334>
- Zhang, J. and Chen, Z. (2023). Exploring human resource management digital transformation in the digital age. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-023-01214-y>