

Universal Design for Learning and the Sustainable Development Goals: Reimagining Inclusive Education – An Alice in Wonderland Journey

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Abstract

This paper critically examines the evolution of inclusive education, tracing its trajectory from disability-centric models towards the more encompassing framework of Universal Design for Learning (UDL) and its alignment with the United Nations Sustainable Development Goals (SDGs), specifically addressing the interconnectedness of SDG 4 (Quality Education) with SDG 8 (Decent Work and Economic Growth) and SDG 10 (Reduced Inequalities). Through a synthesis of past literature and the findings of two systematic literature reviews (SLRs), this paper highlights existing gaps between theory, practice, and the aspirational goals of inclusion. The first SLR revealed a significant absence of research exploring the intersection of UDL and career guidance within an inclusive education philosophy, a crucial link to fostering opportunities for decent work as outlined in SDG 8. The second SLR, focusing on the implementation of UDL in European formal school settings, identified a limited empirical evidence base, predominantly centred on teacher-learner interactions. By bringing together these findings, this paper argues for a more holistic and contextually nuanced approach to inclusion that moves beyond the restrictive medical model of disability and appreciates the diverse cultural contexts influencing educational structures. Furthermore, this paper advocates for building upon the dynamic and flexible nature of UDL to continually challenge and expand the scope of inclusive education. It calls for a genuine push beyond a one-size-fits-all "expert" led approach, emphasising a renewed focus on relationships, a shared multi-professional understanding, and a deep appreciation of culture and context in shaping inclusive practices. It proposes a re-evaluation of terminology and practice, advocating for applied, specific examples that embrace the diversity of all learners, including those with disabilities, and the collaborative roles of all education professionals in achieving truly inclusive and equitable education. This shift toward quality education (SDG 4) aims to reduce inequalities (SDG 10) and promote conditions for decent work and economic growth (SDG 8) by challenging the disabling barriers that prevail in education, limiting quality for those most challenged and historically impeding full participation. Navigating the "wonderland" of inclusive education must now involve considering UDL, the SDGs, and redeveloping inclusive learning for a changing world.

Keywords: Inclusive Education, Universal Design for Learning, Sustainable Development Goals, Systematic Literature Review.

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Introduction: Re-envisioning Inclusive Education

The concept of "inclusive education" has undergone a significant transformation, reflecting evolving societal understandings from inclusion to belonging (Long and Guo, 2023). Initially focused on addressing the educational needs of students with disabilities, the discourse has broadened to encompass a more expansive view of inclusion toward education for all (Miles and Signal 2010). This broadened view acknowledges the diverse backgrounds, abilities, learning preferences, and needs of all learners (Galienė & Mokevičienė, 2021). This evolution is marked by shifts in terminology and theoretical frameworks, seeking to move from segregated special education to more inclusive settings where learners can thrive and feel they belong (Ainscow, Booth, & Dyson, 2006; Florian, 2014; UNESCO, 2005). More recently, proactive, and universally designed approaches are being adopted, challenging traditional views of inclusion and inclusive practice, and prompting a re-examination of professional roles and responsibilities (Waitoller & Thorius, 2016; Forlin & Sin 2017; Braunsteiner & Mariano-Lapidus, 2021; Lindner & Schab, 2020).

Shifting Understandings of Inclusive Education

The term "inclusive education" itself has been subject to varied interpretations and applications (European Agency for Special Needs and Inclusive Education, 2019a; Ramberg & Watkins, 2020; Florian, 2014) and “remains elusive” Ainscow, 2020, p.124). While traditionally associated with the integration of students with disabilities into mainstream classrooms, contemporary understandings emphasise the creation of learning environments that are accessible and responsive to the needs of all students, regardless of their individual differences (Griffin & Shevlin, 2011). This shift recognises that barriers to learning are not inherent in the learner but instead are often caused by inaccessible systems, structures, technologies, and processes (Galvin, 2024), as well as lack of policy, governance and equality of citizenship (Soriano, Watkins & Ebersold 2017). Additionally, in education contexts arise from inflexible curricula, teaching methodologies, assessment practices, and the attitudes and knowledge of professionals (Oliver, 1990; Slee, 2001; Barton, 1996; Rieser, 2022). This understanding necessitates a move beyond disability-focused perspectives to embrace a wider notion of learner diversity (Ainscow, 2020).

Universal Design for Learning (UDL) as a Framework

Universal Design for Learning (UDL) has emerged as a promising framework in this evolving landscape. Originating from the field of Universal Design in architecture and product development (Mace, 1998), UDL offers a proactive approach to designing learning experiences that are flexible and adaptable to diverse learner needs (Rose & Meyer, 2002). By focusing on multiple means of representation, engagement, and action and expression, UDL aims to reduce barriers to learning and provide all students with equitable opportunities to succeed (CAST, 2018). According to UNESCO (2020) UDL “goes beyond inclusive environments to ensure inclusive teaching” (p.7) and “ensures inclusive systems to fulfil every learner’s potential” (p.40).

Unlike earlier models that often focused on retrofitting accommodations for specific groups, UDL seeks to build in inclusivity from the outset (Quirke, Mc Guckin, & McCarthy, 2023). This proactive approach aligns with the need to address systemic barriers, rather than focusing solely on individual deficits. UDL is increasingly recognised as a key component in creating truly inclusive educational settings (Katz, 2021) and is the fastest growing area across tertiary education (Ewe Plantin, & Galvin, 2023; Timus et al., 2024). UDL has evolved over decades to include global perspectives on learning communities, instructional design, transitions, leadership, apprenticeships, and accessibility, showcasing the increasing global interest in UDL across education (Bracken and Novak, 2019, Gronseth, & Dalton, 2019) but since the launch of version 3.0 in July 2024, the framework builds upon previous iterations

emphasising the importance of addressing barriers rooted in biases and systems of exclusion (CAST 2024).

Rao & Meo (2016) highlight how UDL guidelines help teachers integrate flexible options and supports into standards-based lessons, ensuring accessibility for a wide range of learners. Bracken & Novak (2019) further emphasise UDL as a framework that not only supports students with disabilities but also benefits all learners by acknowledging and addressing individual differences in the classroom. Gronseth et al. (2022) argue that UDL has matured from a design framework to an instructional theory, highlighting its evolution and expanded application in education. Whereas (Galvin, & Morgan, 2024, p.4) see UDL as a “philosophy or way of thinking that is learner-centred. It is a reflexive, inclusive approach that requires a mindset shift of [anticipatory] design thinking where a one size fits all approach does not work”.

Global Commitments to Inclusive Education

The global commitment to inclusive education is reflected in several key international policy documents. The United Nations Convention on the Rights of Persons with Disabilities (2006) emphasises the right of persons with disabilities to education without discrimination and on the basis of equal opportunity. It calls for inclusive education at all levels.

Inclusion is also a foundational value across the United Nations Sustainable Development Goals (SDGs), which seek to “leave no one behind.” This principle aims to ensure equitable progress for all people, particularly marginalised and vulnerable groups, and is central to achieving sustainable development by promoting social equity and fostering opportunities for all (UN, 2015). The goal that relates to education, SDG 4, aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all,” including those with disabilities. The aim is to deliver education that will empower learners, regardless of their background or circumstances (UN, 2015; Tonegawa, 2023). The focus is on addressing inclusion in its broadest sense, and removing barriers related to gender, disability, and socioeconomic status, so that lifelong learning for all is realised by striving for social justice (Qureshi, Malkani & Rose, 2020). Notably, UDL is a framework aligned with these principles, offering a means to achieve these goals (Fovet, 2017, 2022).

This shared vision is of significant interest, as it points to the responsibility of all education professionals (not just teachers) to prioritise equity, access, and quality for all learners. Inclusive education professionals, including teachers, guidance counsellors, administrators, policymakers, and others, are called upon to share the vision outlined in the SDGs and other global frameworks, and create learning environments that support the increasing diversity of learners, including those with disabilities. According to Kimhi (2025, p.10) to further develop and integrate inclusive practice, it is a must to “reform teacher education programmes with structured professional development underpinned by UDL principles, so practitioners and those that support learning are equipped to meet the diverse needs of learners”.

A collaborative approach necessitates a dynamic, shared understanding of inclusion, where each professional has a role and can work together. Drawing on the findings of two systematic literature reviews (Quirke, 2024; Ewe Plantin, & Galvin, 2023), this paper examines the discourse as it is presented in the literature.

Cultural and Historical Influences on Inclusive Education

It is crucial to acknowledge that the implementation and understanding of inclusive education are deeply influenced by cultural contexts, the historical development of educational structures and how countries implement different policies (Ainscow 2020; Stentiford & Koutsouris, 2022). Disparities in resources, historical legacies of colonialism, and differing cultural values significantly influence the development and implementation of inclusive education, leading to variations in policy and practice between the Global North and South (McKenzie, Karisa & Kahonde, 2024; Galvin, Moore, & Goldwait-Fowles,

2025). These cultural nuances shape the way inclusion is conceptualised and enacted, highlighting the need for contextually sensitive approaches rather than universally applied solutions. For instance, Ireland has made significant strides in developing inclusive education policies and practices, driven by a strong commitment to equality and social justice (Kimhi, 2025) but still falls short as many young people still remain segregated and excluded (Kenny, McCoy & Mihut, 2020). In contrast to educational philosophies in ancient India, who share concepts that resonate with inclusive ideals, such as the emphasis on individualised instruction and the recognition of diverse learning needs, as seen in ancient Gurukul systems (Bhan & Panshikar, 2023). As Bracken & Novak (2019) point out, understanding these global differences is crucial for effective implementation of UDL and arguably any inclusive theory or practice.

This paper argues that a critical examination of these cultural contexts is essential for moving beyond theoretical frameworks and achieving the practical, applied changes necessary for true inclusion. The authors will delve deeper into the current state of research on UDL within the context of inclusive education through the lens of two systematic literature reviews. Acknowledging the limitation of drawing from only two SLRs, by examining the findings and identifying gaps, we aim to contribute to a more nuanced understanding of how theory translates into practice and how the aspirations of inclusive education align with the global goals of the SDGs (McKenzie, Karisa & Kahonde, 2024). Furthermore, the authors will emphasise the need for applied, contextually relevant examples of practice that move beyond traditional disability-focused approaches to embrace the full spectrum of learner diversity and the collaborative roles of all professionals in the educational ecosystem, ultimately fostering more equitable and inclusive educational systems that promote opportunities for all. Ultimately, the challenge for inclusive education lies in addressing the myriad of sociocultural contexts, norms, meanings of disability, and the historical development and structures of inclusive education in different countries. There is a risk that we keep reverting back to a one-size-fits-all approach, that we will never move beyond a medical approach and this is the challenge if we are to move forward in a more sustainable way. Failure to challenge the interpretation of inclusive education as it is often interpreted through a narrow, deficit lens of traditional special education (Ainscow, 2020, p. 125) keeps the medical model focused on the individual, rather than moving towards a social model, which emphasises societal barriers, will hinder progress towards truly inclusive systems (Tobin & Behling, 2018). A critical examination of the literature is required to inform the development of more sustainable and equitable educational practices.

Research Questions

In line with the themes of informing/disconnect, shared views, and alignment with the SDGs, and echoing the "Alice in Wonderland" theme, this paper will explore the following research questions:

1. How effectively does literature on inclusive education, including UDL, inform practical strategies for quality education (SDG 4) in diverse classrooms?
2. How is the understanding and application of inclusive education, particularly UDL, shared across education professionals, and how does this impact collaborative practices for quality education (SDG 4) and decent work opportunities (SDG 8)?
3. How well do current frameworks and UDL align with the interconnected goals of SDG 4, SDG 8, and SDG 10, and what steps can enhance this alignment through a holistic and contextually nuanced approach to inclusive education?

Literature Review

Literature is perhaps the one common space where theory and practice can meet in a meaningful way. However, the conundrum is to try to resolve the fact that there are differing approaches to inclusion and inclusive thinking in education and consider how they align with the goals of the future in a sustainable way. Perusal and interrogation of the published work in the area of inclusive education requires a nuanced appreciation of the various shifts in societal thinking, societal and linguistic changes to terminology and literacy, and the socio-historical development of opposing views. Moreover, as disability theory and approaches to inclusion in education continue to evolve, “it should be strongly emphasised that the transition to the new paradigm does not mean abandoning the previous ones” (Twardowski, 2022, p. 60). We must also be aware that an inbuilt legacy from previous practice and theoretical foundations could, in fact, hinder future development of our thinking around inclusion.

The Systematic Literature Reviews

A systematic literature review (SLR) has become a well-established methodology for exploring previously researched literature on a chosen area of inquiry (Grant & Booth, 2009). “A systematic review is a literature review that is designed to locate, appraise, and synthesise the best available evidence relating to a specific research question in order to provide informative and evidence-based answers” (Boland et al., 2017, p. 2). An SLR enables the researcher to engage deeply when considering how others have approached and conceptualised the questions being explored, which can result in an alternative view (Quirke, & Mc Guckin, 2024). This section will share the search terms and the results of the two literature reviews, which, when combined, highlighted a new consideration.

First Systematic Literature Review

A systematic literature review by Quirke (2024) investigated how guidance professionals interpret inclusion and UDL as a professional activity in education, distinct from teaching. The search used the following keywords: (("Career Guidance" OR "Career Counselling" OR "Vocational Guidance" OR "Vocational Counselling") AND ("Disability" OR "Impairment" OR "Handicap" OR "Restriction" OR "Limitation" OR "Ableist") AND ("Universal Design for Learning" OR "Universal Design" OR "Universal Design for Education" OR "Universal Design of Instruction" OR "Universal Instructional Design") AND ("Models of Disability" OR "Medical Model" OR "Social Model" OR "Human Rights Model") AND ("Rehabilitation" OR "Coaching")) OR ("Diversity").

The search was conducted across databases including ERIC (EBSCO), ERIC (ProQuest), JSTOR, OECDiLibrary, ProQuest Dissertations & Theses: UK & Ireland, RIAN, Sage Journals Online, Scopus, SpringerLink, Taylor and Francis Journals and Web of Science. These databases contain articles in the fields of disability, education, social sciences, and psychology. The search aimed to identify published articles (theoretical, empirical, and descriptive) to examine the key issues. The search included primary, secondary, and tertiary keywords, Boolean search terms (AND, OR), and wildcards (*) to cover all combinations and alternative forms of keywords. Searches were carried out between September and December 2018. The initial searches yielded no results. It is acknowledged that some research has emerged in recent years, and further research in this area is anticipated (Quirke, 2024).

Second Systematic Literature Review

To identify and synthesise current research on Universal Design for Learning (UDL) within inclusive education, (Ewe Plantin, & Galvin, 2023) carried out a systematic literature review. The search used the following keywords: “universal design for learning” OR UDL AND “Inclusive education” OR “elementary school” OR “primary school” OR “secondary school” OR “post primary school” OR kindergarten OR preschool OR “high school”.

The search was conducted across three international databases: Libsearch, Ebsco, and Scopus. These databases contain articles in the fields of disability, education, social sciences, and psychology. The search aimed to identify scholarly, peer-reviewed articles, written in English and published between 2012 and 2022, with at least one author affiliated with a European institution. Searches were carried out in August 2022, the first in Libsearch on 10 August (n=1103) and 25 August in Ebsco (n=267), with a follow-up search on 27 August 2022 in Scopus (n=131). After applying inclusion/exclusion criteria and removing duplicates, eight articles remained. An additional search in July 2023 across the same three databases yielded four more articles, resulting in a total of eight articles for the review.

Illuminating Inclusion in Education - Where Inclusion is Everyone's Business: Converging Insights

The understanding and implementation of inclusion in education are in constant evolution. This progression has shifted from a primary focus on Special Education to the broader concept of Inclusive Education, and it's increasingly embracing the Universal Design for Learning (UDL) framework (Galienė & Mokevičienė, 2021; Song, 2017). As UDL continues to develop and gain traction, it's also important to acknowledge that it faces criticism (Boysen, 2021). This critical engagement is vital, ensuring that UDL, and any inclusive theory or practice is challenged and refined as it progresses, ultimately strengthening the capacity to promote truly inclusive educational environments.

To gain a comprehensive understanding of this evolving discourse, particularly as it impacts all educational professionals, this paper utilises two Systematic Literature Reviews (SLRs). The first (Quirke, 2024) explored the concept of inclusion as understood by guidance professionals – whose role in education, whilst distinct from teaching (Watts, 2005; Andreassen et al., 2019), offers valuable insights (e.g., considering transition planning versus classroom support linked to a disability diagnosis). The second SLR (Ewe Plantin, & Galvin, 2023) examined the application of UDL across formal schooling in Europe. By synthesising these diverse viewpoints, the combined insights from these reviews contribute to a richer understanding of the multifaceted and ongoing development of inclusive education.

Although the two literature reviews explored distinct facets of inclusion, a common thread emerged: the impact of differing disability theories. Both revealed the lingering influence of the medical model, with Fovet (2017, p. 117) noting the "temporary appeal of medical model-based measures of inclusion and the precedents set in the Global North over the last two decades." However, the principles of UDL, rooted in Universal Design (UD) and the social model, offer a contrasting perspective. UDL prioritises "designing for a variety" (Mace, 1998), proactively considering diverse needs rather than retrofitting solutions for disability. This marks a significant shift from earlier approaches. While the social model (Oliver, 2013) prompted a responsive approach to dismantle societal barriers, UD represents a fundamental change in direction, "turning this situation around" by embedding inclusivity from the outset (Ralabate, 2011, p. 14). The evolution of these theoretical frameworks has profoundly shaped our understanding of "inclusion in education," with approaches continually adapting to changing societal attitudes, underscoring the ongoing need for critical engagement and potential further evolution.

Medical Thinking and its Influence

"Disability Theory" emerged during a period of significant societal change, a time when educational systems were largely segregated, and the experiences of many disabled individuals within education were marked by considerable challenges. The literature extensively documents this historical context, detailing the shift away from segregationist models towards social model thinking and the integration of inclusive education approaches (McCarthy & Shevlin, 2017). However, the influence of the earlier medical model persists in various ways, and critically, there's a risk that in our pursuit of "better" inclusive practices, we inadvertently create new forms of expertise that may still operate with limited genuine consideration for the lived experiences and desires of those seeking inclusion.

The medical model historically framed disability as an individual deficit, often characterising "people with disabilities as having individual attributes of incapacity and dependence" (Areheart, 2008, p. 186). Consequently, language prevalent during that era, and sometimes still encountered, included terms like "rehab," "disabled," and "impairment." While these terms might be perceived by some as exclusionary or politically incorrect today, contemporary disability scholarship highlights the importance of context and agency in language use (Andrews et al., 2019; Peers et al., 2014). For instance, "rehab" can be an empowering and crucial part of a disabled person's experience following injury or illness. Similarly, "disabled" and "impairment" are not inherently negative terms; rather, their connotations depend on who is using them and in what context (Andrews et al., 2022). Cultural differences, particularly within the Irish context and beyond, further complicate the notion of universally "empowering" or "exclusionary" disability language.

The medical model was often characterised by a paternalistic, expert-led approach, operating under the assumption that professionals held the ultimate knowledge. Systems were driven by labels and diagnoses, with a primary focus on "fixing" or "managing" the disability. This approach often concentrated on what individuals couldn't do – their disabilities – rather than recognising and fostering their capabilities. This presents a significant challenge within an educational context, where the emphasis should be on nurturing potential and supporting learning for all. The medical model's focus on deficit can inadvertently lower expectations and create barriers to accessing a curriculum designed around normative assumptions of ability.

Historical literature reflects this perspective in its language, definitions, and approaches to discussing and exploring disability in education. For example, writing from this earlier period, Reynolds (1962, p. 370) stated, "Schools have carried responsibility for programs serving the larger numbers of less severely handicapped children." While this quote offers a glimpse into the historical context of educational provision, a contemporary analysis reveals the language used ("handicapped," "less severely") and the underlying assumptions about levels of ability and the school's "responsibility" as potentially indicative of a medicalised perspective that prioritises categories over individual capabilities. The risk remains that even with updated terminology and approaches, the adherence across the education sectors is reliant on diagnostic disclosure that reaffirms the medical model (Fovet, 2014). This medicalised way of thinking could lead to new forms of expert-driven interventions that fail to truly empower and include individuals on their own terms, focusing once again on perceived limitations rather than inherent capabilities. There is a need to actively challenge the notion of disability as solely residing within the individual and instead emphasise societal barriers and the need for inclusive design from the outset (Galvin, 2024), with a fundamental commitment to recognising and supporting the diverse capabilities of all learners, aligning more to a social model approach.

Social Model and its Influence

"Special Education" increasingly evolved into "Inclusive Education" and previously accepted, disempowering terms being largely rejected. The emphasis moved towards the necessity of classroom adaptations and curriculum reform, as the segregation of learners became increasingly viewed as unacceptable. This aligns with the principles articulated in the Salamanca Statement (UNESCO, 1994), which advocated for the inclusion of all children within mainstream education wherever possible. It's important to note that the social model has been appreciated and applied in diverse ways globally, with notable distinctions between the UK's emphasis on structural oppression and the USA's focus on minority group rights and individualised political action (Meekosha, 2004).

Numerous researchers, including Oliver (1990), championed this move away from individual blame, highlighting the societal barriers and restrictions that fostered exclusion across all aspects of life, including education. This discourse fundamentally reframed the very understanding of disability, leading to a shift in tone and attitude within academic literature and resultant policy documents (UN, 2006), which explicitly outlines the right to inclusive education in Article 24.

Building upon the social model, the social-relational model further emphasises that disability is not solely a product of societal barriers but also arises from the dynamic interactions and relationships

between individuals and their social environment (Thomas, 1999). This perspective acknowledges the psycho-emotional dimensions of disablement, recognising how social attitudes and exclusionary practices can impact an individual's sense of self and well-being.

The social model proactively challenged society to change and reconsider the ways in which disabled people could be included, aiming to anticipate and address differences for a more inclusive society from the outset, not merely react to existing exclusion (Oliver, 1990). This proactive stance aimed to move beyond simply placing a disabled young person in a mainstream school with "add-on" support. Instead, inclusion was recognised as demanding "major changes within society itself and could not be viewed in a vacuum" (French & Swain, 2004, p. 169).

However, a potential limitation in the application of the social model lies in an overemphasis on external barriers, which can inadvertently lead to a binary view where the impact of impairment and individual differences are overlooked (Shakespeare, 2006). Critically, this can also foster a risk of professionals over-relying on the identification of external barriers as the sole determinants of inclusion, potentially limiting the acceptance of personal responsibility in critically examining our own understandings and practices of inclusion in relation to individual learners. This external focus might inadvertently diminish the importance of our own attitudes, beliefs, and pedagogical approaches in either facilitating or hindering inclusion, irrespective of the broader societal context. This is where Universal Design for Learning (UDL) offers a valuable complementary perspective (Rose & Meyer, 2002). While the social and social-relational models rightly critique societal structures and interpersonal dynamics, UDL provides a framework that respects and acknowledges the inherent variability and uniqueness of each student. By focusing on intentional and anticipatory design, it provides meaningful learning environments that are flexible and responsive to diverse learner needs. UDL moves beyond reactive accommodations and aims to proactively address potential barriers arising from both the environment and individual learning differences (Galvin, 2024). In this sense, UDL can be seen as building upon these models by providing a practical approach to curriculum and pedagogy through the many considerations across the framework to empower learner agency (CAST, 2024). In the wider context, it ensures a crucial focus on removing societal and relational barriers that are coupled with a commitment to valuing the diverse capabilities and needs of all learners and fostering a sense of professional responsibility in creating truly inclusive educational experiences (Waitoller & Thorius, 2016), something that the authors believe can be achieved through a UDL lens.

Universal Design for Learning (UDL) and its Influence

Emerging as a significant theory, Universal Design for Learning (UDL) encourages a proactive and anticipatory "design" approach in education and related fields to foster inclusion (Quirke, 2024). This evolving framework, with its widely adopted guidelines, is reshaping professional practice and generating a new language and understanding of "inclusion" in practice, as well as systemic and organisational change (Fovet, 2021). Indeed, "UDL currently emerges as the most promising framework in terms of shifting mindsets, setting aside deficit views, and embracing learner diversity as a given" (Fovet, 2017, p. 74).

Originating from the architectural and product design principles of Universal Design (UD) and enriched by multidisciplinary perspectives (Storey et al., 1998), UDL promotes an anticipatory approach to designing for inclusion from the outset (Galvin, & McParland, 2023). The UDL framework's core tenet involves designing learning experiences with a deep understanding of belonging for a diverse range of learners, a subtle yet crucial distinction. Grounded in an inclusive philosophy that values identity and difference (Slee, 2001), UDL operates on the principle of proactively anticipating the needs of a wide diversity of individuals, aligning with the philosophy of the SDGs (McKenzie, Karisa & Kahonde, 2024).

UDL has shifted the focus towards "diversity of need" and "sense of belonging," operating on a value system that seeks to recognise human worth equitably (CAST, 2024). The 3.0 iteration of the UDL framework actively challenges the "deficit-driven, medical model conceptualizations of disability held

by educators and administrators actively contributing to limiting the growth and support of inclusion" (Connor & Ferri, 2007, p. 65), advocating for inclusion across all populations. This human-centred approach is further highlighted by Lambert et al. (2021), who emphasise the role of empathy within UDL, drawing from its UD origins and its connection to design thinking.

Re-evaluating Inclusive Education: A Multidimensional Perspective Informed by Universal Design for Learning and the Sustainable Development Goals

Considering the extensive and varied literature on inclusion in education, encompassing diverse theoretical underpinnings, historical trajectories, and distinct contextual factors, a significant influence of medical model thinking arguably persists. This paper synthesises findings from two systematic literature reviews (SLRs) examining Universal Design for Learning (UDL) as a contemporary development in inclusive education. A salient finding revealed that the integration of UDL into inclusive education literature coincided with a notable shift in language and pedagogical approach, fostering a stronger connection to practical implementation. Nevertheless, a paucity of research was consistently evident across both reviews, particularly within a newly forming discourse. This scarcity of evidence, specifically the absence of research across Europe and the linking UDL with career guidance, not only highlights a significant gap between theory and practice demanding further scholarly inquiry but also raises critical questions about the synchronised development of professional approaches across all educational domains.

The analysis of the literature reveals a complex and evolving conceptualisation of inclusion. While the shift from disability-centric models towards the more encompassing framework of UDL signifies considerable progress, a discernible disconnect endures between theoretical ideals and the practical realities of diverse classrooms. The continuing emphasis on disability within the discourse, coupled with a limited shared understanding of inclusion across all educational settings and professionals, impedes the development of truly holistic and contextually responsive practices aligned with the interconnected aims of SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), and SDG 10 (Reduced Inequalities) (Sujathamaliniet et al., 2022).

The findings of the SLRs underscore this challenge. The lack of research exploring the intersection of UDL and career guidance indicates a potential oversight in understanding how inclusive principles can support learners' transitions to decent work (SDG 8), a crucial consideration for fostering equitable opportunities for all learners. Similarly, the limited empirical evidence on UDL implementation within educational settings suggests a need for more robust research that extends beyond teacher-learner interactions to examine systemic change and, crucially, appreciates the diverse cultural contexts influencing educational structures.

This paper argues for a paradigm shift that capitalises on the dynamic and flexible nature of UDL to continually challenge and expand the scope of inclusive education. We advocate for a move beyond a prescriptive, "expert"-led approach, emphasising a renewed focus on relationships, a shared multi-professional understanding amongst all educational partners, and a deep appreciation of culture and context in shaping inclusive practices. It is crucial that all educational partners accept personal and professional responsibility for fostering inclusion, moving beyond isolated approaches to embrace collaborative, multidisciplinary perspectives that are sensitive to the diverse needs of all learners and the specific cultural nuances of their environments. The potential for meaningful change lies within a collective commitment to critically evaluating established models and adopting innovative frameworks that demonstrably improve outcomes for all learners, particularly in relation to the aspirations of the SDGs and the broader goals of learning for life and employment. Our responses to the complexities of inclusion must be dynamic, adapting to the ever-evolving needs and cultural landscapes of our evolving learning communities.

Lost in Translation: Literature and Classroom Practice

The evolution of the narrative surrounding disability in education has led to shifts in terminology, conceptual frameworks, and pedagogical approaches. However, defining "inclusion" in education remains a complex undertaking (Griffin & Shevlin, 2011; Shevlin & Flynn, 2011). Despite the concept's expansive nature (Quirke, 2024), much of the literature on "inclusion" continues to focus predominantly on disability. This paper argues that a timely broadening of the discourse on "inclusion" across education is necessary, moving beyond this traditional focus to encompass a more comprehensive understanding relevant to all learners, acknowledging the critical role of cultural and contextual relevance (Richardson et al., 2023).

The literature subtly suggests an inclination to equate "inclusion in education" with "disability" and associated pedagogical practices. Attempts to broaden this discourse have, at times, encountered resistance (Connor, Danforth & Gallaher, 2025), paradoxically fostering exclusionary thinking reminiscent of medical model power dynamics within professional practices. Professional practices, often informed by expert-driven beliefs regarding the needs of vulnerable communities, tend to be influenced by traditional approaches. This results in a prevalent understanding of inclusion defined by "inclusive education" – largely shaped by disability theories and teacher-centric pedagogical practices – rather than a more encompassing view of "inclusion in education" relevant to the diverse needs and contexts of all learners. This narrow framing can create a divergence between the theoretical understanding of inclusion and its practical application in diverse educational settings, failing to adequately address the varied needs and contexts of all learners, particularly when cultural and contextual factors are not sufficiently considered.

A Mad Hatter's Tea Party: Limited Shared Understanding of Professional Responsibility

The findings from the two SLRs highlight a potential absence of a comprehensive shared understanding of inclusive education extending beyond the role of the classroom teacher. The lack of UDL research across Europe in formal education settings (Ewe Plantin, & Galvin, 2023) and in relation to non-teaching professionals, such as career guidance practitioners, indicates that inclusive education practices are often perceived as the sole domain of pedagogy (Quirke, 2024). However, education professionals operate within multidisciplinary and interdisciplinary contexts, each approaching inclusion from their unique theoretical perspective and professional identity. A holistic understanding of "inclusion in education" necessitates learning from this multiplicity of approaches whilst appreciating the distinct relationship each professional has with the learner within an inclusive system. Crucially, all those employed in education must accept personal and professional responsibility for fostering inclusion, moving beyond a "one-size-fits-all" mentality and appreciating the myriad and diversity of contexts, cultures, and individuals they serve. The potential for meaningful change resides within the educator and researcher, and there is a continuous need to challenge models that are not yielding equitable outcomes for all learners, particularly when considering the aspirations of the SDGs and the broader goals of learning for life and work, demanding dynamic and context-aware responses.

Through the Looking-Glass: SDGs, Critiques of Existing Models, and Future Steps

The alignment of current theoretical frameworks and practical applications of inclusive education with the UN Sustainable Development Goals, particularly SDG 4, appears to be in its initial stages. Whilst UDL's principles resonate with the SDG emphasis on equitable and quality education for all, the limited evidence of its widespread application across all educational roles suggests a potential gap. Furthermore, critiques of UDL (Murphy, 2021; Boysen, 2021 and 2024) raise concerns regarding its potential for superficial implementation and insufficient engagement with power dynamics. Similarly, whilst the social model of disability has been influential in shifting perspectives, its limitations in

addressing the lived experiences of impairment have also been noted (Shakespeare, 2006; Owens, 2015). Strengthening the alignment with the SDGs requires a nuanced understanding of these critiques and a deliberate effort to broaden the discourse on inclusion, moving beyond potentially limiting interpretations of existing models to embrace a truly universal design framework that considers the diverse needs of all learners and professionals within their specific cultural contexts, necessitating dynamic and adaptive approaches.

Conclusion

In conclusion, the literature on inclusion in education continues to reflect the enduring influence of medical model thinking. The findings from the two SLRs, highlighting the lack of empirical evidence across Europe and a scarcity of research in key areas such as UDL and career guidance, underscores the imperative for a more dynamic and comprehensive understanding of inclusion. The authors note that different educational environments benefit from the expertise of numerous professionals, yet the role of non-teaching staff within the context of inclusive education and UDL approaches remains largely under-examined.

Moving forward, a fundamental reconsideration of "inclusion" and "inclusive practice" is essential. This necessitates a departure from expert-driven, medical model perspectives towards a collaborative, multidisciplinary approach that values the unique contributions of all professionals (Braunsteiner & Mariano-Lapidus, 2021; Lindner & Schab, 2020). Embracing UDL as a guiding philosophy for all roles within education, whilst acknowledging and addressing its critiques and the limitations of other models such as the social model, offers a promising trajectory towards creating more inclusive, equitable, and resilient learning environments aligned with the SDGs. Future research must prioritise investigating the practical application of UDL across diverse professional roles and fostering a shared understanding of inclusion that is contextually responsive, culturally sensitive, and moves beyond traditional disability-focused perspectives to address the evolving needs of all learners and practitioners (Quirke, Mc Guckin, & McCarthy, 2023). Only through such a multidimensional and critically informed approach, characterised by dynamic and adaptive responses to diverse cultural contexts, can inclusion in education truly evolve beyond its current limitations and become responsive and sustainable for an ever-changing diversity of both learners and practitioners.

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Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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