



Journal Homepage: <https://edurekhapublisher.com/erijalss/>

Volume- 2 Issue – 3 (May-June) 2026

ISSN: 3107-5169 (Online)

Frequency: Bimonthly



PAGES: 73-81

ARTICLE TITLE:

Inclusive Enrolment and Retention Pathways for Students with Disabilities in Higher Education

Teresa Onyemah*, Esther Ojo, Beatrice Adebunmi, Aishah Odenike, Favour Ogidan, Suliyat Olaleye, Oyindamola Ayorinde, Racheal Omoaruna, Aliyah Banjoko & Udeme Jacob

Department of Special Education, University of Ibadan, Ibadan, Nigeria



ARTICLE HISTORY

RECEIVED

04-04-2026

ACCEPTED

01-06-2026

PUBLISHED

24-06-2026

Corresponding author:

Teresa Onyemah

Department of Special Education,
University of Ibadan, Ibadan,
Nigeria



Abstract

Inclusive higher education extends beyond access to ensure that students with disabilities (SWDs) are supported in their participation, persistence, and successful graduation. This review examines enrolment and retention pathways through a conceptual and policy-informed review of disability inclusion in higher education. Drawing on the social model of disability, the capability approach, Universal Design for Learning (UDL), and international frameworks such as the Convention on the Rights of Persons with Disabilities (CRPD) and Sustainable Development Goal Four (SDG 4), the article explores how structural, institutional, pedagogical, psychosocial, and digital factors influence student experiences. Particular attention is given to the relationship between access, participation, and completion, highlighting the need for systemic approaches that move beyond accommodation toward inclusive design and institutional transformation.

Keywords: Inclusive higher education, students with disabilities, enrolment and retention, Universal Design for Learning (UDL), disability inclusion, accessibility and student support system

1. Introduction

Growing international attention to equity, participation, and educational justice has brought disability inclusion to the forefront of higher education reform. International agreements, particularly the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), have strengthened expectations that individuals with disabilities should have equitable opportunities to access, participate in, and complete higher education (Lord & Stein, 2018; Stein & Lord, 2010). In response, universities worldwide have introduced accessibility initiatives, disability support services, and inclusive teaching strategies to reduce exclusion and enhance participation. Despite these advances, significant disparities remain between policy aspirations and the realities experienced by many students with disabilities (SWDs).

Evidence from different regions suggests that access to higher education has improved, yet participation and completion outcomes remain uneven. Many SWDs continue to encounter inaccessible environments, inadequate support structures, and institutional cultures that unintentionally reinforce exclusion (McKinney & Swartz, 2022; Wells, 2025). These challenges often emerge through a combination of physical, digital, pedagogical, and administrative barriers that limit opportunities for meaningful engagement. Consequently, the issue is no longer simply whether students gain admission to higher education, but whether institutions

create conditions that enable them to thrive throughout their academic journey.

Experiences of disability inclusion differ considerably across national and institutional contexts. South African universities, for example, have made notable policy commitments while still grappling with resource limitations and implementation gaps (Dreyer, 2021). Similar tensions have been reported in Ghana and Tanzania, where structural inequalities continue to affect the educational experiences of SWDs (Morley & Croft, 2011). At the same time, institutions in parts of Europe and the United Kingdom have increasingly adopted inclusive philosophies that challenge deficit-oriented understandings of disability and emphasise systemic change (Tang et al., 2024). Such variations demonstrate that inclusion is shaped not only by policy commitments but also by governance structures, institutional capacity, leadership priorities, and resource availability.

Research increasingly shows that widening access alone does not guarantee positive outcomes. Higher retention and completion rates are more commonly associated with institutions that embed inclusion throughout the student lifecycle, from recruitment and admissions to graduation and employment transitions. Practices such as Universal Design for Learning (UDL), accessible assessment, structured transition programmes, and strong peer-support systems have been linked to improved persistence and student satisfaction (Fleming et al., 2017; Wells, 2025). However, the effectiveness of these approaches often depends on contextual factors such as staff preparedness, technological infrastructure, and institutional accountability.

This narrative review explores the pathways that support inclusive enrolment and retention for students with disabilities in higher education. Particular attention is given to the conceptual foundations that shape contemporary understandings of disability inclusion and the theoretical perspectives that inform policy and practice. Through this discussion, the review seeks to establish a foundation for understanding how institutional systems can move beyond access toward meaningful participation, belonging, and academic success.

2. Conceptual and Theoretical Frameworks

A coherent conceptual and theoretical foundation is necessary for understanding how higher education institutions can develop inclusive pathways that support both enrolment and long-term participation. Concepts such as disability, inclusion, accessibility, and accommodation provide the language through which policy and practice are interpreted. At the same time, theoretical perspectives offer explanations for why barriers persist and how they may be addressed. Together, these perspectives establish the analytical framework used throughout this review.

2.1 Concepts

Disability: Contemporary disability scholarship increasingly recognises disability as a product of interactions between individuals and the social, institutional, and environmental conditions in which they live. Rather than locating disadvantage solely within impairment, the social model distinguishes between impairment and the barriers created by society. Samaha (2007), Shakespeare and Watson (2016), and Goering (2015) argue that exclusion frequently emerges from inaccessible environments, discriminatory practices, and inflexible institutional arrangements. Additional scholarship highlights how chronic illness, stigma, and structural inequalities intersect with

disability experiences (Berghs et al., 2019; Bolt, 2005). Within higher education, barriers to participation are often embedded in admissions systems, teaching practices, and governance structures rather than in students themselves (McKinney & Swartz, 2022; Wells, 2025).

Inclusion: Meaningful participation in academic, social, and institutional life lies at the centre of inclusive higher education. Beyond physical access, inclusion encompasses belonging, respect, engagement, and equitable opportunities for achievement. Research suggests that inclusive environments are shaped by accessible pedagogies, supportive institutional cultures, and leadership commitments that recognise learner diversity (Shogren et al., 2015; Tang et al., 2024). Evidence further indicates that inclusive practices contribute positively to student persistence, engagement, and satisfaction (Fleming et al., 2017; Page et al., 2023). Throughout this article, inclusion is viewed as an institutional condition reflected in policies, practices, and support systems that facilitate participation and success.

Accessibility: Accessibility involves designing educational environments, technologies, curricula, and communication systems so that diverse learners can engage effectively without extensive individual adaptation. Such an approach encompasses physical accessibility, digital accessibility, assistive technologies, and accessible learning resources. Research by Choi and Seo (2024) and Dalton et al. (2019) demonstrates that proactive design significantly reduces barriers to participation. Accessibility is therefore not merely a technical requirement but also an outcome shaped by leadership priorities, resource allocation decisions, and institutional accountability.

Reasonable Accommodation: Equal participation often requires targeted adjustments that respond to individual needs. Reasonable accommodation refers to modifications or supports that enable students with disabilities to participate on an equal basis with others without imposing disproportionate burdens on institutions. Examples include extended examination time, alternative assessment formats, sign-language interpretation, and assistive technologies. Although accommodation remains essential, scholars caution that it cannot, by itself, eliminate systemic barriers embedded in institutional structures (Abobaker, 2024; Kotzmann et al., 2022a; McKinney & Swartz, 2022). This distinction highlights the difference between reactive support and proactive inclusive design.

Universal Design for Learning: Universal Design for Learning (UDL) provides a proactive framework for recognising learner variability from the outset. Through multiple means of engagement, representation, and expression, UDL encourages flexible teaching and assessment practices that accommodate diverse learning needs (Dell et al., 2015; Schreiber, 2017). Research indicates that UDL can enhance participation and retention for both disabled and non-disabled learners (Coffie et al., 2022; Dalton et al., 2019; Yaquoubi et al., 2022). Nevertheless, implementation challenges remain common, including limited professional development opportunities, inadequate institutional support, and inconsistencies in digital accessibility (Knarlag & Olaussen, 2016; Wells, 2025). These concepts establish the language and analytical focus of the article. A deeper understanding of persistent inequalities, however, requires theoretical perspectives that explain how barriers are created, maintained, and challenged.

2.2 Social Model of Disability

Among the most influential perspectives in disability studies, the social model locates disability within the barriers constructed by society rather than within impairment alone. This perspective highlights how policies, physical environments, teaching practices, and cultural assumptions can restrict participation and create disadvantage (Shakespeare & Watson, 2016; Silvers, 2010). Subsequent scholarship has expanded the model by examining how disability intersects with factors such as poverty, gender, ethnicity, and chronic illness (Goering, 2015; Swain et al., 2003).

Within higher education, the social model suggests that many barriers to enrolment and retention originate from institutional arrangements. Inaccessible admissions processes, inflexible curricula, inadequate support services, and discriminatory attitudes can limit opportunities for participation even when students possess the ability and motivation to succeed (Dreyer, 2021; McKinney & Swartz, 2022). Consequently, responsibility for inclusion shifts from individual adaptation toward institutional transformation.

2.3 Human Rights and the Capability Approach

Human rights frameworks provide a normative foundation for disability inclusion by framing education as a fundamental right rather than a discretionary benefit. The Convention on the Rights of Persons with Disabilities emphasises accessibility, non-discrimination, and participation across all levels of education (de Beco, 2022; Graham et al., 2023). From this perspective, exclusion represents a violation of rights that requires corrective action through policy, governance, and accountability mechanisms.

Complementing this perspective, the capability approach focuses on individuals' real opportunities to achieve outcomes they value. Rather than concentrating solely on formal access, the capability approach asks whether individuals possess the practical freedom to participate, learn, develop skills, and complete their education (Claassen, 2015; Terzi, 2010). Financial hardship, inaccessible curricula, stigma, and weak institutional support can restrict these capabilities even when

educational opportunities formally exist (Fleming et al., 2017; Morley & Croft, 2011). This perspective therefore strengthens the analysis of retention by emphasising the conditions required for meaningful participation and success.

2.4 Inclusive Education Frameworks: CRPD and SDG Four

Global policy frameworks have played a significant role in advancing disability inclusion within higher education. Article 24 of the Convention on the Rights of Persons with Disabilities calls for inclusive education at all levels and emphasises accessibility, participation, and equality of opportunity. Research highlights the growing influence of the Convention on educational policy and institutional reform efforts (Abobaker, 2024; Kotzmann et al., 2022a).

Sustainable Development Goal Four reinforces these commitments by promoting inclusive and equitable quality education for all. Studies conducted across diverse regions suggest that SDG Four has encouraged reforms in curriculum design, support services, and leadership practices aimed at reducing educational inequalities (Escobedo et al., 2025; Kusimo & Chidozie, 2019; Page et al., 2023). Together, these frameworks encourage institutions to move beyond symbolic commitments toward measurable improvements in access, participation, and completion for students with disabilities.

Among the practical approaches associated with these frameworks, Universal Design for Learning remains one of the most influential. Research from different contexts demonstrates that UDL-informed teaching and assessment can reduce barriers and strengthen student engagement (Dalton et al., 2019; Knarlag & Olaussen, 2016; Yaqoubi et al., 2022). Nevertheless, significant implementation gaps remain, as institutions lack the resources, infrastructure, expertise, and accountability systems required to consistently operationalise inclusive commitments. Understanding these realities is essential for analysing the barriers and retention challenges discussed in subsequent sections. The systems-based relationships underpinning inclusive enrolment and retention are presented in Figure 1.

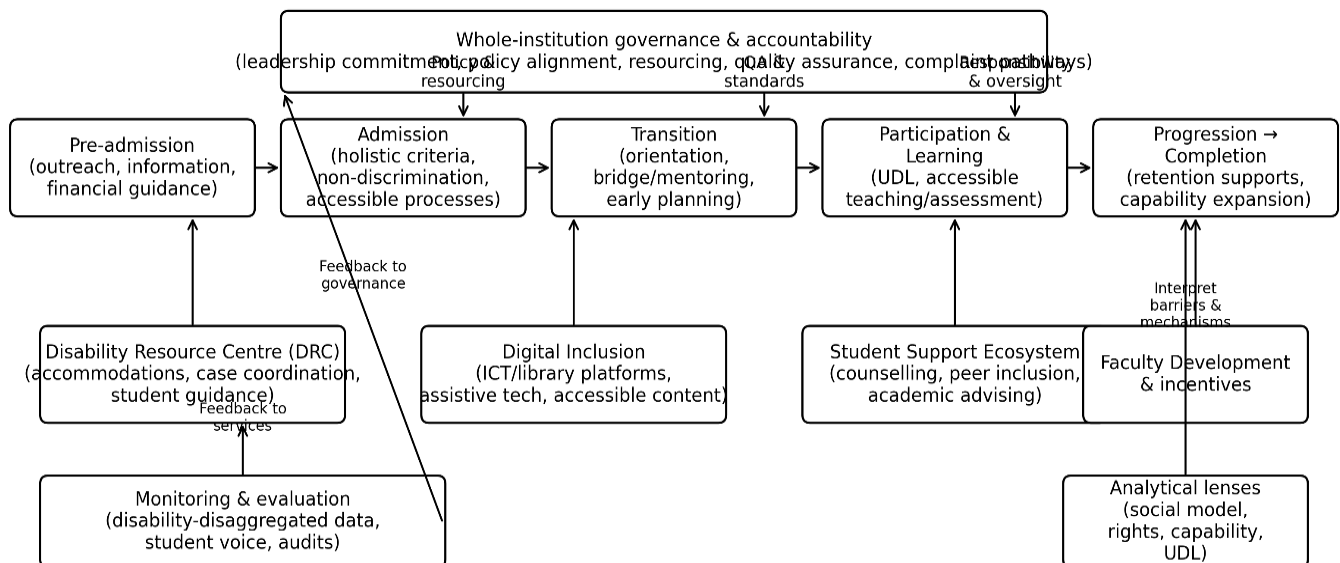


Figure 1. Systems-based model of inclusive enrolment and retention for SWDs

Figure 1 presents a system-based model of inclusive enrolment and retention for students with disabilities in higher education. The model illustrates a sequential pathway from pre-admission, admission, transition, participation and learning to progression and completion. Interconnected institutional mechanisms, including disability resource centres, digital inclusion initiatives, student support services, faculty development, and continuous monitoring and evaluation, support these stages. Overarching governance and accountability structures provide leadership, policy direction, quality assurance, and resource allocation across all stages. The model emphasises that successful enrolment and retention depend on coordinated institutional efforts, continuous feedback, accessibility, and evidence-informed decision-making.

3. Barriers to Enrolment and Retention for Students with Disabilities in Higher Education

Although policy commitments to disability inclusion have expanded significantly over the past two decades, many students with disabilities continue to encounter obstacles that affect both entry into higher education and successful progression through their studies. These barriers are often interconnected, operating across structural, institutional, pedagogical, psychosocial, and administrative domains. Understanding their cumulative impact is essential for developing effective strategies that support equitable participation and long-term academic success.

3.1 Structural Barriers: Broader social and economic conditions continue to influence educational opportunities for students with disabilities long before they reach higher education. Financial hardship, limited access to quality primary and secondary education, inadequate healthcare services, and transportation challenges frequently reduce opportunities for educational progression (Morley & Croft, 2011; Graham et al., 2023). In many low- and middle-income countries, disability remains closely associated with poverty, creating a cycle in which restricted educational opportunities contribute to reduced employment prospects and continued social exclusion.

Geographical disparities further compound these challenges. Students living in rural or underserved communities often experience reduced access to specialised educational support, assistive technologies, and transition programmes that facilitate movement into higher education (Kusimo & Chidozie, 2019; Dreyer, 2021). Such inequalities can significantly affect enrolment patterns and academic preparedness.

Digital inequalities represent another important structural concern. Access to reliable internet connectivity, assistive technologies, and accessible digital resources remains uneven across regions and socioeconomic groups. As universities increasingly rely on online learning platforms and digital communication systems, disparities in access to technology may create additional barriers to participation and retention (Dalton et al., 2019; Papadopoulos et al., 2022).

3.2 Institutional Barriers: Organisational policies and institutional practices often influence the extent to which students with disabilities can access and participate effectively in higher education. Despite formal commitments to inclusion, many institutions continue to operate systems originally designed for a relatively

homogeneous student population. Consequently, admissions procedures, support services, and academic regulations may inadvertently disadvantage students with disabilities (McKinney & Swartz, 2022; Wells, 2025).

Physical accessibility remains a concern in numerous institutions. Inaccessible classrooms, libraries, accommodation facilities, and transportation systems can restrict mobility and reduce opportunities for participation. Although legislative frameworks have encouraged improvements in accessibility, implementation remains inconsistent across institutions and regions (Abobaker, 2024; Kotzmann et al., 2022a).

Limited disability support services also affect student experiences. Understaffed disability units, insufficient funding, and fragmented support structures often reduce the effectiveness of institutional responses to student needs (Fleming et al., 2017; Dreyer, 2021). In some contexts, support services remain reactive rather than proactive, requiring students to navigate complex processes before receiving assistance.

Institutional culture further shapes inclusion outcomes. Negative assumptions about disability, limited staff awareness, and perceptions that accommodations compromise academic standards may contribute to exclusionary practices (Shogren et al., 2015; Tang et al., 2024). Such attitudes can discourage disclosure, reduce help-seeking behaviour, and undermine students' sense of belonging within the university community.

3.3 Pedagogical Barriers: Teaching and learning practices play a central role in determining whether students with disabilities can engage meaningfully with higher education. Traditional approaches often assume uniform learning needs and may fail to accommodate diverse ways of accessing information, demonstrating knowledge, and participating in academic activities (Dell et al., 2015; Schreiber, 2017). Assessment practices frequently present challenges. Time-limited examinations, inaccessible assessment formats, and rigid grading systems may disadvantage students whose disabilities affect information processing, communication, or physical participation.

Research suggests that flexible assessment approaches can improve participation without compromising academic quality (Coffie et al., 2022; Yaquobi et al., 2022). Digital learning environments can either reduce or reinforce exclusion. Online platforms that are not designed with accessibility principles in mind may create difficulties for students who rely on screen readers, captioning services, or alternative navigation systems (Choi & Seo, 2024; Papadopoulos et al., 2022). Similar concerns arise when learning materials are provided in formats that are incompatible with assistive technologies.

Professional preparedness among academic staff also influences inclusion outcomes. Limited training in disability-inclusive pedagogy may reduce educators' confidence in adapting instruction and responding effectively to diverse learner needs (Knarlag & Olaussen, 2016; Wells, 2025). Consequently, inclusive teaching practices often vary significantly across departments and individual lecturers.

3.4 Psychosocial Barriers: Experiences within the social environment of higher education can significantly influence persistence and academic success. Feelings of isolation, exclusion, and stigma continue to affect many students with

disabilities, particularly in institutions where disability inclusion is not fully embedded within campus culture (Morley & Croft, 2011; Page et al., 2023). Disclosure decisions represent a recurring challenge. Some students choose not to disclose disabilities due to concerns about discrimination, negative labelling, or differential treatment from peers and staff (McKinney & Swartz, 2022; Tang et al., 2024). While non-disclosure may protect students from perceived stigma, it can also restrict access to accommodations and support services.

Belonging and social integration are strongly associated with retention outcomes. Positive relationships with peers, lecturers, and support personnel contribute to engagement and academic confidence, whereas experiences of marginalisation may increase withdrawal intentions (Fleming et al., 2017; Wells, 2025). Participation in extracurricular activities, mentoring programmes, and peer-support networks has been linked to stronger social connections and improved persistence. Mental health concerns also warrant attention. Academic pressures, financial stress, accessibility challenges, and experiences of discrimination may contribute to anxiety, depression, and reduced well-being among students with disabilities (Graham et al., 2023; Page et al., 2023). Without appropriate psychosocial support, these factors can negatively affect both academic performance and retention.

3.5 Administrative Barriers: Administrative processes frequently influence students' experiences in ways that are less visible but equally significant. Complex accommodation procedures, inconsistent policy implementation, and bureaucratic delays can impose additional burdens on students already facing multiple challenges (Abobaker, 2024; Kotzmann et al., 2022a).

Documentation requirements often present difficulties. Students may be required to provide extensive medical evidence before receiving accommodation, creating financial and logistical challenges that delay access to support (Lord & Stein, 2018; Stein & Lord, 2010). Such processes can be particularly burdensome for students from disadvantaged backgrounds.

Communication gaps between departments may further weaken support systems. Disability services, academic departments, information technology units, and student affairs offices frequently operate independently, leading to fragmented service delivery and inconsistent responses to student needs (Dreyer, 2021; McKinney & Swartz, 2022).

Monitoring and accountability mechanisms also remain underdeveloped in many institutions. Although policies often articulate commitments to inclusion, fewer institutions systematically evaluate enrolment, retention, progression, and completion outcomes for students with disabilities (Graham et al., 2023; Page et al., 2023). The absence of reliable data limits institutional capacity to identify challenges, assess interventions, and drive continuous improvement.

Recognition of these barriers provides an essential foundation for understanding why access alone is insufficient for achieving educational equity. Attention must therefore shift toward identifying the institutional practices, support mechanisms, and policy interventions that facilitate successful enrolment and sustained participation for students with disabilities in higher education.

4. Inclusive Enrolment Pathways for Students with Disabilities

Addressing barriers to participation requires more than removing obstacles after students enter higher education. Sustainable inclusion begins with the creation of enrolment pathways that intentionally support access, transition, engagement, and progression. Such pathways recognise that students with disabilities often encounter challenges before admission and therefore require coordinated support across multiple stages of the educational journey.

4.1 Transition Planning and Preparation: Preparation for higher education frequently begins long before students submit applications. Effective transition planning helps students develop academic, social, and self-advocacy skills necessary for successful participation in tertiary education. Research suggests that structured transition programmes improve preparedness, increase confidence, and facilitate smoother adjustment to university environments (Fleming et al., 2017; Wells, 2025).

Collaboration between secondary schools, families, disability support services, and higher education institutions plays a critical role in this process. Early exposure to university environments, orientation activities, and career guidance initiatives can help students make informed decisions about educational pathways (Morley & Croft, 2011; Kusimo & Chidozie, 2019). These experiences also provide opportunities to identify support needs before enrolment.

Development of self-determination skills remains particularly important. Students who understand their learning needs, communicate effectively, and participate actively in decision-making are often better positioned to navigate higher education systems (Shogren et al., 2015; Claassen, 2015). Consequently, transition programmes should include opportunities for self-advocacy, goal setting, and independent problem-solving.

4.2 Inclusive Admissions Processes: Admission systems serve as gatekeepers to higher education and can either promote or restrict participation. Equitable access requires admissions procedures that recognise diverse abilities and minimise unnecessary barriers. Application platforms, entrance examinations, interviews, and communication processes should therefore be designed with accessibility in mind (Abobaker, 2024; Kotzmann et al., 2022a).

Accessible information is a fundamental component of inclusive admissions. Prospective students must be able to obtain accurate information about programmes, support services, accommodation procedures, and institutional expectations in formats accessible to diverse users (Dalton et al., 2019; Choi & Seo, 2024). Websites, promotional materials, and application systems should comply with recognised accessibility standards.

Admissions policies should also avoid deficit-oriented assumptions regarding disability. Selection processes that focus exclusively on limitations rather than potential may unintentionally exclude capable applicants. Contemporary approaches increasingly emphasise equitable opportunity, recognising that academic potential can be demonstrated through multiple pathways (Lord & Stein, 2018; Stein & Lord, 2010).

4.3 Orientation and Early Engagement: Initial experiences within higher education often shape students' perceptions of belonging and influence subsequent persistence. Comprehensive orientation programmes can therefore play a significant role in supporting retention among students with disabilities. Effective programmes provide information about academic expectations, campus resources, support services, and accessibility procedures while also facilitating social integration (Page et al., 2023; Fleming et al., 2017).

Opportunities for peer interaction are especially valuable during the transition period. Peer mentoring initiatives, student organisations, and support networks help new students develop social connections that contribute to engagement and well-being (Tang et al., 2024; Wells, 2025). Positive relationships established during the early stages of university life often continue to influence academic persistence throughout a student's programme.

Institutional responsiveness during the first year is equally important. Early identification of challenges, proactive communication, and timely intervention can prevent minor difficulties from becoming barriers to retention (McKinney & Swartz, 2022; Graham et al., 2023).

5. Retention Strategies for Students with Disabilities

Enrolment alone does not guarantee successful educational outcomes. Retention requires sustained attention to academic, social, psychological, and institutional factors that influence student experiences over time. Institutions that prioritise retention recognise that persistence is shaped by ongoing interactions between students and their learning environments.

5.1 Universal Design for Learning and Inclusive Pedagogy:

Inclusive teaching practices are among the most effective mechanisms for supporting retention. Universal Design for Learning (UDL) encourages educators to anticipate learner diversity and provide multiple pathways for engagement, representation, and expression (Dell et al., 2015; Schreiber, 2017). By reducing the need for individual accommodation, UDL contributes to more equitable learning environments. Flexible teaching approaches allow students to engage with content in ways that align with their strengths and preferences.

Multiple formats for learning materials, varied assessment options, and accessible digital resources can enhance participation and reduce barriers to achievement (Coffie et al., 2022; Yaqoubi et al., 2022). Professional development remains essential for successful implementation. Academic staff require opportunities to develop knowledge and skills related to inclusive pedagogy, accessibility, and disability awareness (Knarlag & Olaussen, 2016; Wells, 2025). Without adequate preparation, inclusive practices may be applied inconsistently across programmes and departments.

5.2 Academic Support Systems: Targeted academic support contributes significantly to student persistence. Services such as tutoring, academic advising, writing support, assistive technology training, and learning skills development help students address challenges before they become barriers to progression (Fleming et al., 2017; McKinney & Swartz, 2022). Effective advising systems are

particularly important because they provide students with guidance regarding course selection, academic planning, and available support services.

Regular engagement with advisors can strengthen students' sense of connection to the institution and facilitate timely intervention when difficulties arise (Page et al., 2023; Wells, 2025). Assistive technologies further support academic participation by enhancing access to information and learning activities. Screen readers, speech-to-text software, captioning tools, and other technologies can improve independence and reduce barriers to engagement (Papadopoulos et al., 2022; McNicholl et al., 2021).

5.3 Social and Emotional Support: Academic success is closely linked to social and emotional well-being. Students who feel valued, respected, and connected to their institution are generally more likely to persist and complete their studies (Morley & Croft, 2011; Tang et al., 2024). Counselling services provide important support for students experiencing stress, anxiety, or other mental health concerns. Accessible and disability-responsive counselling services can help students develop coping strategies and maintain well-being throughout their studies (Graham et al., 2023; Page et al., 2023).

Peer-support initiatives also contribute positively to retention. Mentoring relationships, disability advocacy groups, and student communities create opportunities for mutual support and shared learning experiences (Shogren et al., 2015; Fleming et al., 2017). These networks often strengthen a sense of belonging and reduce feelings of isolation.

5.4 Monitoring Progress and Early Intervention: Retention efforts are most effective when institutions identify challenges before they become crises. Early alert systems, progress monitoring mechanisms, and coordinated intervention strategies can help institutions respond proactively to academic or personal difficulties (McKinney & Swartz, 2022; Wells, 2025).

Data-informed decision-making supports this process. Tracking attendance, academic performance, engagement indicators, and service utilisation patterns enables institutions to identify students who may require additional support (Page et al., 2023; Graham et al., 2023). Such approaches are most effective when accompanied by clear referral pathways and coordinated support structures. Sustained retention, therefore, depends on a combination of inclusive pedagogy, academic assistance, social support, accessible technologies, and responsive institutional systems. Together, these elements create conditions that enable students with disabilities not only to remain enrolled but also to achieve meaningful academic success.

6. Inclusive Institutional Policies and Governance

Sustainable disability inclusion requires institutional policies that move beyond compliance and actively support participation, progression, and success. While many universities have adopted disability-related policies, the effectiveness of these frameworks depends largely on implementation, monitoring, and institutional commitment. Policies that exist only as formal statements rarely produce meaningful change unless they are integrated into governance

structures, strategic planning processes, and everyday institutional practices.

6.1 Policy Development and Implementation: Institutional policies establish the foundation for disability inclusion by defining responsibilities, expectations, and accountability mechanisms. Effective policies address admissions, teaching and learning, assessment, infrastructure, technology, student support, and employment practices in a coordinated manner (Abobaker, 2024; Kotzmann et al., 2022a). Such policies should align with national legislation and international frameworks, particularly the Convention on the Rights of Persons with Disabilities.

Implementation remains a persistent challenge. Although many institutions articulate strong commitments to inclusion, gaps often emerge between policy intentions and operational realities. Limited resources, insufficient staff training, and competing institutional priorities may hinder effective implementation (Dreyer, 2021; Wells, 2025). Addressing these challenges requires leadership commitment and ongoing institutional investment.

6.2 Leadership and Institutional Commitment: Meaningful progress in disability inclusion is strongly influenced by leadership. Senior administrators, faculty leaders, and governing bodies play a critical role in shaping institutional priorities and allocating resources. Where leadership actively promotes inclusion, institutions are more likely to develop supportive cultures and sustain long-term improvements (Tang et al., 2024; Page et al., 2023). Institutional commitment is reflected not only in policy statements but also in decision-making processes. Strategic plans, budgeting frameworks, quality assurance systems, and performance indicators should incorporate disability inclusion as a core institutional objective rather than a peripheral concern (Graham et al., 2023; Lord & Stein, 2018). Such integration reinforces accountability and encourages continuous improvement.

6.3 Accountability and Monitoring: Effective governance depends on the ability to assess progress and identify areas requiring improvement. Monitoring systems provide valuable information regarding enrolment, retention, progression, graduation, and student satisfaction among students with disabilities (Page et al., 2023; Graham et al., 2023). Collection and analysis of disability-related data support evidence-informed decision-making. Reliable information enables institutions to evaluate the effectiveness of interventions, allocate resources strategically, and respond to emerging challenges.

At the same time, data collection processes must respect privacy, confidentiality, and ethical considerations (Stein & Lord, 2010; de Beco, 2022). Regular evaluation strengthens accountability by ensuring that institutional commitments are translated into measurable outcomes. Through ongoing assessment, universities can identify successful practices and address persistent barriers more effectively.

7. Technology, Innovation, and Digital Inclusion

Technological innovation has transformed higher education, creating new opportunities for participation while simultaneously introducing

new challenges. For students with disabilities, digital technologies can enhance access, support learning, and facilitate communication. However, these benefits depend on the accessibility and inclusiveness of technological systems.

7.1 Assistive Technologies: Assistive technologies play an important role in supporting participation and academic achievement. Tools such as screen readers, speech-recognition software, captioning systems, alternative input devices, and text-to-speech applications enable students to engage more effectively with learning materials and academic activities (Papadopoulos et al., 2022; McNicholl et al., 2021). Research indicates that assistive technologies contribute to greater independence, improved academic performance, and enhanced confidence among students with disabilities (Figard & Carberry, 2024; Dalton et al., 2019). Nevertheless, access remains uneven due to financial constraints, limited institutional provision, and inadequate training opportunities.

7.2 Digital Accessibility: As learning increasingly occurs through digital platforms, accessibility has become a critical consideration. Learning management systems, online assessments, digital libraries, and communication tools must be designed to accommodate diverse users. Accessibility features such as captioning, alternative text, keyboard navigation, and compatibility with assistive technologies support equitable participation (Choi & Seo, 2024; Papadopoulos et al., 2022). Failure to address accessibility requirements can create new forms of exclusion. Students may encounter difficulties accessing course materials, participating in discussions, or completing assessments when digital environments are not designed inclusively (Dalton et al., 2019; McNicholl et al., 2021). Consequently, accessibility should be incorporated from the earliest stages of technology design and procurement.

7.3 Artificial Intelligence and Emerging Technologies: Emerging technologies, particularly artificial intelligence (AI), offer new possibilities for supporting inclusion. AI-driven tools can facilitate personalised learning, automate accessibility functions, provide real-time feedback, and support adaptive educational experiences (Choi & Seo, 2024; Wells, 2025). Despite these opportunities, concerns remain regarding equity, bias, privacy, and ethical governance. AI systems trained on limited or biased datasets may inadvertently disadvantage students with disabilities or reinforce existing inequalities (de Beco, 2022; Graham et al., 2023). Institutions must therefore adopt responsible approaches that balance innovation with fairness, transparency, and accountability.

7.4 Building Digitally Inclusive Institutions: Digital inclusion requires more than access to technology. Effective implementation involves infrastructure development, staff training, student support, and ongoing evaluation. Institutions that invest in digital literacy, accessible design, and technological support services are better positioned to create environments that accommodate diverse learners (Reddy et al., 2023; Choi & Seo, 2024). Collaboration between disability services, information technology units, academic departments, and students themselves strengthens digital inclusion efforts. Such partnerships ensure that

technological innovations respond to actual needs rather than assumptions about disability (Papadopoulos et al., 2022; Figard & Carberry, 2024).

8. Conclusion

Efforts to strengthen enrolment and retention for students with disabilities require a shift from fragmented interventions toward comprehensive institutional transformation. Access remains important, but meaningful inclusion extends beyond admission to encompass participation, belonging, achievement, and successful completion. The evidence reviewed here demonstrates that barriers to inclusion are multidimensional, emerging from structural inequalities, institutional practices, pedagogical approaches, psychosocial experiences, and administrative systems.

Conceptual perspectives such as the social model of disability, the capability approach, and human rights frameworks provide valuable foundations for understanding these challenges and guiding institutional responses. When combined with Universal Design for Learning and accessible technologies, these perspectives support more proactive approaches to inclusion that anticipate diversity rather than reacting to exclusion after it occurs.

Sustained progress depends on coordinated action across policy, leadership, governance, teaching, student support, and technology systems. Institutions that embed inclusion within strategic planning, accountability structures, and everyday practice are better positioned to support student success. By creating environments that value diversity and remove unnecessary barriers, higher education can move closer to fulfilling its commitment to equitable participation and educational opportunity for all students.

References

1. Abobaker, M. Y. (2024). Developing Saudi Arabia's disability rights legislation in compliance with the United Nations Convention on the Rights of Persons with Disabilities in the education system. *Journal of Infrastructure, Policy and Development*, 8(13). <https://doi.org/10.24294/jipd9343>
2. Berghs, M., Atkin, K., Hatton, C., & Thomas, C. (2019). Do disabled people need a stronger social model: A social model of human rights? *Disability & Society*, 34(7–8), 1034–1039. <https://doi.org/10.1080/09687599.2019.1619239>
3. Bolt, D. (2005). From blindness to visual impairment: Terminological typology and the social model of disability. *Disability & Society*, 20(5), 539–552. <https://doi.org/10.1080/09687590500156246>
4. Choi, G. W., & Seo, J. (2024). Accessibility, usability, and Universal Design for Learning: Discussion of three key LX/UX elements for inclusive learning design. *TechTrends*, 68(5), 936–945. <https://doi.org/10.1007/s11528-024-00987-6>
5. Claassen, R. (2015). Human dignity in the capability approach. In M. Düwell, J. Braarvig, R. Brownsword, & D. Mieth (Eds.), *The Cambridge handbook of human dignity* (pp. 240–249). Cambridge University Press. <https://doi.org/10.1017/CBO9780511979033.030>
6. Coffie, E., Botchway, E., & Ansah, F. (2022). Universal Design for Learning and inclusive instructional practices in higher education.
7. Dalton, E. M., Lyner-Cleophas, M., Ferguson, B. T., & 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>
8. de Beco, G. (2022). The right to inclusive education. *Modern Law Review*, 85(6), 1329–1356. <https://doi.org/10.1111/1468-2230.12742>
9. Dell, C. A., Dell, T. F., & Blackwell, T. L. (2015). Applying Universal Design for Learning in online courses: Pedagogical and practical considerations. *Journal of Educators Online*, 13(2), 166–192. <https://doi.org/10.9743/JEO.2015.2.1>
10. Dreyer, L. M. (2021). Specific learning disabilities: Challenges to meaningful access and participation in higher education institutions. *Journal of Education*, 85, 75–92. <https://doi.org/10.17159/2520-9868/i85a04>
11. Escobedo, Y. V., Quintero, R. N., & Ayala, D. Á. (2025). Inclusive curriculum adaptations as a global strategy to guarantee the Sustainable Development Goals in education. *Salud, Ciencia y Tecnología*, 5. <https://doi.org/10.56294/saludcyt20251587>
12. Figard, R. A., & Carberry, A. R. (2024). A law of diminishing returns: Quantifying online accessibility for engineering students with disabilities in the wake of the COVID-19 pandemic. *IEEE Transactions on Education*, 67(3), 434–442. <https://doi.org/10.1109/TE.2023.3326760>
13. Fleming, A. R., Oertle, K. M., Plotner, A. J., & Hakun, J. G. (2017). The influence of social factors on student satisfaction among college students with disabilities. *Journal of College Student Development*, 58(2), 215–228. <https://doi.org/10.1353/csd.2017.0016>
14. Goering, S. (2015). Rethinking disability: The social model of disability and chronic disease. *Current Reviews in Musculoskeletal Medicine*, 8(2), 134–138. <https://doi.org/10.1007/s12178-015-9273-z>
15. Graham, L. J., Medhurst, M., Malaquias, C., Tancredi, H., de Bruin, C., Gillett-Swan, J., Poed, S., Spandagou, I., Carrington, S., & Cologon, K. (2023). Beyond Salamanca: A citation analysis of the CRPD/GC4 relative to the Salamanca Statement in inclusive and special education research. *International Journal of Inclusive Education*, 27(2), 123–145. <https://doi.org/10.1080/13603116.2020.1831627>
16. Knarlag, K., & Olaussen, E. (2016). Developing inclusive teaching and learning through the principles of universal design. *Studies in Health Technology and Informatics*, 229, 165–173. <https://doi.org/10.3233/978-1-61499-684-2-165>
17. Kotzmann, J., Griffith, E., & Morss, J. R. (2022a). The right to inclusive education for persons with disabilities: A comparative analysis of state progress. In *Inclusive Sustainability: Harmonising Disability Law and Policy* (pp. 81–105). Springer. https://doi.org/10.1007/978-981-19-0782-1_4
18. Kusimo, A. O., & Chidozie, F. C. (2019). Inclusive education and Sustainable Development Goals: A study of the physically challenged in Nigeria. *Cogent Arts & Humanities*, 6(1). <https://doi.org/10.1080/23311983.2019.1684175>

19. Lord, J. E., & Stein, M. A. (2018). Pursuing inclusive higher education in Egypt and beyond through the Convention on the Rights of Persons with Disabilities. *Social Inclusion*, 6(4), 230–240. <https://doi.org/10.17645/si.v6i4.1709>
20. McKinney, E. L., & Swartz, L. (2022). Integration into higher education: Experiences of disabled students in South Africa. *Studies in Higher Education*, 47(2), 367–377. <https://doi.org/10.1080/03075079.2020.1750581>
21. McNicholl, A., Desmond, D., & Gallagher, P. (2023). Assistive technologies, educational engagement and psychosocial outcomes among students with disabilities in higher education. *Disability and Rehabilitation: Assistive Technology*, 18(1), 50–58. <https://doi.org/10.1080/17483107.2020.1854874>
22. Morley, L., & Croft, A. (2011). Agency and advocacy: Disabled students in higher education in Ghana and Tanzania. *Research in Comparative and International Education*, 6(4), 383–399. <https://doi.org/10.2304/RCIE.2011.6.4.383>
23. Page, A., Vira, A., Ledger, S., Mosen, J., Anderson, J., Charteris, J., & Boyle, C. (2023). Pacific inclusive education model: Addressing dichotomies to ensure positive outcomes. *Journal of Education Policy*, 38(5), 870–889. <https://doi.org/10.1080/02680939.2022.2080275>
24. Papadopoulos, K., Koustriava, E., Chronopoulou, E., Molina-Carmona, R., Manganello, F., Isaraj, L., Fountouki, C., & Fernández Gil, J. M. (2025). Accessible educational material for higher education students with disabilities: Knowledge and skills of teaching staff. *Social Sciences*, 14(8). <https://doi.org/10.3390/socsci14080489>
25. Reddy, P., Chaudhary, K., & Hussein, S. (2023). A digital literacy model to narrow the digital literacy skills gap. *Heliyon*, 9(4), e14878. <https://doi.org/10.1016/j.heliyon.2023.e14878>
26. Samaha, A. M. (2007). What good is the social model of disability? *University of Chicago Law Review*, 74(4), 1251–1308. <https://doi.org/10.2307/20141862>
27. Schreiber, J. (2017). Universal design for learning: A student-centred curriculum perspective. *Curriculum and Teaching*, 32(2), 89–98. <https://doi.org/10.7459/ct/32.2.06>
28. Shakespeare, T., & Watson, N. (2016). Beyond models: Understanding the complexity of disabled people's lives. In *New Directions in the Sociology of Chronic and Disabling Conditions*. https://doi.org/10.1057/9780230297432_4
29. Shogren, K. A., Gross, J. M. S., Forber-Pratt, A. J., Francis, G. L., Satter, A. L., Blue-Banning, M., & Hill, C. (2015). The perspectives of students with and without disabilities on inclusive schools. *Research and Practice for Persons with Severe Disabilities*, 40(4), 243–260. <https://doi.org/10.1177/1540796915583493>
30. Silvers, A. (2010). An essay on modelling: The social model of disability. In *Philosophy and Medicine* (Vol. 104, pp. 19–39). Springer. https://doi.org/10.1007/978-90-481-2477-0_2
31. Stein, M. A., & Lord, J. E. (2010). Monitoring the Convention on the Rights of Persons with Disabilities: Innovations, lost opportunities, and future potential. *Human Rights Quarterly*, 32(3), 689–728. <https://doi.org/10.1353/hrq.2010.0003>
32. Swain, J., Griffiths, C., & Heyman, B. (2003). Towards a social model approach to counselling disabled clients. *British Journal of Guidance & Counselling*, 31(1), 137–152. <https://doi.org/10.1080/0306988031000086215>
33. Tang, E. S. Y., Griffiths, A., & Welch, G. F. (2024). The impact of three key paradigm shifts on disability, inclusion, and autism in higher education in England: An integrative review. *Trends in Higher Education*, 3(1), 122–141. <https://doi.org/10.3390/higheredu3010007>
34. Terzi, L. (2010). The capabilities approach. In *International Encyclopedia of Education* (3rd ed.). Elsevier. <https://doi.org/10.1016/B978-0-08-044894-7.00577-7>
35. Wells, M. B. (2025). Supporting students with disabilities: Discrepancies in educational outcomes and the need for comprehensive postsecondary support. *Discover Education*, 4(1). <https://doi.org/10.1007/s44217-025-00758-2>
36. Yaquobi, T., Mohammadi, Z., & Golzar, J. (2022). An analysis of Universal Design for Learning at collegial level: Effective ways to maximise learning outcomes, inclusion, and equity. *Research in Post-Compulsory Education*, 27(4), 594–621. <https://doi.org/10.1080/13596748.2022.2110775>