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Beyond Provision: Rethinking Accessibility in Academic Libraries for Meaningful Access

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ABSTRACT

In academic libraries, accessibility is often approached through infrastructure, digital systems, and institutional support, where the presence of facilities and technologies is treated as evidence of inclusion. This orientation leaves a conceptual gap in explaining how access is actually realised for disabled users during service encounters and everyday academic engagement. This paper reconceptualises accessibility as an enacted institutional practice shaped through the relationship among institutional conditions, service practices, and user experience. The study adopts a conceptual approach based on critical literature synthesis to examine how accessibility is produced in academic library environments. From this analysis, the paper develops the Enacted Accessibility Framework, which explains meaningful access as an outcome of alignment among institutional conditions, service practices, and user experience. The framework clarifies that institutional conditions establish the enabling environment, service practices translate accessibility into action, and user experience reflects how access is realised in use. It further shows that accessibility breakdown emerges when these domains lose alignment, even in settings where infrastructure, technologies, and policy frameworks are present. The paper contributes a process-based explanation of accessibility that moves beyond provision-centred interpretations and offers a stronger analytical basis for examining how meaningful access is produced in academic library contexts.

1. Introduction

Accessibility in higher education is grounded in global and national commitments that frame inclusive access as a fundamental condition of academic participation [1-3]. In this context, academic libraries carry an operational responsibility to shape the environments through which disabled students engage with information resources, navigate learning spaces, and participate in academic systems. A persistent concern lies in how access is realised in practice, since institutional

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arrangements, system configurations, and service practices determine whether access becomes meaningful in everyday academic life. Recent work points to a continuing gap between formal accessibility provision and the quality of access realised in use, where institutional design and system-level execution continue to produce inconsistent outcomes in learning [4,5]. This condition weakens the capacity of academic libraries to function as fully inclusive knowledge environments and points to the need for a stronger explanation of accessibility as an enacted institutional practice.

In this paper, disabled users refer to individuals with physical, sensory, cognitive, or learning impairments that affect their use of library resources and services, aligned with the Persons with Disabilities Act 2008 (Act 685, Malaysia) and the international usage of Persons with Disabilities (PWD) [1]. Accessibility is approached in relation to these users as a multidimensional condition shaping how library environments are navigated, interpreted, and experienced, instead of being treated as a fixed outcome of infrastructure provision or compliance with standards [6,7]. This framing positions accessibility as a condition produced through institutional arrangements in use.

Evidence from higher education reveals differentiated accessibility in physical, digital, and institutional dimensions, where structural constraints, inconsistent application of accessibility standards, and limitations in institutional support continue to shape patterns of participation [8-11]. Digital environments intensify these conditions through usability barriers that restrict independent engagement with academic resources [12-17]. Continued reliance on assistance, mediation, and adaptive strategies further reflects stratified access among student groups [18-20], confirming that accessibility remains unstable in practice. This pattern aligns with broader developments in higher education, where access increasingly intersects with questions of inclusion, institutional culture, and the embedded practices that structure participation [21]. Empirical syntheses reinforce this concern by demonstrating that disabled students continue to encounter layered barriers in infrastructure, pedagogy, and institutional systems, while practices in assessment and learning processes reproduce exclusion in subtle but consequential ways [22-24].

In academic libraries, these broader conditions acquire practical form through service practices. Accessibility is shaped through how users obtain assistance, interpret information, and navigate resources during actual service encounters. Access to library facilities and services for persons with disabilities reflects inconsistent provision of assistive technologies and limited-service readiness, both of which constrain effective engagement with information resources [25]. The quality of access is further shaped by staff capability, where structured training in producing accessible materials influences how information is delivered and understood by users [26]. Accessibility is also strengthened through collaborative service approaches, where engagement between libraries and broader institutional actors supports inclusive service practice and expands user participation [27]. These practices are sustained through institutional conditions linked to leadership support, resource allocation, and institutional readiness, which shape how accessibility efforts are prioritised and maintained.

Accessibility challenges in infrastructure, systems, and user experience are widely recognised, while the explanation of how access is produced through practice remains underdeveloped. Day and Fleischmann [28] argue that academic librarians play a direct role in enabling access through interaction with users, where assistance in locating, interpreting, and adapting academic materials shapes how information becomes usable in practice. At the same time, accessibility has frequently been discussed through provision, compliance, or standardisation, which gives greater visibility to what institutions provide than to how access is realised in use. Bennett *et al.*, [29] argue that accessibility cannot be reduced to technical or regulatory solutions and should instead be understood as a socially embedded and continuously enacted process shaped through interaction among users, services, and institutional contexts. Peacock and Vecchione, [30] similarly highlight procedures,

workflows, best practices, and policies as important mechanisms for structuring accessibility-related service activity in academic libraries. Even so, this line of work explains provision and operational arrangement more clearly than it explains how institutional conditions, service practices, and user experience interact in producing access. A conceptual gap, therefore, remains between institutional intent and what users are actually able to do when engaging with library resources.

This gap carries both conceptual and institutional consequences. Conceptually, accessibility remains weakly articulated as a process through which access is produced in interaction, limiting its strength as an analytical construct in service contexts [28]. Institutionally, formal accessibility provision may coexist with variation in the quality and usability of support, shaped by staff response, service context, and organisational coordination [31]. Brunskill, [32] gives empirical weight to this concern by demonstrating that the quality of accessibility information shapes whether users with disabilities approach library services with certainty. Krejtz *et al.*, [33] extend this concern by illustrating that accessibility in higher education can be institutionally represented while remaining fragile in practice, while Mack *et al.*, [34] demonstrate that accessibility depends on continuing coordination among stakeholders, systems, and institutional practices. Access, in this sense, may be institutionally established while remaining unstable during actual service encounters, reducing the dependability of academic libraries as inclusive knowledge access points.

Against this backdrop, this study advances a conceptual understanding of accessibility as an enacted institutional practice produced through the relationship among institutional conditions, service practices, and user experience. By integrating service quality, organisational readiness, and user experience, the paper develops a structured explanation that moves accessibility scholarship beyond provision-centred interpretation toward a process-based account of how access is realised in academic libraries. Although prior studies have yet to combine these dimensions in a single explanatory structure, Vettriselvan *et al.*, [35] foreground service alignment, Kontio [36] strengthens the case for systematic accessibility practice, Putnam *et al.*, [37] reinforce the importance of user experience in explaining how accessibility is realised, and Boticario *et al.*, [38] demonstrate the value of integrated higher education accessibility frameworks linking institutional conditions, service design, and user needs.

The paper makes three contributions. First, it repositions accessibility from provision to practice by focusing on how access is realised during actual service encounters. Second, it integrates institutional conditions, service practices, and user experience in a unified analytical perspective, clarifying how these dimensions jointly shape accessibility. Third, it establishes a conceptual distinction between provision and lived accessibility, thereby strengthening the basis for analysing accessibility as an institutional process. Accordingly, the study aims to conceptualise accessibility as an enacted institutional practice for disabled users in academic library contexts.

The paper is organised as follows. Section 2 develops the literature review by examining accessibility as an institutional provision, service practices, lived experience, institutional readiness, and their integration as an enacted institutional mechanism. Section 3 introduces the Enacted Accessibility Framework in Academic Libraries. Section 4 discusses the paper's contributions and implications. Section 5 addresses limitations and future research directions. Section 6 concludes by clarifying the significance of meaningful access as an enacted institutional accomplishment in academic library environments.

2. Literature Review

2.1 Accessibility as Institutional Provision and Enacted Access

Accessibility is widely treated as an institutional responsibility in academic libraries, where physical infrastructure, digital systems, and assistive resources are introduced in line with broader commitments to inclusive education [1-3]. In this policy and institutional framing, libraries are expected to provide spaces, platforms, and support arrangements that allow disabled students to participate equitably in academic life. Accessibility, therefore, enters library discourse through a provision-based logic that gives central importance to facilities, technologies, service points, and organisational support. This orientation has played an important role in establishing institutional obligations, particularly in higher education, where inclusion is closely associated with infrastructure development, digital access, and formal service commitments [6,7,25,39]. Through this lens, accessibility is often understood through the presence of enabling structures, including accessible entrances, adaptive technologies, digital interfaces, and service arrangements designed to support learning and research participation [9,10].

Research grounded in academic and higher education settings indicates that provision alone gives an incomplete account of accessibility. A recurring pattern appears in studies reporting limitations in infrastructure design, digital usability, and operational readiness, even in settings where facilities and systems are formally available [40-43]. This line of work points to a persistent gap between the existence of accessible features and the user's capacity to engage with them effectively. Facilities may be visible, digital platforms may be available, and support mechanisms may be formally established, although access remains fragile when design decisions, service routines, and staff responsiveness fail to translate provision into usability [44,45]. Hence, the central issue lies in the operational life of accessibility, because institutional commitment gains practical meaning only when users can locate, interpret, and use resources with reasonable clarity, continuity, and support.

This limitation calls for a stronger analytical framing of accessibility as an enacted condition produced through service interaction. Accessibility gains substance through the encounter between users, systems, staff, and institutional routines, where navigation, communication, mediation, and timely assistance shape whether academic resources become genuinely usable [44,46,28]. Assistive tools, accessible entrances, digital platforms, and designated services remain important, although their value depends on how they function during actual engagement [47,48]. From this standpoint, accessibility is produced through use, mediation, and institutional response rather than treated as a finished condition secured by provision alone [18,19]. In sum, the analytical emphasis moves from what the institution provides to how access is delivered, negotiated, and sustained through everyday library service processes [28,30,36,49].

In this paper, enacted access refers to accessibility as realised through actual use, where navigation, timely support, and meaningful engagement with library services determine whether formally provided arrangements translate into effective and usable access for disabled users [50-53]. Research from Malaysian higher education reinforces this position by indicating that meaningful access depends on the combined functioning of institutional conditions, digital arrangements, and service responsiveness. Work on inclusion in higher education, accessibility-oriented web initiatives, and disabled students' engagement with academic support points to recurring gaps between formal commitment, technological provision, and actual user experience [8,12,18,54]. In this context, accessibility is shaped through activation, coordination, and practical delivery in everyday academic settings, where the quality of digital interfaces, the availability of meaningful support, and the responsiveness of service environments determine the depth of participation achieved. This positions accessibility as an institutional accomplishment realised through practice. From this perspective, service practices emerge as the key mechanism linking institutional intention with lived academic participation, which makes them central to the next stage of the review.

2.2 Service Practices as the Mechanism of Accessibility Delivery

Service practices occupy a central place in accessibility because access acquires practical meaning through the encounters that connect disabled users with library staff, systems, and support arrangements. In this setting, accessibility depends less on the formal presence of services alone and more on the quality, responsiveness, and usability of the assistance delivered during actual engagement. Service quality scholarship identifies responsiveness, reliability, assurance, and empathy as core dimensions in contexts where users depend on informed and timely support [55,56]. In academic libraries, these dimensions take shape through staff guidance, assistive technologies such as screen readers and adaptive software, collaboration with institutional and external partners, staff awareness initiatives, user-centred service design, and accessible digital tools that strengthen inclusive service delivery [30,57,58].

Service practices refer to the behaviours, actions, judgements, and situated adjustments carried out by library staff during service encounters. These practices shape how accessibility-oriented support is delivered and how it is experienced by disabled users [59-61]. Access frequently depends on staff mediation, system interpretation, and the ability to adapt assistance to specific user requirements [58,62,63]. When assistance is delayed, familiarity with assistive technologies is limited, or personalised support is weak, users may face greater difficulty completing academic tasks and engaging independently with information resources [64,65]. This point matters analytically because it positions accessibility as something carried through service enactment, where the quality of staff response shapes whether available resources become effective and usable in practice [52,66].

The effectiveness of these practices is closely tied to professional readiness and institutional support. Inclusive service delivery depends on librarians' capacity to respond knowledgeably, confidently, and appropriately to disability-related needs. Preparedness in this sense extends beyond technical familiarity and includes training, confidence in the use of assistive tools, and access to support structures that allow accessibility commitments to be translated into practical assistance [52,64,67]. Pionke [68,69] makes this clear by demonstrating that staff views, competence, and comfort in serving patrons with disabilities shape the quality of accessibility support in library settings. Dos Santos [70] strengthens this point by underlining the continuing significance of accessibility training and inclusion-oriented professional development, while Day *et al.*, [58] illustrate that service effectiveness depends on staff capacity to support specialised formats and assistive access in everyday library work. Small *et al.*, [71] reinforce the same logic by framing inclusive librarianship as an ongoing professional commitment tied to core service responsibility. From this standpoint, accessibility is inseparable from the professional judgement, confidence, and readiness of staff who convert institutional provision into meaningful support.

Service practices are also shaped by the organisational conditions that influence how accessibility-related work is prioritised, supported, and sustained in everyday operations. Workload pressures, resource allocation, managerial expectations, and the extent of institutional coordination influence whether staff can provide support in a consistent and responsive manner. When accessibility is treated as a peripheral responsibility or left to individual discretion, service delivery may become reactive, inconsistent, and overly dependent on personal effort [72,73]. Falloon [74] illustrates that accessibility gains force when institutional commitment is translated into practical arrangements, whereas Nazim and Ali [25] draw attention to the continuing effects of service and resource limitations on the support available to persons with disabilities. Ferrara [75] adds a further dimension by pointing to the role of staff understanding of attitudinal barriers in shaping how

accessibility is interpreted and carried into service settings, while Chiscano [57] foregrounds the importance of service design grounded in the lived experiences of students with disabilities. Samson [76] similarly emphasises that effective disability services require sustained institutional attention to service adaptation and user support. These studies clarify that differences in user experience emerge when organisational backing is weak, staff response lacks continuity, and accessibility depends too heavily on local improvisation at the point of service. In practice, such conditions become visible through personalised assistance, adapted service delivery, format conversion, and assistive access, all of which shape how users engage with library systems and resources during actual encounters [25,45,77].

From a service perspective, accessibility is realised through interaction among disabled users, staff, and institutional structures. Access depends on how information is communicated, how support is delivered, and how services are adjusted to individual needs during actual encounters. User-oriented studies indicate that disabled individuals frequently rely on mediation and assistance when engaging with library services, which reinforces the central role of service practices in shaping access outcomes [18,19]. Service delivery is further strengthened by the integration of technologies and organisational coordination, where differences in training, resource availability, and system design influence how accessibility is operationalised in practice and how users experience service quality [6,78,79]. Accessibility, in this sense, is produced through service processes involving interpretation, adjustment, and interaction in specific institutional settings. Service practices thus function as the mechanism through which institutional provision is translated into lived user experience.

2.3 Lived Experience of Disabled Users

For disabled users, accessibility in academic libraries is judged at the point of use, where participation depends on whether spaces, systems, and support arrangements can be engaged with confidently, continuously, and with reasonable independence. From this perspective, lived experience captures the practical reality of accessibility as users move through library environments, interpret service conditions, seek assistance, and adjust to demands that emerge during everyday academic activity. User-oriented studies suggest that access frequently involves navigation difficulty, reliance on assistance, and repeated adaptation to conditions that respond only partially to accessibility requirements [18,19]. Lived experience thus brings accessibility into focus as a condition encountered in action, where participation is shaped by what users can actually do, sustain, and complete during engagement with library life. In this paper, lived experience refers to how disabled users encounter, interpret, and negotiate accessibility in practice as they navigate library spaces, use digital systems, seek support, and participate in everyday academic activity [42,80,81].

This experiential perspective carries analytical importance because it reveals how accessibility is felt, negotiated, and evaluated in practice. User experience is shaped by the interplay of physical movement, access to resources and assistive technologies, digital usability, staff interaction, and the social and emotional conditions that influence participation [45,82,83]. Accessibility, from this standpoint, becomes a layered experience in which material arrangements, interface design, interpersonal support, and affective response combine to shape whether library use remains manageable, supportive, and academically productive.

Material and digital conditions place immediate pressure on this experience. Physical accessibility continues to raise serious concerns related to mobility, spatial navigation, and the practical usability of facilities intended to support disabled users. Structural limitations such as inaccessible layouts, limited assistive features, and variation in design standards affect users' ability to move

independently and use academic environments with confidence [8-11]. A related pressure emerges in digital settings, where access to information resources depends on systems offering very different levels of usability for different users [39,78,84]. Studies on Malaysian institutional websites and digital platforms identify limitations in navigation, compatibility with assistive technologies, and interface usability, particularly for visually impaired users [12-16]. Under such conditions, users may spend additional time, energy, and effort locating information, relying on workaround strategies, or revising how tasks are completed when digital design responds weakly to accessibility needs [47,79]. Accessibility, in this situation, becomes inseparable from the burden of effort required to secure usable access.

Service encounters shape this experience further by influencing the degree of independence, assurance, and continuity users can sustain during library use. When users require assistance to navigate systems, interpret information, or obtain resources, interaction with library staff becomes part of the lived condition of accessibility. Timely guidance and responsive assistance can strengthen participation, whereas weak communication, delayed response, or limited familiarity with accessibility-related needs can leave users uncertain about available support and less able to complete academic tasks effectively [19,25,45,64]. From the user's standpoint, service interaction affects more than task completion alone. It also shapes confidence in seeking help, willingness to re-engage with services, and the sense that library environments can be approached as usable and supportive spaces.

Social and attitudinal conditions deepen this experiential layer by influencing how disabled users are received and included in academic environments. Accessibility is also experienced through treatment, recognition, sensitivity, and the quality of interpersonal regard encountered during library use. Negative perceptions, limited awareness, and weak sensitivity to disability-related needs can restrict participation and reduce confidence in seeking support [85]. User experience, in this respect, includes reassurance, hesitation, comfort, exposure, and stigma, all of which affect how library services and academic activities are approached [84,86]. These responses matter because participation is shaped by emotional security and functional access.

Lived experience ultimately marks the point where institutional claims about accessibility are tested against practical reality. Access gains meaning when disabled users can move through physical settings, engage digital systems, obtain timely support, and participate without excessive disruption, dependence, or uncertainty. Strain in any one of these dimensions can weaken access to information and reduce the quality of academic participation [82,87]. These positions' lived experience as a critical analytical lens for understanding accessibility, because it reveals how institutional provision is converted into confidence, effort, dependence, participation, or withdrawal in everyday library use.

2.4 Institutional Readiness and the Conditions of Accessibility

Institutional readiness refers to the extent to which organisational structures, resources, and commitments are aligned to sustain accessibility-oriented services as part of routine operations [72-73,88]. In academic libraries, readiness is reflected in policy frameworks that guide accessibility provision, the availability of accessible infrastructure and assistive technologies, staff development, resource allocation, user engagement mechanisms, and collaboration with internal and external stakeholders that support inclusive service delivery [7,25,78,84]. In this sense, readiness extends beyond institutional intention. It captures the degree to which accessibility is established as an operational responsibility supported by coordinated structures, practical resources, and continuing organisational commitment.

Leadership, policy direction, and organisational coordination form the core conditions of this readiness. Institutional commitment influences whether accessibility is embedded in everyday operations or left to depend on local initiative and situational response [72,73]. Accessibility gains operational force when policies are translated into workflows, responsibilities, and service routines that shape everyday practice [89]. Clear planning, defined responsibilities, and coordinated action strengthen the institutional basis for accessibility, while weak policy integration and limited managerial attention can leave accessibility inconsistently carried into practice [7,78]. Readiness, therefore, depends on whether accessibility is treated as a shared institutional responsibility with clear operational expression.

A further condition lies in the institutionalisation of staff capability. Readiness depends on the extent to which staff are prepared through structured training, awareness of disability-related needs, and familiarity with assistive technologies that support service adaptation [25,52,64,67]. Professional knowledge and confidence matter because accessibility is frequently advanced or constrained through the judgements staff make during actual service delivery. When training is limited or support structures are weak, accessibility may rely heavily on personal commitment rather than established professional capacity. From this standpoint, staff capability represents a core expression of institutional readiness, because it connects organisational expectation with the practical ability to respond effectively to diverse user requirements.

Resource readiness is equally decisive. Access to assistive technologies, accessible digital platforms, alternative formats, and support systems influences whether accessibility can be sustained as a functioning part of library operations [12,13,17,84,87]. The issue extends beyond the formal availability of tools. What matters is whether resources are integrated into service workflows, supported through adequate funding, and coordinated among the institutional units involved in accessibility provision. Technologies and tools carry limited organisational value when they are difficult to mobilise in response to user needs at the point of service [90]. Institutional readiness is therefore shaped by the practical integration of resources into the operational life of accessibility.

Institutional culture adds a further layer by shaping how accessibility is understood, prioritised, and normalised in academic environments. Attitudes toward disability, sensitivity to accessibility needs, and recognition of inclusive practice as a collective responsibility influence how seriously accessibility is carried into everyday work [19,85]. Where awareness is limited, and accessibility holds a weak institutional profile, policy and resources may exist without generating strong operational commitment. A supportive culture, by contrast, strengthens readiness by reinforcing the idea that accessibility belongs to the core responsibilities of the library rather than to occasional adjustment or individual goodwill.

Viewed as a whole, institutional readiness functions as the enabling condition through which accessibility gains operational force. Variation in access often emerges from differences in policy integration, staff preparedness, resource coordination, and institutional culture, even when formal commitment appears present. Accessibility in academic libraries is thus shaped by the quality of organisational preparation that supports service delivery, user engagement, and practical response in everyday settings [31].

2.5 Accessibility as an Enacted Institutional Mechanism in Academic Libraries

Accessibility gains practical force when institutional conditions, service practices, and user experience operate in concert during actual library use. The preceding discussion has established that access depends on the combined functioning of physical and digital environments, accessible resources, service interaction, institutional readiness, and the lived experience of disabled users

[6,7,25,39]. This synthesis positions accessibility as an enacted institutional mechanism: a coordinated process through which access is produced, sustained, and experienced in academic library settings.

This mechanism rests on three analytical layers. At the institutional layer, policy direction, resource allocation, leadership commitment, and organisational coordination create the conditions that enable accessible service provision [7,78]. At the service layer, staff practices, assistive technologies, and accessibility-oriented adjustments shape how support is delivered during actual encounters [47,58,91]. At the user layer, access takes form through navigation, interpretation, confidence, effort, and participation as disabled users engage with library spaces, systems, and resources [45,82,87]. Accessibility acquires its practical value through the relationship among these layers, because access depends on how institutional preparation, service enactment, and user experience reinforce one another in use.

This layered view clarifies why formal provision offers only a partial account of accessibility. Accessible infrastructure may exist, digital platforms may appear compliant, and service arrangements may be formally established, while access still weakens when staff preparedness is limited, resources are weakly integrated, or support is difficult to mobilise during actual use [82,84]. The quality of accessibility depends on operational alignment: institutional priorities need to be carried into service routines, and service routines need to support users in ways that strengthen navigation, understanding, and participation. Accessibility, in this sense, emerges as an institutional accomplishment realised through coordinated organisational and service action.

The synthesis developed in this review presents accessibility as an enacted institutional mechanism realised through the interaction of institutional conditions, service practices, and user experience in academic library settings. This position clarifies that accessibility acquires practical force when enabling structures, responsive service action, and users' actual engagement operate in relation to one another during library use. To consolidate this argument, Table 1 organises the literature into six accessibility domains and maps each domain through three enacted layers: institutional conditions, service practices, and user experience. The final column draws these elements into an integrative insight that clarifies how accessibility gains meaning in practice.

Table 1

Accessibility as an enacted institutional mechanism in academic libraries

Accessibility Domain	Institutional Conditions	Service Practices	User Experience	Integrative Insight
Physical Environment	Spatial design, circulation routes, accessible entry points, and environmental planning create the institutional basis for physical access.	Staff guidance, navigation support, and situational adjustment shape how physical environments are used during actual engagement.	Movement, orientation, confidence, and independent use influence how physical access is experienced.	Physical access gains meaning when environmental design, staff support, and user movement work in concert during use.
Digital Environment	Platform design, interface structure, accessibility standards, and compatibility with assistive technologies shape access to digital resources.	Digital guidance, staff mediation, and service adaptation influence how users navigate systems and obtain information.	Usability, interpretability, effort, and persistence shape how digital access is encountered in practice.	Digital accessibility is realised when system design, service response, and user engagement support usable interaction with information resources.
Accessible Resources	Assistive technologies, alternative formats,	Format conversion, adaptive support, and	Access to content, continuity of	Resources strengthen accessibility when they

Accessibility Domain	Institutional Conditions	Service Practices	User Experience	Integrative Insight
	accessible platforms, and resource support structures provide the material basis for access.	specialised assistance determine whether resources can be mobilised at the point of need.	engagement, and independent use depend on the practical usability of resources during service use.	are integrated into service routines and activated in support of real academic tasks.
Service Interaction	Organisational support, accessibility procedures, staff development, and service expectations establish the conditions for responsive assistance.	Personalised guidance, system interpretation, communication, and accessibility-oriented adjustment shape how support is delivered.	Clarity, reassurance, responsiveness, and task completion influence how users experience accessibility during service encounters.	Service interaction converts institutional commitment into usable support through direct engagement with users.
Organisational Readiness	Policy direction, leadership commitment, resource allocation, staff preparedness, and organisational coordination create the enabling environment for accessibility.	Readiness takes practical form through implementation, continuity of support, and the translation of institutional priorities into routine service action.	Reliability of support, continuity of access, and confidence in services are shaped by the degree of institutional coherence encountered by users.	Organisational readiness gives an operational force when policy, capacity, and coordination are aligned in support of service delivery.
Social-Emotional Climate	Institutional culture, disability awareness, and recognition of inclusive practice as a shared responsibility shape the social climate of accessibility.	Respectful communication, sensitivity, supportive interaction, and inclusive orientation influence how users are received and assisted.	Confidence, reassurance, belonging, hesitation, and stigma shape how disabled users approach library services and academic participation.	Accessibility is also lived through dignity, confidence, and inclusion, which shape the security of participation in library use.

Source: Author's synthesis based on the literature reviewed in Sections 2.1–2.5.

Table 1 clarifies that accessibility rests on relational alignment rather than isolated provision. Each domain acquires accessibility value through the way institutional preparation, service response, and user engagement reinforce one another during actual use. Physical and digital environments, accessible resources, service interaction, institutional readiness, and social-emotional climate each contribute to access, although their significance lies in the way they support movement, interpretation, assistance, confidence, and participation in library life. This synthesis strengthens the paper's central claim that accessibility in academic libraries is best understood as a coordinated institutional accomplishment realised through enactment in practice.

3. Enacted Accessibility Framework in Academic Libraries

The review developed in Sections 2.1 to 2.5 leads to a clear conceptual conclusion: accessibility in academic libraries is best understood as an enacted institutional process produced through the relationship among institutional conditions, service practices, and user experience. Earlier literature has commonly addressed accessibility through infrastructure, digital provision, assistive technologies, service support, or user barriers as closely related concerns. The present synthesis

draws these strands into a single explanatory model by treating accessibility as something realised through coordination, interpretation, and use in actual library settings. On this basis, the Enacted Accessibility Framework is proposed to explain how access is produced, how strain emerges, and how meaningful access can be strengthened in academic libraries.

The first domain of the framework is institutional conditions. This domain refers to the organisational environment that enables accessibility, including policy direction, leadership commitment, resource allocation, staff preparedness, accessibility-oriented planning, and institutional coordination. Its importance lies in the degree to which accessibility is established as a sustained organisational responsibility supported by coherent priorities, workable routines, and continuing institutional attention. Institutional conditions, therefore, provide the enabling basis that allows accessibility to move from formal commitment into operational possibility.

The second domain is service practices. This domain captures the actions, judgements, adjustments, and responses through which accessibility is carried into practice during service encounters. Access takes form through staff guidance, communication, system interpretation, adaptive support, specialised assistance, and the practical mobilisation of assistive and accessible resources. Service practices provide the operational link between institutional commitment and user support. In the framework, they function as the translating mechanism through which policies, resources, and organisational priorities acquire practical force at the point of interaction.

The third domain is user experience. This domain refers to how accessibility is encountered, interpreted, and lived by disabled users as they engage with library spaces, digital systems, resources, and staff. User experience includes physical navigation, digital usability, service interaction, and social-emotional response. It is at this level that accessibility acquires immediate meaning, because users encounter the consequences of design, service quality, institutional readiness, and social climate in ways that directly shape participation. User experience is therefore treated as the realised expression of accessibility in practice.

The framework proposes that meaningful access emerges when these three domains operate in alignment. Institutional conditions create the enabling basis, service practices convert that basis into support, and user experience reflects the quality of access realised through that relationship. Accessibility becomes stronger when institutional priorities are carried into workable routines, resources are usable in practice, staff are prepared to respond, and users can engage with confidence, continuity, and interpretive clarity. Accessibility weakens when alignment loses force, such as when formal provision exists while service response lacks consistency, or when technologies are available while their practical mobilisation remains difficult at the point of need.

From this perspective, the Enacted Accessibility Framework advances a process-based explanation of accessibility in academic libraries. The framework redirects analytical attention from provision alone to the coordinated institutional action through which access is produced and lived in practice. It also explains why accessibility may appear established at the level of policy, infrastructure, or service availability while remaining difficult to sustain as meaningful access during actual use. By organising accessibility through institutional conditions, service practices, and user experience, the framework provides a structured basis for examining where alignment strengthens access, where strain becomes visible, and how more effective forms of accessibility can be supported in academic library contexts.



Fig. 1. Enacted accessibility framework for meaningful access in academic libraries (Source: Developed by authors) Meaningful access emerges when institutional conditions, service practices, and user experience are aligned; strain arises when this alignment weakens

Figure 1 presents the framework as a relational model in which accessibility gains practical meaning when institutional conditions, service practices, and user experience reinforce one another during actual library use. The framework clarifies that accessibility is realised at the point where institutional intention is carried into service action and encountered by users in practice. Its conceptual contribution lies in explaining accessibility as a coordinated institutional process rather than as a collection of parallel issues related to infrastructure, services, and user barriers. In this way, the framework provides a clearer basis for examining how access is enacted, where strain is generated, and how meaningful access can be strengthened in academic libraries.

4. Contributions and Implications

By positioning service practices as the operational core through which accessibility is enacted, the study establishes how institutional conditions acquire practical meaning in user experience. Prior studies have approached accessibility through infrastructure, digital systems, and service provision, although these elements have often been examined as separate components with limited explanation of how they function together in practice [7,45,82]. Studies of academic libraries and higher education accessibility repeatedly describe settings in which facilities, systems, and policies are present, while meaningful access remains constrained by weak alignment among usability, service execution, and user interaction [8,12,14,18]. This study addresses that limitation by

establishing accessibility as a coordinated outcome produced when institutional conditions are translated into service practices and realised in the experience of disabled users during actual service encounters.

This reconceptualisation shifts the analytical focus from institutional provision to the production of accessibility in practice. By positioning service practices as the operational core through which accessibility is enacted, the study clarifies how institutional conditions acquire practical meaning in user experience. This perspective offers a sharper explanation for the persistent gap between accessibility initiatives and meaningful access, including settings where resources and policy frameworks are already in place. In this formulation, accessibility takes shape through the quality of coordination among institutional conditions, service practices, and use [31].

From a practical standpoint, the implications are substantial. Efforts to strengthen accessibility in academic libraries require more than expanded infrastructure, assistive technologies, or stronger policy frameworks considered separately. Evidence indicates that facilities and systems may be present while disabled users continue to encounter barriers when service practices lack consistency, adaptation, or institutional support [8,17,64]. This places service practices at the point where accessibility gains practical force or loses its effectiveness. Institutional efforts must therefore focus on embedding accessibility in routine service delivery, strengthening staff capability in interpreting and responding to diverse user needs, and ensuring that institutional resources are translated into coordinated service action [58,69,89]. In academic libraries, accessibility becomes meaningful when institutional commitment is carried into user support through service practice. In the absence of such alignment, accessibility remains difficult to sustain as a reliable and structured condition of library service.

5. Limitations and Future Research

This study offers a conceptual explanation of accessibility as an enacted institutional practice, developed through theoretical integration and critical synthesis, with direct empirical examination of service environments reserved for subsequent inquiry. That orientation gives the framework conceptual precision while leaving the situated complexity of accessibility to be explored through real encounters, institutional routines, and user responses. Accessibility, as advanced here, is dynamic, relational, and interaction-dependent, so its expression is likely to differ according to institutional arrangements, service configurations, and user circumstances. The framework should thus be read as an analytical foundation that clarifies key domains and their relationship, while empirical work remains essential for tracing how these dynamics unfold in practice.

The study is also deliberately centred on academic library environments, where institutional structures, service roles, and user expectations follow relatively recognisable organisational patterns. This focus gives the analysis depth and conceptual coherence, although other information environments may involve different governance arrangements, technological infrastructures, and forms of user engagement. The framework likewise emphasises institutional conditions, service practices, and user experience as the principal domains through which accessibility is realised. Broader systemic influences, including sector-wide policy pressures, inter-institutional variation, and wider digital ecologies, remain beyond the immediate scope of the present analysis. These boundaries position the study as a conceptual platform for subsequent inquiry. Its contribution lies in organising the literature into a process-based explanation of accessibility and in identifying alignment as the condition through which meaningful access gains practical force.

Future research can build directly on this foundation by examining accessibility through real service interactions, where institutional conditions, service practices, and user experience meet in

immediate and consequential ways. Such work could examine how staff interpret accessibility in everyday service situations, how support is adapted during encounters, and how disabled users make sense of these experiences as they navigate spaces, systems, resources, and assistance. Empirical attention to these processes would deepen understanding of how accessibility is realised, where strain emerges, and how meaningful access is strengthened in service contexts.

Further inquiry could also examine how differences in institutional readiness, staff capability, and service execution shape accessibility in different academic libraries. This line of research would enrich understanding of the conditions that support alignment between institutional intent and service practice, as well as the circumstances that give rise to accessibility breakdown. A comparative agenda extending to digital repositories, hybrid service environments, and other information settings would further sharpen the framework's relevance and portability. Through such work, the conceptual foundation developed here can support a more precise and context-sensitive understanding of accessibility as an enacted practice.

6. Conclusions

Accessibility in academic libraries is anchored in global and national policy commitments that position inclusive access as a core responsibility of higher education. In Malaysia, this responsibility is reinforced through major policy instruments that establish accessibility as part of institutional obligation and educational participation. The analysis developed in this paper shows that policy commitment, infrastructure, and formal provision, while important, acquire practical significance when institutional conditions, service practices, and user experience are aligned in use. This paper advances a reconceptualisation of accessibility as an enacted institutional practice, clarifying that meaningful access is realised when organisational priorities are translated into service action and encountered as usable support by disabled users. The Enacted Accessibility Framework proposes a process-based explanation for the persistent gap between accessibility provision and lived experience in academic libraries by showing how alignment strengthens meaningful access and the disconnection gives rise to fragmented support, reduced usability, and constrained participation. In the Malaysian higher education context, this argument sharpens the implementation challenge by indicating that the force of accessibility lies less in declared commitment than in the quality of enactment through everyday library practice. As access to information remains central to participation in teaching, learning, and research, the framework offers a clearer analytical basis for strengthening dependable and meaningful access in academic library environments.

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References

- [1] United Nations. (2006). *Convention on the Rights of Persons with Disabilities (CRPD)*. https://www.un.org/disabilities/documents/convention/convention_accessible_pdf.pdf
- [2] UNESCO. (2015). *Rethinking education: Towards a global common good?* UNESCO Publishing.
- [3] Ministry of Education Malaysia. (2013). *Malaysia Education Blueprint 2013–2025 (Higher Education)*. Putrajaya: Ministry of Education Malaysia.
- [4] Afonso, Ana, Lina Morgado, Isabel Cristina Carvalho, and Maria João Spilker. "Facing challenges in higher education: Enhancing accessibility and inclusion through flexible learning design." *Education Sciences* 15, no. 8 (2025): 1013. <https://doi.org/10.3390/educsci15081013>
- [5] Laufer Nir, Hila, and Arie Rimmerman. "Evaluation of Web content accessibility in an Israeli institution of higher education." *Universal Access in the Information Society* 17, no. 3 (2018): 663-673.

- <https://doi.org/10.1007/s10209-018-0615-7>
- [6] Çakmak, Tolga, and Ezgi Uğurlu. "Accessibility in academic libraries: An evaluation of conditions and practices of twelve academic libraries in Türkiye." *The Journal of Academic Librarianship* 51, no. 3 (2025): 103056. <https://doi.org/10.1016/j.acalib.2025.103056>
- [7] Alu, Augustine Aduko, and Lizette King. "Disability policies to guide the provision of facilities, services and resources to students with disabilities: The case of ten Ghanaian academic libraries." *The Journal of Academic Librarianship* 50, no. 6 (2024): 102970. <https://doi.org/10.1016/j.acalib.2024.102970>
- [8] Yusof, Yusmarhaini, Cheong Chong Chan, Azlin Hilma Hillaluddin, Fatimah Zailly Ahmad Ramli, and Zarina Mat Saad. "Improving inclusion of students with disabilities in Malaysian higher education." *Disability & Society* 35, no. 7 (2020): 1145-1170. <https://doi.org/10.1080/09687599.2019.1667304>
- [9] Yusof, Mohamed, and David Jones. "Universal design practice in Malaysia: Architect's perceptions of its terminology." In *Universal Design 2014: Three days of creativity and diversity*, pp. 347-355. IOS Press, 2014. <https://doi.org/10.3233/978-1-61499-403-9-347>
- [10] Rahim, Asiah Abdul, Ismawi Zen, Nur Amirah Abd Samad, and Che Raikandar Che Rahim. "Universal design and accessibility: Towards sustainable built environment in Malaysia." *Universal design* (2014): 299-306. <https://doi.org/10.3233/978-1-61499-403-9-299>
- [11] Zahari, Nur Fatin, Adi Ifran Che Ani, and Robiah Abdul Rashid. "Profiling disabled facilities and accessibility provided in national heritage buildings in Malaysia." *Journal of Critical Reviews* 7, no. 5 (2020): 109-115.
- [12] Ahmi, Aidi, and Rosli Mohamad. "Evaluating accessibility of Malaysian public universities websites using AChecker and WAVE." *Journal of Information and Communication Technology* (2016). <https://doi.org/10.2139/ssrn.3550314>
- [13] Ahmi, Aidi, and Rosli Mohamad. "Current state of web accessibility of Malaysian ministries websites." In *AIP Conference Proceedings*, vol. 1761, no. 1, p. 020014. AIP Publishing LLC, 2016. <https://doi.org/10.1063/1.4960854>
- [14] Aziz, Maslina Abdul, Wan Abdul Rahim Wan Mohd Isa, and Norzainuriah Nordin. "Assessing the accessibility and usability of Malaysia higher education website." In *2010 International Conference on User Science and Engineering (i-USER)*, pp. 203-208. IEEE, 2010. <https://doi.org/10.1109/IUSER.2010.5716752>
- [15] Midi, Nur Akma, Rosnah Idrus, and Nursakirah Ab Rahman Muton. 2014. "Web Accessibility of Malaysian Research Universities Websites for the Visually Impaired." In *2014 the 4th International Workshop on Computer Science and Engineering-Winter, WCSE 2014*. Science and Engineering Institute.
- [16] Jati, Handaru, and Dhanapal Durai Dominic. "Website accessibility performance evaluation in Malaysia." In *2008 International Symposium on Information Technology*, vol. 1, pp. 1-3. IEEE, 2008. <https://doi.org/10.1109/ITSIM.2008.4631587>
- [17] Amin, Aizan Sofia, Siti Zuliana Md Zuki, and Noremy Md Akhir. "Accessibility to facilities for persons with disabilities at public institutes of higher learning." *International Journal of Recent Technology and Engineering* 8, no. 2 (2019): 21-37. <https://doi.org/10.35940/ijrte.B1004.0982S1019>
- [18] Bodaghi, Nahid Bayat, Zainab Awang-Ngah, and Noorhidawati Abdullah. "Student volunteers as academic saviours and social connectors among the visually impaired in an academic library." *Libri* 64, no. 1 (2014): 40-48. <https://doi.org/10.1515/libri-2014-0004>
- [19] Yasina, Mohd Hanafi Mohd, Mohd Mokhtar Taharb, Mohd Syazwan, Nur Shafiqah Abdul Rahim Zainalc, and Rabaishah Azirune. "Support and Opportunities: The Public Benefits Hearing at The National University of Malaysia, UKM."
- [20] Wilson, Sharon, Rajini Kumar Sreedharam, and Bavani Ramayah. "Challenges among visually impaired students in higher education towards online learning during the COVID-19 pandemic in Malaysia." In *Improving Inclusivity in Higher Education: Addressing the Digital Divide in the COVID Pandemic*, pp. 51-67. Singapore: Springer Nature Singapore, 2023. https://doi.org/10.1007/978-981-99-5076-8_4
- [21] Marom, Lilach, and Jennifer Hardwick. "From access to inclusion: A call for a cultural shift in higher education." *Higher Education* 89, no. 2 (2025): 513-534. <https://doi.org/10.1007/s10734-024-01233-x>
- [22] Gull, Mubashir, Navneet Kaur, and Shaimaa Ezzat Basha. "A systematic review of challenges faced by students with disabilities in higher education." *Annals of Neurosciences* 33, no. 2 (2026): 247-258. <https://doi.org/10.1177/09727531251344705>
- [23] Punch, Renée, Jill Duncan, and Ruth Talbot-Stokes. "Experiences and challenges of students with disability in Australian universities: A scoping review." *International Journal of Inclusive Education* 30, no. 6 (2026): 1169-1187. <https://doi.org/10.1080/13603116.2025.2526009>
- [24] Nieminen, Juuso Henrik. "Unveiling ableism and disablism in assessment: A critical analysis of disabled students' experiences of assessment and assessment accommodations." *Higher Education* 85, no. 3 (2023): 613-636. <https://doi.org/10.1007/s10734-022-00857-1>

- [25] Nazim, Mohammad, and Altaf Ali. "An investigation of access to library facilities and services for persons with disabilities in India." *IFLA journal* 51, no. 4 (2025): 954-968. <https://doi.org/10.1177/03400352241310532>
- [26] Kwak, Aneta. "Developing a Training Program for Student Library Assistants to Make Scanned PDFs Accessible: A Case Study." *College & Research Libraries* 86, no. 1 (2025): 160. <https://doi.org/10.5860/crl.86.1.160>
- [27] Olmedo-Pagés, Elena Loreto, and Rosario Arquero-Avilés. "Aprendizaje-Servicio como instrumento para la accesibilidad y la inclusión: resultado de una propuesta colaborativa entre universidades y bibliotecas (Service-learning as a tool for accessibility and inclusion: results of a collaborative approach between." *Information Research an international electronic journal* 30, no. iConf (2025): 910-918. <https://doi.org/10.47989/ir30iConf47167>
- [28] Day, Jaxsen R., and Kenneth R. Fleischmann. "Academic libraries and accessibility: How academic librarians assist students with visual impairments in accessing academic reading materials." *The Journal of Academic Librarianship* 52, no. 3 (2026): 103238. <https://doi.org/10.1016/j.acalib.2026.103238>
- [29] Bennett, Cynthia L., Erin Brady, and Stacy M. Branham. "Interdependence as a frame for assistive technology research and design." In *Proceedings of the 20th international acm sigaccess conference on computers and accessibility*, pp. 161-173. 2018. <https://doi.org/10.1145/3234695.3236348>
- [30] Peacock, Rebeca, and Amy Vecchione. "Accessibility best practices, procedures, and policies in Northwest United States academic libraries." *The Journal of Academic Librarianship* 46, no. 1 (2020): 102095. <https://doi.org/10.1016/j.acalib.2019.102095>
- [31] Anderson, Talea, and Chelsea Leachman. "Centering accessibility: A review of institutional repository policy and practice." *Journal of librarianship and scholarly communication* 8, no. 1 (2020). <https://doi.org/10.7710/2162-3309.2383>
- [32] Brunskill, Amelia. "'Without that detail, I'm not coming': The perspectives of students with disabilities on accessibility information provided on academic library websites." (2021). <https://doi.org/10.5860/crl.81.5.768>
- [33] Krejtz, Krzysztof, Ann Marcus-Quinn, Carlos Duarte, Iga Stasiak, Letícia Seixas Pereira, and Izabela Krejtz. "Higher education accessibility information in practice. A report on the accessibility of European Universities." *Universal Access in the Information Society* 24, no. 3 (2025): 2673-2685. <https://doi.org/10.1007/s10209-025-01224-4>
- [34] Mack, Kelly Avery, Natasha A. Sidik, Aashaka Desai, Emma J. McDonnell, Kunal Mehta, Christina Zhang, and Jennifer Mankoff. "Maintaining the accessibility ecosystem: A multi-stakeholder analysis of accessibility in higher education." In *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility*, pp. 1-6. 2023. <https://doi.org/10.1145/3597638.3614547>
- [35] Vetrivelan, R., R. Ramya, M. Sathya, R. Swadhi, and A. Deepan. "Service delivery and citizen-centric approaches: Innovating public administration management in higher education." In *Challenges of Public Administration Management for Higher Education*, pp. 113-136. IGI Global Scientific Publishing, 2025. <https://doi.org/10.4018/979-8-3693-4346-3.ch006>
- [36] Kontio Jr, Jeffrey P. "From reactive to proactive: Leveraging Learning Management Systems for a more accessible learning experience." In *Proceedings of the 2025 ACM SIGUCCS Annual Conference*, pp. 1-4. 2025. <https://doi.org/10.1145/3675229.3712524>
- [37] Putnam, Cynthia, Emma J. Rose, and Craig M. MacDonald. "'It could be better. It could be much worse': Understanding Accessibility in User Experience Practice with Implications for Industry and Education." *ACM Transactions on Accessible Computing* 16, no. 1 (2023): 1-25. <https://doi.org/10.1145/3575662>
- [38] Boticario, Jesus G., Alejandro Rodriguez-Ascaso, Olga C. Santos, Emmanuelle Raffenne, Lydia Montandon, David Roldán Martínez, and Félix Buendía García. "Accessible lifelong learning at higher education: outcomes and lessons Learned at two different PilotSites in the EU4ALL Project." *Journal of Universal Computer Science* 18, no. 1 (2012): 62-85. <https://doi.org/10.3217/jucs-018-01-0062>
- [39] Cross, Brady C. "Library Computer Workstations for Inclusive College Student Populations." *The International Journal of Information, Diversity, & Inclusion* 4, no. 1 (2020): 60-83. <https://doi.org/10.33137/ijidi.v4i1.32340>
- [40] Ilako, Caroline, Elena Maceviciute, and Joyce Bukirwa Muwanguzi. "Creating inclusive library spaces for students with disabilities (SWDs): perceptions and experiences." In *International Conference on Information*, pp. 487-494. Cham: Springer International Publishing, 2020. https://doi.org/10.1007/978-3-030-43687-2_39
- [41] Akgül, Yakup. "Accessibility, usability, quality performance, and readability evaluation of university websites of Turkey: a comparative study of state and private universities." *Universal access in the information society* 20, no. 1 (2021): 157-170. <https://doi.org/10.1007/s10209-020-00715-w>
- [42] Galkute, Milda, Luis A. Rojas P, and Victor A. Sagal M. "Improving the web accessibility of a university library for people with visual disabilities through a mixed evaluation approach." In *International Conference on Human-Computer Interaction*, pp. 56-71. Cham: Springer International Publishing, 2020.

- https://doi.org/10.1007/978-3-030-49570-1_5
- [43] Abu Qaadon, Asmaa, Faten Hamad, and Hussam Fakhouri. "Facilitating digital accessibility for students with disabilities into information services at Jordanian academic libraries." *Library Management* 45, no. 8-9 (2024): 527-546. <https://doi.org/10.1108/LM-01-2024-0001>
 - [44] Oswal, Sushil K. "Institutional, legal, and attitudinal barriers to the accessibility of university digital libraries: Implications for retention of disabled students." In *Digital Libraries and Institutional Repositories: Breakthroughs in Research and Practice*, pp. 123-141. IGI Global Scientific Publishing, 2020. <https://doi.org/10.4018/978-1-5225-2665-0.ch010>
 - [45] Roberson, Casey Alexander, Trisha Barefield, and Eric Griffith. "Students with disabilities and library services: Blending accommodation and universal design." *The Journal of Academic Librarianship* 48, no. 4 (2022): 102531. <https://doi.org/10.1016/j.acalib.2022.102531>
 - [46] Tateo, Luigi. "Web accessibility and usability: limits and perspectives." In *teleXbe*. 2021.
 - [47] Alabi, Adefunke O., and Stephen M. Mutula. "Digital inclusion for visually impaired students through assistive technologies in academic libraries." *Library Hi Tech News* 37, no. 2 (2020): 14-17. <https://doi.org/10.1108/LHTN-11-2019-0081>
 - [48] Cain, Melissa, and Melissa Fanshawe. "Expectations for success: Auditing opportunities for students with print disabilities to fully engage in online learning environments in higher education." *Australasian Journal of Educational Technology* 37, no. 3 (2021): 137-151. <https://doi.org/10.14742/ajet.6449>
 - [49] Hermosa-Ramírez, Irene, and Blanca Arias-Badia. "Accessibility as a means to realising social justice in higher education: Interviews with user organisations and service-providers." *Linguistica Antverpiensia, New Series—Themes in Translation Studies* 23 (2024). <https://doi.org/10.52034/lans-tts.v23i.783>
 - [50] Potnis, Devendra, and Kevin Mallary. "Proposing an information value chain to improve information services to disabled library patrons using assistive technologies." *Journal of Information Science* 48, no. 6 (2022): 825-837. <https://doi.org/10.1177/0165551520984719>
 - [51] Phukubje, Justice, and Mpho Ngoepe. "Convenience and accessibility of library services to students with disabilities at the University of Limpopo in South Africa." *Journal of Librarianship and Information Science* 49, no. 2 (2017): 180-190. <https://doi.org/10.1177/0961000616654959>
 - [52] Day, Jaxsen R., and Kenneth R. Fleischmann. "Serving the needs of students with disabilities: How academic librarians can collaborate with publishers and disability services offices." *Proceedings of the Association for Information Science and Technology* 57, no. 1 (2020): e334. <https://doi.org/10.1002/pra2.334>
 - [53] Agabirwe, Patience, George W. Kiyangi, and Elena Macevicate. "Locked out! Exploring university library websites' accessibility by students with visual disabilities." *Digital Library Perspectives* 41, no. 3 (2025): 419-433. <https://doi.org/10.1108/DLP-11-2024-0189>
 - [54] Hamzah, Abdul Aziz, Zatul Amilah Shaffie, Nor Hayati Abdul Hamid, and Nurulnadan Aziz. "MyAbility: A Web Portal for Students with Challenge based on Web Content Accessibility Guideline 2.0." *Annals of Emerging Technologies in Computing (AETiC)* 5, no. 5 (2021): 194-200. <https://doi.org/10.33166/AETiC.2021.05.024>
 - [55] Cook, Colleen, Fred Heath, Bruce Thompson, and Duane Webster. "LibQUAL+ TM: preliminary results from 2002." *Performance Measurement and Metrics* 4, no. 1 (2003): 38-47. <https://doi.org/10.1108/14678040310471239>
 - [56] Landrum, Hollis, Victor R. Prybutok, Xiaoni Zhang, and Daniel A. Peak. "Measuring IS system service quality with SERVQUAL: Users' perceptions of relative importance of the five SERVPERF dimensions." *Informing science* 12 (2009): 17. <https://doi.org/10.28945/426>
 - [57] Cerdan Chiscano, Monica. "Giving a voice to students with disabilities to design library experiences: an ethnographic study." *Societies* 11, no. 2 (2021): 61. <https://doi.org/10.3390/soc11020061>
 - [58] Day, Tiffany, Brigid Gonzales, and Karen Brunsting. "Accessibility Initiatives for Technical Services: Adding Braille Textbooks in an Academic Library." *Library Resources & Technical Services* 68, no. 4 (2024). <https://doi.org/10.5860/lrts.68n4.8331>
 - [59] Nagata, Haruki, Yoshinori Satoh, Sarah Gerrard, and Päivi Kytömäki. "The dimensions that construct the evaluation of service quality in academic libraries." *Performance measurement and metrics* 5, no. 2 (2004): 53-65. <https://doi.org/10.1108/14678040410546073>
 - [60] Asogwa, Brendan E., Boniface U. Asadu, Jonas U. Ezema, and Ferdinand C. Ugwuanyi. "Use of ServQUAL in the evaluation of service quality of academic libraries in developing countries." *Library Philosophy and Practice* (2014): 0_1.
 - [61] Butt, Kiran, Muhammad Arif, and Muhammad Rafiq. "Assessing university students' satisfaction with web-based library services based on SERVQUAL model: A case of a Pakistani University." *Libri* 73, no. 2 (2023): 153-165. <https://doi.org/10.1515/libri-2022-0050>

- [62] Silva, Sueli Alves, and Luciane de Fátima Beckman Cavalcante. "Explicit mediation and information seeking behavior in university libraries." (2019).
- [63] Kawooya, Dick, Clayton A. Copeland, Eric P. Robinson, Jonathan Band, Courtney Swartzendruber, and Samaneh Borji. "Supporting blind, visually impaired, and print disabled students: Are academic libraries doing enough?." *The Journal of Academic Librarianship* 52, no. 3 (2026): 103235. <https://doi.org/10.1016/j.acalib.2026.103235>
- [64] Azizah, Syahrani Nur. "Academic librarian perceptions of facilities and services for persons with visual impairments." *The Journal of Academic Librarianship* 49, no. 6 (2023): 102791. <https://doi.org/10.1016/j.acalib.2023.102791>
- [65] Vanderheiden, Gregg, and Crystal Marte. "A 20-year Prospective View of Accessibility and ICT." *im Wandel: Eine Mensch-Technik-Umwelt* (2024): 260.
- [66] La Macchia, Karen. "An academic digital library advancing an equitable and inclusive educational environment." *Digital Library Perspectives* 37, no. 1 (2021): 18-27. <https://doi.org/10.1108/DLP-07-2020-0062>
- [67] Wojciechowska, Maja. "The importance and level of individual social capital among academic librarians." *New review of academic librarianship* 29, no. 1 (2023): 51-76. <https://doi.org/10.1080/13614533.2022.2079538>
- [68] Pionke, J. J. "Library employee views of disability and accessibility." *Journal of Library Administration* 60, no. 2 (2020): 120-145. <https://doi.org/10.1080/01930826.2019.1704560>
- [69] Pionke, J. J. "A secondary analysis of the library profession's self-reported competence and comfort in working with patrons with disabilities." *Library Management* 42, no. 6-7 (2021): 409-420. <https://doi.org/10.1108/LM-10-2020-0153>
- [70] Lima dos Santos, Ana Paula. "Librarian training for accessibility and inclusion: challenges and impacts of the information regime in university libraries." *RDBCI: Digital Journal of Library & Information Science/Revista Digital de Biblioteconomia e Ciência da Informação* 23 (2025). <https://doi.org/10.20396/rdbci.v23i00.8679425>
- [71] Small, Ruth V., William N. Myhill, and Lydia Herring-Harrington. "Developing accessible libraries and inclusive librarians in the 21st century: Examples from practice." (2015). <https://doi.org/10.1108/S0065-283020150000040013>
- [72] Weiner, Bryan J. "A theory of organizational readiness for change." In *Handbook on implementation science*, pp. 215-232. Edward Elgar Publishing, 2020. <https://doi.org/10.4337/9781788975995.00015>
- [73] Qomariyah, A. N., E. Mursidah, Y. A. Gonti, and D. Wahyuni. "Analysis of organizational readiness towards library 4.0: a case study at x library." *Record and Library Journal* 6, no. 2 (2020): 110. <https://doi.org/10.20473/rlj.v6-i2.2020.110-119>
- [74] Falloon, Kerry. "A case study in practice: providing accessibility for persons with disabilities at the College of Staten Island Library." (2015). <https://doi.org/10.1108/S0065-283020150000040014>
- [75] Ferrara, Lisa. "Library staff's understanding of attitudinal barriers experienced by individuals with disabilities in libraries." *Reference Services Review* 52, no. 1 (2024): 50-65. <https://doi.org/10.1108/RSR-03-2023-0033>
- [76] Samson, Sue. "Best practices for serving students with disabilities." *Reference Services Review* 39, no. 2 (2011): 260-277. <https://doi.org/10.1108/00907321111135484>
- [77] Conner, Matt, and Leah Plocharczyk. "The Stories that Unite Us: Socialization and Inclusion of Adults with Intellectual Disabilities (ID) Through Library Book Clubs." (2019).
- [78] Khan, Zafar Imam. "Assessing disability inclusivity in UAE university libraries: A regulatory and empirical perspective." *IFLA Journal* (2025): 03400352251378766. <https://doi.org/10.1177/03400352251378766>
- [79] Eneya, Dorothy Doreen, and Aderonke Olaitan Adesina. "Library service provision for students with disabilities in academic libraries: A literature review." *Information, Knowledge, and Technology for Teaching and Research in Africa* (2025): 85-108. https://doi.org/10.1007/978-3-031-65745-0_4
- [80] Power, Jill A. "EBSCO Information Services usability study on accessibility." *Reference Services Review* 46, no. 3 (2018): 449-459. <https://doi.org/10.1108/RSR-04-2018-0044>
- [81] Ariya, Pakinee, Yakannut Yensathit, Phimphakan Thongthip, Kannikar Intawong, and Kittit Puritat. "Assisting hearing and physically impaired students in navigating immersive virtual reality for library orientation." *Technologies* 13, no. 1 (2024): 2. <https://doi.org/10.3390/technologies13010002>
- [82] Nazim, Mohammad, Areeba Beg, and Mayukh Sarkar. "Access to library facilities and services for users with disabilities: a study of Aligarh Muslim University in India." *Journal of Access Services* 18, no. 1 (2021): 30-49. <https://doi.org/10.1080/15367967.2020.1870120>
- [83] Sánchez, Fabiola González, Diana Maribel Armijos Robles, Octavio Segundo Crespo Castillo, and Luisa Patricia Ramón Pacurucu. "Accessibility of communication and information for people with sensory disabilities in the libraries of Azogues." *Salud, Ciencia y Tecnología* 4 (2024): 29. <https://doi.org/10.56294/saludcyt2024973>
- [84] Blummer, Barbara, and Jeffrey M. Kenton. "Access and accessibility of academic libraries' electronic resources and services." *Library Science and Administration: Concepts, Methodologies, Tools, and Applications: Concepts, Methodologies, Tools, and Applications* 188 (2017). <https://doi.org/10.4018/978-1-5225-3914-8.ch010>

- [85] Che Rosli, Danial Fikhry, Sheau Tsuey Chong, Nor Azzatunnisak Mohd Khatib, and Muhammad Adli Aibee. 2025. "Exploring Challenges Related to Social Identity Acceptance and Interpersonal Relationships among Disabled University Students in Malaysian Public Universities." *Asia Pacific Journal of Educators and Education* 40 (1): 257–76.
- [86] Geng, Manman. 2021. "Construction of Accessibility for Readers with Disability in University Libraries—Taking North American Research Libraries as an Example." *Library and Information Service* 65 (3). LIS Press Co., Ltd: 128–37. <https://doi:10.13266/j.issn.0252-3116.2021.03.016>
- [87] Salauddin, Nazia. "Accessibility of information resources and services in the library for the users with disabilities: A study." *Indian Journal of Information Sources and Services* 12, no. 1 (2022): 47-51.
<https://doi.org/10.51983/ijiss-2022.12.1.3158>
- [88] Erlyani, Neka, and Fendy Suhariadi. "Literature review: Readiness to change at the university." *Open Access Macedonian Journal of Medical Sciences* 9, no. F (2021): 464-469. <https://doi.org/10.3889/oamjms.2021.6203>
- [89] da Silveira, Luís André, Wajdi Aljeedani, and Marcelo Medeiros Eler. "Strategic insights into integrating accessibility in software development: Motivations, barriers, commitments, and business value." In *Proceedings of the XXIII Brazilian Symposium on Human Factors in Computing Systems*, pp. 1-14. 2024.
<https://doi.org/10.1145/3702038.3702108>
- [90] Michalak, Russell, and Monica DT Rysavy. "Assessing the accessibility of library tools & services when you aren't an accessibility expert: Part 2." *Journal of Library Administration* 60, no. 3 (2020): 295-300.
<https://doi.org/10.1080/01930826.2020.1727283>
- [91] Kishore, Henry S., D. Solomon Paul Raj, and K. R. Senthilkumar. "AI for accessibility: A case study of enhancing library services for users with disabilities." In *Improving Library Systems with AI: Applications, Approaches, and Bibliometric Insights*, pp. 214-225. IGI Global Scientific Publishing, 2024.
<https://doi.org/10.4018/979-8-3693-5593-0.ch015>