



CASE STUDY

Reimagining inclusion: developing the NURTURE framework scaffold through Universal Design for Learning at Northumbria University

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ABSTRACT

This paper presents NURTURE (Northumbria University Responsive Teaching for Universal Reach and Engagement), an implementation scaffold operationalising Universal Design for Learning (UDL) across institutional practice. Developed in response to widening participation and the limitations of deficit-based accommodation models, NURTURE reframes inclusion as collective institutional responsibility rather than individualised adjustment. Grounded in critical pedagogies (Freire, 1970; hooks, 1994) and disability justice frameworks, it integrates UDL's principles of multiple means of engagement, representation, and action/expression (CAST, 2024) to challenge systemic barriers in curriculum design, pedagogy, and assessment. The paper critically examines NURTURE's theoretical foundations and development, offering an account of the framework at an early, formative stage of institutional embedding within a post-1992 UK university, phased 2025–2030. Though still in progress, NURTURE offers a replicable model for embedding systemic inclusion, contributing to scholarship on translating UDL into institutional practice for learning developers, educators, and policymakers.

KEYWORDS: universal design for learning, inclusive pedagogy, neurodiversity, insitutional transformation, higher education.

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Introduction

'The classroom, with all its limitations, remains a location of possibility. In that field of possibility we have the opportunity to labour for freedom' (hooks, 1994).

Higher education is increasingly characterised by diverse student cohorts, including neurodivergent and international learners (LaRocco & Wilken, 2013). Yet traditional models of inclusive practice often rely on individualised accommodations that, while well-meaning, are reactive, resource-intensive, and risk stigmatising students by framing their needs as deviations from the norm. With theories of education such as Freire's (1970) pedagogy of the oppressed, and bell hooks' (1994) pedagogy as the practice of freedom, the classroom is positioned as a transformative space, where teaching and learning are rooted in justice and liberation. Central to this vision is engaged pedagogy, which resists hierarchical and exclusionary approaches by valuing the whole student and fostering mutual responsibility between learners and educators. From this perspective, prevailing approaches to inclusion fall short: rather than fragmentary adjustments, institutions are called to reimagine education as a collective and emancipatory practice, reshaping systems, structures, and cultures so that all students can flourish.

Recognising the limitations of current practices, and as an educator who has worked for inclusive education at primary level and now at tertiary level, I have initiated the NURTURE (Northumbria University Responsive Teaching for Universal Reach and Engagement) scaffold to embed Universal Design for Learning (UDL) principles across curriculum design, pedagogy, and institutional culture. With a student population of approximately 34,000, representing 131 countries, and a demographic composition of 54% female and 46% male students, the university serves a diverse community that requires systemic approaches to inclusion. Identifying as an A/R/Tographer, I integrate the perspectives of artist, researcher, and teacher to examine and enact inclusive pedagogy. Both my artistry and research directly inform my teaching and curriculum design and underpin the development of the institution's initiative NURTURE (see 'Initial Research Project' section).

UDL provides a proactive, inclusive framework that designs learning from the outset to accommodate diversity, minimising the need for retrofitted adjustments. Through multiple means of engagement, representation, and action/expression (CAST, 2024), UDL enables all learners, particularly those from marginalised backgrounds, to thrive in equitable, flexible,



and responsive learning environments (Hamilton & Petty, 2023). Informed by the critical pedagogies of hooks (1994) and Freire (1970/2014), the NUTURE framework advocates embedding inclusive practices into teaching, curriculum, and institutional ethos to enhance belonging, participation, and success.

The following section establishes the evidence base for UDL in UK higher education, before turning to the gaps in current implementation that NUTURE is designed to address.

Universal Design for Learning (UDL)

Despite policy-driven efforts, higher education remains shaped by structural inequities. Students' intersecting identities, including disability, gender, race, class, and religion, continue to impact access and experience (Lawrie et al., 2017). Historically centred on privileged groups, higher education often marginalises neurodivergent students by perceiving cognitive difference as deficiency, rather than as a valuable dimension of diversity. Deficit-based perceptions are reinforced by epistemic injustices, including ableism, racism, and classism, which hinder recognition, retention, and academic progression (Andrews, 2020; Fricker, 2007). Conventional support mechanisms, such as extra exam time or translated materials, are typically reactive, triggered after a difficulty is identified (Moriña et al., 2025). This approach reinforces a compliance-oriented mindset and overlooks the need for proactive, systemic design that anticipates learner variability from the outset. Hamilton and Petty (2023) argue that improving experience and outcomes for neurodivergent students should be a priority for universities aiming for contexts in which neurodivergent people can thrive at university and in society. In response, this paper positions UDL as a transformative model capable of addressing structural exclusion by embedding equity into teaching and learning. It argues for a move beyond legal compliance towards a values-led vision of higher education in which all students can participate meaningfully and succeed on their own terms.

UDL is an educational framework for inclusive practice grounded in psychological and neuroscientific research in the learning sciences (Meyer et al., 2014). It shifts the focus from accessibility as remediation to accessibility as design (Tobin & Behling, 2018a), enabling educators and learners to set clear goals, anticipate barriers, create meaningful options, and embrace human variability (CAST, 2024). Originating in architecture and urban planning, Universal Design (UD) emphasises creating environments accessible to all, regardless of ability (Nelson, 2014). Applied to education, UDL extends this principle to curriculum design,



proactively removing barriers at the planning stage rather than retrofitting accommodations (McGuire et al., 2006). Developed by CAST (2024), the UDL framework is grounded in insights from neuroscience and inclusive pedagogy. It challenges traditional models of teaching and learning by promoting three core principles, as shown in Table 1 below.

Table 1. Alignment between UDL’s core principles and their practical application within the NURTURE framework.

UDL principle	NURTURE in action
Engagement (Why)	Give students meaningful choices in learning activities, assessment formats, and discussion styles. Foster a sense of purpose and connection.
Representation (What)	Offer content in multiple formats (videos, readings, captions, visuals). Ensure learning materials are clear, accessible, and easy to navigate.
Action & Expression (How)	Provide different ways for students to demonstrate learning, from essays and presentations to multimedia or practical work. Scaffold success with planning tools and support.

For example, content might be delivered through a combination of readings, infographics, video lectures, and podcasts (representation); students may choose to participate in discussions, projects, or reflective journals (engagement); and they can complete assessments through written work, oral presentations, or creative media (expression). These principles foster a learning environment that is flexible, anticipatory, and responsive to learner variability, thereby minimising the need for individual adjustments (Kieran & Anderson, 2018).

Recent data illustrates the growing relevance of UDL in higher education. Between 2022/23 and 2023/24, the number of students with a declared disability in the UK increased by 30,040. The proportion of students with a known disability has risen consistently, by approximately one percentage point each year since 2019/20 (HESA, 2024). A 2025 British Council report on disability inclusion in UK higher education further found that significant numbers of disabled students had to initiate contact with their institutions themselves to access support and identified resistance from internal and external stakeholders as a persistent barrier to embedding inclusive practice (Evans, 2025). In this context, UDL offers a powerful alternative to reactive models of support. For students with special educational needs and disabilities (SEND), UDL provides accessible digital materials (representation), multimodal content and diverse assessment methods (expression), and motivational strategies such as collaboration,



choice, and relevance (engagement). These reduce reliance on formal disclosures or special arrangements. Students with a Student Accessibility Plan (SAP) at Northumbria University will benefit from a more consistent and equitable experience, as UDL minimises the need for ad hoc accommodations by embedding inclusive practices into standard course design. Similarly, international students benefit from UDL's emphasis on clear, scaffolded instructions (representation), culturally relevant materials (engagement), and multiple language supports (representation and engagement), which enhance both comprehension and participation without isolating or labelling individuals. Emerging empirical evidence supports these benefits at scale: a recent study found that UDL integration was associated with improved educational environments and increased access for students experiencing participation barriers across diverse institutional contexts (Guo & Wang, 2025).

Despite this growing evidence base, significant gaps remain in how UDL is being put into practice across institutions. The following section examines those gaps and the limitations of current approaches.

Gaps in the literature

While Universal Design for Learning (UDL) has gained traction in higher education over the past two decades, aiming to reframe traditional teaching methods (Fornauf & Dangora Erickson, 2020), there remains a significant gap between its theoretical promise and practical, institution-wide implementation. Black et al. (2015) found that students, both disabled and non-disabled, continue to face barriers to learning, with diverse preferences in how they access and demonstrate knowledge. When UDL and Universal Design for Instruction (UDI) strategies were applied, students reported improved engagement, comprehension, and expression, reinforcing the potential of inclusive design to benefit all learners, not just those with disclosed needs (Bastidas Martinez et al., 2025).

However, much of the current literature remains focused on classroom-level interventions, with few studies examining UDL as a holistic institutional framework. As Morina (2020) notes, while some lecturers who voluntarily integrated UDL into their teaching observed increased engagement across diverse learner groups, including international and neurodivergent students, these practices were often informal, based on individual initiative rather than strategic policy. McGuire et al. (2006) call for a collaborative approach to examine the efficacy of applying UD to educational environments. There is limited empirical research on faculty



attitudes, training, and self-efficacy regarding UDL adoption, and many evaluations rely on self-reported outcomes rather than longitudinal or mixed-method designs. A recent systematic review by Moriña et al. (2025), analysing 20 studies involving over 5,000 participants, found that targeted faculty training in UDL significantly increases teaching competence and promotes more inclusive pedagogical practice, underscoring that institutional change requires structured staff development, not individual initiative alone.

One critical but underexplored dimension in UDL research is the role of student voice. Inclusive pedagogical frameworks must be informed by those they intend to serve (Lombardi et al., 2016). Tobin and Behling (2018b) emphasise the importance of co-creating inclusive learning environments with students rather than for them, noting that student input is essential to identifying hidden barriers and validating diverse learning experiences. Similarly, Priyadharsini and Sahaya Mary (2024) argue that UDL's effectiveness is significantly enhanced when it is grounded in participatory practices that actively include student perspectives, particularly those of historically marginalised learners. This is directly illustrated by Salisbury et al. (2025), whose students-as-partners project employed neurodivergent students as co-designers of pedagogical practice, finding that higher education typically adopts an individualised adaptive approach to difference rather than designing whole courses and environments with both neurotypical and neurodivergent learners in mind from the outset. Relatedly, recent research on neurodivergent students' lived experiences in higher education finds a persistent gap between institutional rhetoric around inclusion and students' actual day-to-day experiences (Quigley & Gallagher, 2025), reinforcing the case for participatory approaches that centre authentic student perspectives.

Centring student voice aligns not only with the spirit of UDL but also with wider social justice and equity aims in higher education. Moreover, scholars and practitioners advocate for embedding student voice as a methodological and ethical imperative within inclusive education research, highlighting that meaningful dialogue with students brings to the surface lived realities that often remain invisible in top-down approaches (Bovill, 2017; Cook-Sather, 2006; Felten et al., 2013). Incorporating these perspectives is not merely beneficial, it is necessary for authentic and responsive UDL implementation (Fornauf & Dangora Erickson, 2020; Tobin & Behling, 2018a).



Taken together, these gaps and insights call for a shift in research and institutional strategy. To move beyond theoretical advocacy, higher education must explore how UDL can be applied at scale, through robust, evidence-based approaches that incorporate student voice, support faculty development in flexible content delivery, and foster institutional cultures that value diverse demonstration of learning. Only by listening to those most affected can UDL realise its transformative potential across the sector.

These gaps inform the theoretical lens through which NUTURE has been developed. The following section sets out the critical framework that underpins the initiative.

Theoretical framework

The aim of NUTURE is to reposition UDL through a critical pedagogy lens. While UDL traditionally focuses on barrier removal and design flexibility, Northumbria University aims to elevate it beyond technical compliance, to an emancipatory practice shaped by Freire (1970/2014) and hooks (1994).

Table 2. Shared principles across Freire's critical pedagogy, hooks' engaged pedagogy, and UDL.

Shared principle	Freire	Hooks	UDL
Learner empowerment	✓	✓	✓
Inclusivity & equity	✓	✓	✓
Voice & agency	✓	✓	✓
Critique of oppression	✓	✓	
Design for access			✓
Emotion in learning		✓	✓

This integrated framework challenges learning developers and educators to not only accommodate diversity but to critique the institutional norms that define what counts as 'normal' or 'able'. Drawing on critical disability studies, this approach aligns with what Dolmage (2017) terms 'academic ableism', the systemic privileging of particular bodily and cognitive capacities that positions disability as deficit rather than difference. Garland-Thomson's (2011) concept of 'misfitting' further illuminates how educational environments are designed around normative assumptions, creating disabling barriers when students do not conform to imagined ideal learners.



UDL, viewed through this critical lens, shifts from a technical accommodation model to a social justice framework (Waitoller & King Thorius, 2016). Rather than retrofitting education for 'special needs', it interrogates the very architecture of exclusion embedded in curriculum design, assessment practices, and pedagogical delivery. This resonates with Hehir's (2002) notion of 'ableist assumptions' in education; implicit beliefs that certain ways of learning, demonstrating knowledge, or engaging with content are inherently superior (Roberts, 2026).

The framework's transformative potential lies in its challenge to what Kumashiro (2000) identifies as 'common sense' in education, the naturalised practices that feel neutral but actually privilege particular ways of being and knowing. By foregrounding variability as the norm rather than the exception (Rose & Meyer, 2002), UDL destabilises the myth of the 'average student' around which higher education has historically been structured (Rose, 2016). This epistemological shift demands that institutions examine whose knowledge counts, whose bodies belong, and whose minds are valued within academic spaces (Annamma et al., 2013).

This theoretical foundation shapes the design of NURTURE in every dimension. The following section introduces the framework itself, explaining how these principles are translated into institutional practice.

NURTURE: framework and design

NURTURE is a university-wide scaffolded approach that embeds Universal Design for Learning (UDL) principles to create inclusive, equitable, and flexible learning environments. It guides curriculum design, pedagogy, and assessment by emphasising multiple ways of engaging, representing, and expressing knowledge, ensuring that all students, including those who are neurodivergent, disabled, or from historically marginalised groups, can thrive. By proactively designing learning experiences rather than retrofitting accommodations, NURTURE positions accessibility and inclusion as foundational, systemic, and aligned with Northumbria University's strategic commitment to equity and student success.

NURTURE complements wider commitments of the University's Education Strategic Delivery Plan within Strategy 2024–30, such as embedding experiential learning opportunities into every undergraduate programme, eliminating disparities in graduate outcomes, and enhancing student belonging and support. Additionally, NURTURE supports the goals of the university's Access and Participation Plan, which aims to widen participation and provide



equality of opportunity across the entire student lifecycle. Together, these initiatives move beyond reactive accommodations towards systemic transformation, positioning inclusion as a structural principle and embodying bell hooks' (1994) vision of education as a practice of freedom.

Informed by the experiences of De Montfort University (DMU), which has pioneered UDL as its institution-wide approach to teaching and learning in the UK, Northumbria University seeks to build upon these insights. At DMU, UDL adoption began with classroom-level modifications before scaling to a whole-university model embedded across curriculum design, assessment, and staff development. Adopting UDL should not be an additional burden on teaching staff but is, fundamentally, just good teaching, a reframing that has proven effective at DMU in reducing resistance and building institutional buy-in (Merry, 2023). DMU's experience demonstrates that when UDL is positioned as an enhancement to pedagogical practice rather than a compliance requirement, staff engagement and course quality both improve. NUTURE draws directly on this model, adapting its phased, staff-centred approach to Northumbria University's context.

Grounded in a critical recognition that compliance-driven models of access no longer meet the needs of contemporary learners, NUTURE reframes inclusion as a systemic responsibility. It shifts the focus from 'fixing the student' to transforming the learning environment, drawing conceptual inspiration from the emancipatory pedagogies of Paulo Freire and bell hooks (Kinsella, 2020). NUTURE is grounded in UDL as its core pedagogical model but critically extends its scope by incorporating Freire's (1970/2014) emancipatory pedagogy. Freire's critique of the 'banking model' of education and his emphasis on dialogue, agency, and transformative praxis provide a powerful lens through which to rethink inclusion, not simply as access but as liberation.

Freire's (1970/2014) key concept of *conscientização* (critical consciousness) involves developing awareness of social, political, and economic contradictions, and praxis, understood as reflection and action upon the world to transform it. Central to this approach is dialogical education, where learning occurs through authentic dialogue rather than the 'banking' model of depositing information into passive recipients. Freire's vision of problem-posing education positions students as co-creators of knowledge, while his concept of humanisation frames education as liberation rather than domestication.



Theoretical framing also resonates with bell hooks' insistence on education as a practice of freedom (1994, 2003), centred on emotion, identity, and justice. For hooks, transformative pedagogy requires educators to recognise the classroom as a site where knowledge production is inseparable from students' lived experiences, bodies, and social positionalities. Her concept of 'engaged pedagogy' demands that teaching be a reciprocal, humanising process that honours the whole person, intellectual, emotional, and spiritual, rather than treating learners as disembodied minds to be filled with content (hooks, 1994, p. 13).

This challenges the Cartesian dualism that pervades higher education, where rationality is privileged over embodiment, and where emotional or sensory experiences are framed as distractions from 'real' learning rather than integral to it. NURTURE's commitment to multiple means of engagement directly addresses this false dichotomy, recognising that affect, motivation, and identity are not peripheral to cognition but foundational to it (Meyer et al., 2014). When hooks writes that 'to teach in a manner that respects and cares for the souls of our students is essential if we are to provide the necessary conditions where learning can most deeply and intimately begin' (1994, p. 13), she articulates what UDL operationalises: that flexibility in how students access, process, and demonstrate learning is not simply about accommodation, it is about dignity, autonomy, and the right to be present as one's full self in educational spaces. Moreover, hooks' emphasis on education as liberation rather than domestication (echoing Freire, 1970) reframes inclusion not as assimilation into existing structures, but as collective transformation of those structures themselves. This positions NURTURE within a genealogy of radical pedagogy that refuses to separate access from justice, or diversity from decolonisation.

Staff are central to the success of NURTURE. They can put it into practice by presenting core content in multiple formats, such as lecture slides, transcripts, and visual summaries, to support diverse learning styles. Where possible, staff are encouraged to offer flexibility in how students engage with the material and how they are assessed. Inclusive practices should be embedded into course design from the outset rather than added as retrofits, and staff are encouraged to collaborate with student support teams, instructional designers, and colleagues to share ideas, strategies, and resources. By taking these steps, staff help create learning environments that are equitable, accessible, and responsive to the needs of all students.



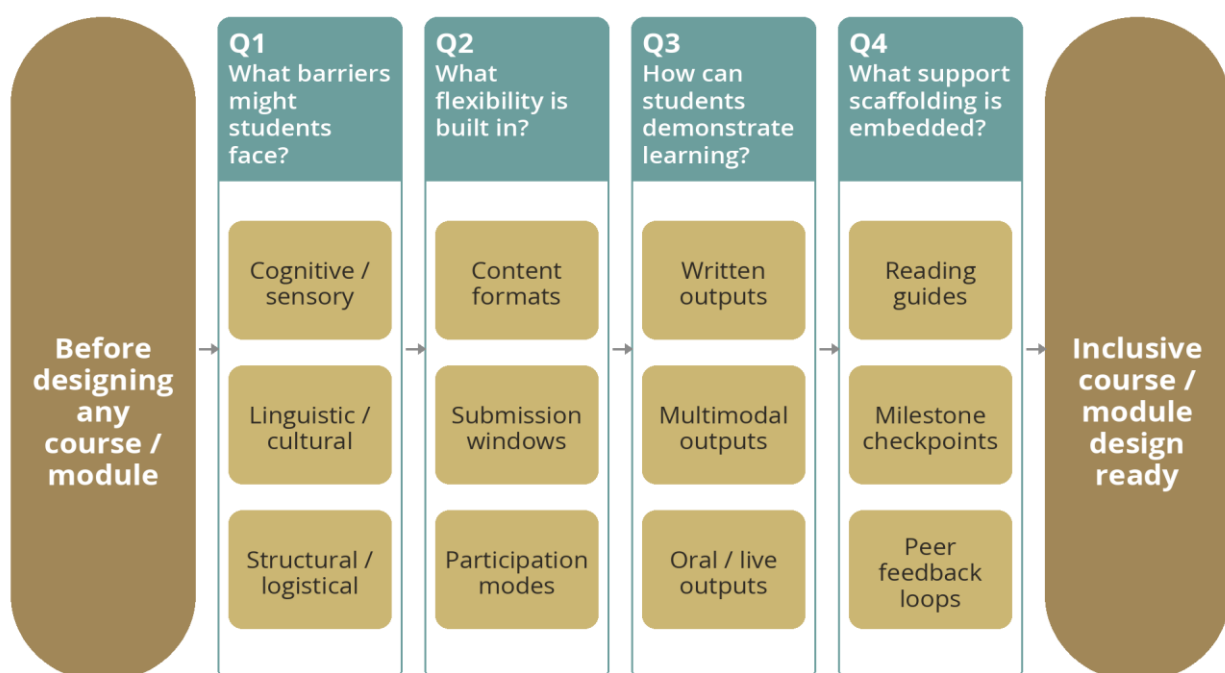
To support colleagues in moving from UDL awareness to confident, evidence-based practice, Northumbria University is developing a UDL Digital Badge programme. Using a 'Plus One Redesign' approach, the programme invites staff to identify specific barriers in their current teaching and implement targeted UDL-informed improvements, providing the framework knowledge, practical tools, and peer support needed to create meaningful change. Rather than requiring wholesale curriculum transformation, this incremental approach makes embedding UDL sustainable and manageable alongside existing workloads. Completion of the badge connects colleagues to a growing community of UDL practitioners across the institution, building the shared culture of inclusive excellence that NUTURE depends upon.

The Decision Tree: a practical tool for inclusive design

For each delivery model, educators are encouraged to create practical decision trees. The four questions below should be considered before designing any course or module. Together, they form a structured prompt for proactive, barrier-aware design:

- What barriers might students face in accessing this content or assessment?
- What flexibility is built into timelines, formats, and participation methods?
- How are students given choice in demonstrating learning?
- What support scaffolding is embedded (not bolted on)?

Figure 1. NUTURE decision tree — to be completed before designing any course or module



Worked example: applying the decision tree to a Level 5 undergraduate module

The following example illustrates how the four questions might be applied in practice when designing a Level 5 undergraduate module, in this case, a core module requiring students to engage with primary sources, produce analytical writing, and participate in seminar discussion. The same logic applies across disciplines and delivery modes.

Q1: What barriers might students face in accessing this content or assessment?

Primary source texts may present significant challenges for students with dyslexia or processing difficulties, particularly where documents are scanned PDFs without accessible formatting. Seminar participation may disadvantage students who are selectively mute, anxious in group settings, or for whom English is an additional language. A single written essay as the sole assessment method risks excluding students who think and communicate more effectively through other modes. At this stage, the module leader maps these anticipated barriers before any content is finalised, rather than addressing them reactively once students have disclosed needs.

Q2: What flexibility is built into timelines, formats, and participation methods?

All primary source materials are made available in both PDF and Word format, with alt-text on embedded images, at least one week before the session in which they are required. Seminar participation is structured to include written reflection options alongside spoken discussion. Submission deadlines are published at the start of the module with a self-certification extension process that does not require medical evidence for short extensions of up to five working days.

Q3: How are students given choice in demonstrating learning?

Rather than a single summative essay, the module offers a choice of two assessment formats carrying equal weighting: a 2,500-word analytical essay, or a 15-minute recorded presentation accompanied by a 500-word critical commentary. Both formats assess the same learning outcomes, ensuring that choice does not compromise academic rigour. This approach aligns with UDL's principle of multiple means of action and expression, allowing students to demonstrate knowledge in the mode most suited to their strengths.



Q4: What support scaffolding is embedded (not bolted on)?

Rather than directing students to external study skills support, scaffolding is embedded within the module itself. A structured reading guide accompanies each primary source, signposting key passages and framing analytical questions. Assessment criteria are shared in student-facing language at the start of the module, with an annotated exemplar provided for each format. A mid-module checkpoint, a brief, ungraded reflective task, gives students and the module leader early sight of any comprehension gaps before the summative assessment. Peer feedback structures are built into two seminar sessions, providing formative dialogue without requiring additional staff resource.

With the framework and its practical tools established, the following section sets out the phased timeline for NUTURE's development and embedding across the institution.

Timeline

The development and embedding of NUTURE is structured across five phases spanning 2024 to 2030, aligned with Northumbria University's Strategy 2024–30. This paper documents the first phase and should be read as the opening contribution in a series of outputs tracing NUTURE's development over time.

- **2025: Foundations.** Drawing on Universal Design for Learning (CAST, 2024), the emancipatory pedagogies of Freire (1970/2014) and hooks (1994), and critical disability studies frameworks (Dolmage, 2017), the NUTURE scaffold is drafted. A scoping study is initiated, the basis of this paper, asking: How can students' learning experiences guide the design of curricula and the facilitation of inclusive learning environments?
- **2025–26: Pilot.** The decision tree and four-question framework are developed and tested with early-adopter module leaders. CPD materials and worked examples are produced. Participatory research begins with neurodivergent students as co-designers, positioning student voice as co-creation rather than consultation (Salisbury et al., 2025; Tobin & Behling, 2018b).
- **2026–27: Scale.** The NUTURE CPD programme is extended across faculties and impact evaluation data from the pilot is collected and analysed.
- **2026–28: Institutional Embedding.** Findings from the Phase 1 participatory research are published in a follow-up paper. NUTURE becomes embedded through case



studies across curriculum design, pedagogy, and student support as standard institutional practice. Staff recognition frameworks are updated to value inclusive teaching. The proactive support model displaces reactive, individually-negotiated accommodation.

- **2028–30: Sustained Practice.** UDL is evidenced across all student-facing services. A significant reduction in individual reasonable adjustment requests demonstrates that proactive design has replaced reactive response. A sector-facing case study is submitted and further research publications document outcomes from sustained inclusive practice.

The first phase of this timeline is underway. The following section describes the initial research project that forms the empirical foundation of NURTURE's ongoing development.

Initial research project

The first phase of the project centres participatory research with higher education students, ensuring that those most affected by exclusion are active co-constructors of the framework rather than its subjects. This includes direct engagement with the university's physical and digital learning estates, with students invited to identify how spatial and environmental factors shape their experience of inclusion and belonging. The phase also encompasses the scoping study presented here, which asks: How can students' learning experiences guide the design of curricula and the facilitation of inclusive learning environments?

A/R/Tography is a practice-based research methodology that positions the researcher simultaneously as artist, researcher, and teacher, recognising that these roles are not separate but mutually informing (Irwin & de Cosson, 2004). Rather than extracting knowledge from participants, A/R/Tography creates conditions in which meaning is made collaboratively through arts-based processes, treating creative practice as a form of inquiry in its own right. This approach is particularly well-suited to research concerned with inclusion and student voice, as it resists the hierarchies of traditional qualitative methods and opens space for participants to communicate experience through modes beyond written or spoken language. The researcher's photo-broidery project, currently in development, applies this methodology directly: students are invited to photograph aspects of their learning environment that help or hinder their engagement, then respond to those images through embroidery, a slow, tactile



process that encourages reflection and allows meaning to accumulate over time. The resulting works function both as data and as artefact, making visible what surveys and interviews often cannot reach: the felt, embodied experience of belonging and exclusion in educational spaces.

Findings from this scoping work will inform a second paper, which will report on the outcomes and insights gained from engaging neurodivergent students directly in co-designing inclusive pedagogical practices. A future study will adopt a qualitative, participatory design to explore the lived experiences of students in higher education, with the aim of informing institution-wide implementation of UDL (Martin et al, 2019; Smith, 2012). Central to this approach is the student voice: knowledge is not extracted but co-created, ensuring that inclusive practices are rooted in authentic student perspectives (Tobin & Behling, 2018b).

The paper concludes by drawing together the theoretical, practical, and institutional threads developed in the preceding sections.

Conclusion

NUTURE is a move away from compliance-driven models of inclusion towards pedagogies grounded in agency, collaboration, and justice. It offers both theoretical insights and practical strategies for enhancing learning development in higher education. As Freire notes, '[e]ducation either functions as an instrument ... or it becomes the practice of freedom' (1970/2014, p. 34).

Within a liberatory pedagogical framework, Universal Design for Learning (UDL) transcends a set of strategies to become a transformative approach. It reconceptualises classrooms, curricula, and institutions as spaces where diversity is not merely accommodated but actively embraced and embodied, shifting education from reactive individual adjustments to a proactive culture of equity, anticipation, and shared empowerment. Inclusive teaching is embedded in institutional structures, policies, and leadership, aligning with objectives for widening participation, student success, and equality, diversity, and inclusion (EDI), and promoting the recognition of inclusive practice in promotion and workload models.

The success of NUTURE depends on several critical factors working in concert. Executive sponsorship remains essential, requiring visible senior leadership commitment backed by adequate resourcing. Implementation tools must be designed to reduce rather than increase



workload, making inclusive practice the path of least resistance for staff. Student support services, including disability support, student wellbeing, and academic skills teams, must work in active partnership with academic staff rather than operating as separate referral endpoints; when inclusive design is embedded in the curriculum from the outset, support services shift from reactive intervention to proactive collaboration, reinforcing NURTURE's principles across every student touchpoint. To support staff in moving beyond UDL awareness to confident, evidence-based implementation, Northumbria University is developing a UDL Digital Badge programme. Using a 'Plus One Redesign' approach, the programme invites colleagues to identify specific barriers in their current practice and implement targeted UDL-informed improvements, providing the framework knowledge, practical tools, and peer support needed to create meaningful change. Sharing case studies of practice further connects staff to a growing community of UDL practitioners across the institution, contributing to Northumbria University's commitment to inclusive excellence and social mobility. Evidence of impact on student outcomes needs to be systematically collected and widely shared to build institutional buy-in. Resistance must be addressed proactively, particularly the misconception that inclusive practice represents 'dumbing down', by foregrounding robust evidence demonstrating how these approaches benefit all students.

Importantly, this work is not intended solely for Northumbria University. Given the global imperative for more just and inclusive education, NURTURE offers a replicable model for institutions committed to moving beyond access-as-compliance towards equity-driven transformation in which all students can participate meaningfully and succeed on their own terms.

Disclosure statement

The author used the following generative AI tool in the creation of this manuscript: Claude (Anthropic). The specific task performed by Claude was generating the figure contained in the manuscript. All intellectual content remains solely the work of the human author.

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