

University students' perspectives and (re-)imaginings of inclusive classroom practices. An inclusive and collaborative approach to inclusive education

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ABSTRACT

Despite growing professional and scholarly attention to inclusive education (IE), significant challenges persist in higher education. Little is known about how students interpret and (re-)imagine inclusive classroom practices, yet their unique insider perspectives are essential for developing more inclusive, evidence-based policies and pedagogies. This study examined how students at a Dutch research university perceive, interpret, and (re-)imagine inclusive classroom practices. We conducted Feminist Participatory Action Research, involving eight focus groups and one in-depth interview ($N=42$) with active co-creation and visual ethnography. Drawing on and contributing to two key Universal Design for Learning frameworks, we found that students mainly valued multiple practices of academic engagement, alongside diverse practices of social inclusion and engagement, representation and action and expression, extending and refining the literature. From their experiences, we identified six interconnected, mutually reinforcing key practices: (1) optimising relevance, value and authenticity; (2) fostering collaboration, interdependence and collective learning; (3) fostering supportive, respectful lecturer-student interactions; (4) fostering community and belonging; (5) representing a diversity of perspectives and identities in authentic ways; and (6) providing varied assessment types. Our study reveals students' preferences for inclusive, collaborative, problem-based and impact-driven education approaches and calls for inclusive, comprehensive and systemic implementations.

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Introduction

In recent decades, inclusive education (IE) has gained international prominence, supported by international treaties and policy initiatives that advocate for IE for all learners (United Nations 2018). IE has traditionally been performed and researched in primary and secondary education. However, in recent years, universities have focused more on IE practices and policies, partly following rapidly expanding and diversifying student populations, including groups historically marginalised in higher education (HE) (United Nations 2018). These trends are also visible in the Netherlands, where recent policy developments emphasise flexibility, individualised learning pathways and broader commitments to IE (Van der Hijden and Martin, 2023). Nevertheless, significant challenges remain. Many lecturers report insufficient time, training and institutional support to implement IE, and classroom practices often fail to enhance learning for all students, inadvertently reinforcing disparities (Amor et al. 2019; Messiou 2017).

A review of the literature reveals five key gaps. First, IE research continues to focus on primary and secondary education, leaving HE comparatively underexplored (Filippou, Acquah, and Bengs 2025). Second, while numerous studies examine lecturers' inclusive practices, far less attention has been given to how different actors – particularly students – perceive these practices (Amor et al. 2019). Nevertheless, students' unique insider perspectives are essential to inform more inclusive, evidence-based policies and practices. Third, most studies examine specific student categories, particularly those with special education needs and/or disabilities (Messiou 2017). Although such categorical foci can be legitimate, they undermine the central idea of IE to improve the learning of *all* students. Moreover, they risk stigmatising students, neglecting students who do not fit pre-defined labels, and shifting attention from contextual barriers to deficit views that blame individual learners for educational difficulties (Messiou 2017). Fourth, IE scholarship has tended to be theoretical or descriptive rather than collaborative or transformative, despite growing recognition that participatory approaches can challenge power imbalances, bridge gaps between research and practice, and generate new, more inclusive pedagogical strategies (Ainscow, Booth, and Dyson 2006). Finally, the field remains heavily Anglo-Saxon-oriented, with limited research in countries such as the Netherlands, whose socio-cultural and educational landscapes differ substantially (Hernández-Torrano, Somerton, and Helmer 2022).

In response to these gaps, this study investigated *how students at a Dutch research university interpret and (re-)imagine inclusive classroom practices*. We conducted eight focus groups and one in-depth interview ($N = 42$), incorporating active co-creation and visual ethnography (Pink 2021). Guided by Feminist Participatory Action Research principles, we sought to conduct accessible, inclusive research that fosters collaborative relationships, enables bottom-up, co-created perspectives, addresses power inequalities and contributes to social transformation (Leavy and Harris 2018). Drawing on and extending two central IE frameworks – the Center for Applied Special Technology's (CAST) (2024) Universal Design for Learning (UDL) model and Katz's (2012) Three-Block Model (TBM) – we identified six dynamic, interactive and mutually reinforcing inclusive classroom practices that students particularly valued. Their responses highlight strong preferences for inclusive, collaborative, problem-based and impact-driven pedagogies. This study contributes to IE scholarship by foregrounding students' rarely examined

perspectives in a highly international and diverse non-Anglo-Saxon HE context, using an inclusive participatory methodology. Furthermore, through refining and integrating two key UDL frameworks, the article provides a more comprehensive analytical lens for examining IE in HE. In doing so, it aims to support ongoing efforts to decolonise academic research and institutional practice (Timmis et al. 2024).

Inclusive education in higher education

IE has been contested since its inception, with various interpretations and definitions (Ainscow, Booth, and Dyson 2006). We consider IE an educational philosophy and practice aimed at *proactively* enhancing the participation and learning of *all* students in a *common* educational context. Contrasting with one-size-fits-all curricula, IE acknowledges and strives to proactively accommodate students' diverse backgrounds, needs, abilities and learning styles (Messiou 2017). It emphasises presence, participation and achievement and considers inclusion a never-ending process inherently linked to exclusion (Ainscow, Booth, and Dyson 2006).

Over recent decades, universities worldwide have implemented measures to make HE more accessible, particularly for students with disabilities, including through support services, technologies and some IE practices (Thomas 2012). Although these measures frequently facilitate *access*, they often fall short of guaranteeing *meaningful inclusion and high-quality learning for all students*, particularly non-traditional groups (Thomas 2016). Existing research has examined institutional IE policies and their reception (Thomas 2016), yet it remains largely categorical, theoretical and descriptive – highlighting the need to explore all students' lived experiences in classroom settings.

Inclusive classroom practices in higher education and students' perceptions

Inclusive classroom practices aim to support the participation and learning of *all* students by ensuring equitable opportunities for academic success. Much of the existing literature conceptualises these practices through the UDL model, primarily informed by CAST's (2024) UDL guidelines and Katz's (2012) TBM. Below, we outline the UDL model and integrate its key frameworks to structure our discussion of inclusive practices and students' perceptions.

The Universal Design for Learning model

UDL is an IE framework for proactively designing flexible teaching and learning approaches that meet the diverse needs of learners (Meyer, Rose, and Gordon 2014). It assumes learner variability as the norm and therefore seeks to enhance access, participation and progress for all learners. CAST's UDL (2024) framework includes three key principles: lecturers should design multiple means of (1) engagement, (2) representation, and (3) action and expression. Various studies indicate that university students are generally satisfied with UDL-driven inclusive classroom practices and perceive these as supporting their learning and academic success (Dean, Lee-Post, and Hapke 2017). We now discuss each principle and related student perceptions.

Principle 1: design multiple means of academic engagement

To support purposeful and motivated learners, lecturers should provide multiple avenues for academic engagement that address the ‘why’ of learning through the affective network of the brain (CAST 2024). Students in UDL-informed environments typically report higher academic engagement (Coffman and Draper 2022).

First, lecturers can *design options for welcoming interests and identities* (CAST 2024). This includes offering choices in content and tools and connecting learning to relevant contemporary or local contexts. For instance, incorporating digital technologies can strongly stimulate academic engagement (Hitchcock et al. 2016).

Second, *effort and persistence can be sustained* by cultivating collaboration, interdependence, collective learning and a strong sense of belonging. Student engagement and belonging are crucial to improving student retention and success (Ribera, Miller, and Dumford 2017; Thomas 2012). These are most effectively nurtured through academic activities in which all students participate, requiring an inclusive, rather than targeted, approach to teaching, learning and assessment (Thomas 2016). Practically, student interactions can be encouraged through ice-breaking activities, collaborative learning groups, group projects and small group in-class activities, whereas interactions with lecturers can be stimulated via welcoming messages, face-to-face meetings, video conferencing, written feedback and e-mail (Coffman and Draper 2022).

Principle 2: design multiple means of social inclusion and engagement

While CAST’s first principle thus considers socio-emotional factors that improve academic engagement, Katz’s (2012) TBM extends the focus to broader social and emotional learning.

Because few studies explore students’ perspectives on these aspects, we complement CAST’s model by integrating a principle centred on social inclusion and engagement.

Social and emotional learning aims to cultivate compassionate classroom environments that promote both social and academic engagement (Katz 2012). It involves supporting students in *building a positive self-concept* (e.g. being aware of strengths and challenges, feeling a sense of belonging) and *valuing diversity* (e.g. awareness of others’ strengths and challenges, valuing diverse community contributions). Students value *supportive lecturer-student interactions*, involving both verbal (e.g. using names, respectful communication) and non-verbal lecturer immediacy (e.g. eye contact, listening, patience), as well as *warm, supportive classroom climates* (Coffman and Draper 2022; Faulkner et al. 2021). They appreciate being treated as capable individuals and expect limited power differentials between lecturers and students.

Principle 3: design multiple means of representation

For resourceful, knowledgeable learners, lecturers should represent information and content in varied ways, addressing the ‘what’ of learning through the brain’s recognition network (CAST 2024). With UDL-driven education, students often feel more in control of learning (Coffman and Draper 2022).

Specifically, lecturers should *provide multiple options for perception, language and symbols*. This includes presenting diverse perspectives and identities authentically and challenging stereotypes. Clear information, language and symbols combined with

varied learning resources (e.g. websites, social media, images, podcasts, concept maps, personal experiences) can stimulate different sensory modalities (Coffman and Draper 2022). Students identify such variation as essential to increase their understanding of course content (Dean, Lee-Post, and Hapke 2017).

Principle 4: design multiple means of action and expression

For strategic, goal-directed learners, lecturers should vary how students can express what they know and can do, addressing the ‘how’ of learning via the brain’s strategic network (CAST 2024). Although the variety of UDL-driven activities and course materials may feel overwhelming (Anderson, Davis, and McLaughlin 2019), students often experience increased academic growth (Coffman and Draper 2022).

Specifically, lecturers can provide *different options for interaction* with curricular materials and assistive technologies (CAST 2024). They should vary the response methods and optimise access to accessible and assistive materials and tools. This includes combining open lectures, in-class activities and discussions, online learning, self-study, and (group and individual) assignments, involving suitable digital learning tools. Students often appreciate using technology, especially for having different options to express their ideas and creativity (Hitchcock et al. 2016).

Additionally, lecturers should provide *different options for expression and communication* through clear and diverse assessment types, such as presentations, essays and reflections. Evaluation procedures should be reflexive, constructive and sensitive to students’ diverse needs, enabling them to demonstrate understanding through modalities that suit their strengths (Anderson, David, and McLaughlin 2019).

Methodology

To explore how university students interpret, respond to and (re-)imagine inclusive classroom practices, the first author, assisted by the co-authors, conducted 8 focus groups (4–7 participants each) and 1 semi-structured in-depth interview ($N = 42$), involving active co-creation and visual ethnography (Pink 2021). Focus groups were chosen for their usefulness in revealing how meaning is socially constructed (Bloor et al. 2001), while the interview was held for practical reasons.

Sampling strategy

Using purposive sampling, we recruited students from a social sciences and humanities faculty at a Dutch research university, for reasons of feasibility, focus and methodological rigour. The faculty’s highly international and diverse student body made it a suitable setting, although full sociodemographic representativeness was not feasible. Participants were recruited through e-mail, interpersonal communication, social media, posters, slides and snowball sampling, resulting in a relatively diverse sample: 37 women and 5 men, aged 19–30 ($M = 22.5$), with varied abilities/disabilities and racial/ethnic backgrounds. We had 12 Dutch and 2 Greek, Indian and Latvian participants, while the others had Argentinian, Aruban, British-Jamaican, Bulgarian, Chinese, Dutch-Armenian, Dutch-Brazilian, Dutch-Portuguese, French, French-Dutch, French-German, Georgian-Spanish, German, Irish, Italian, Japanese, Kyrgyz, Nepalese,

Portuguese–Brazilian–Luxembourgish, South-Korean, Russian, Slovak-Polish, Spanish and Vietnamese backgrounds. This involved 22 bachelor's, 18 master's and 2 pre-master's students.

Interview procedures

The English-spoken, audio-recorded face-to-face focus groups and interview took place on campus in May and June 2024. They lasted between 103 and 136, and 79 min, respectively. We flexibly used an interview guide and an accompanying PowerPoint presentation, which comprised online questionnaires, dilemma questions and participatory activities. These tools provided multiple means of engagement, representation, action and expression, in line with IE principles, and were adapted to newly acquired insights.

The interview guide began with an explanation of the project and research ethics. Participants were then invited to introduce themselves and to complete online questionnaires on their sociodemographics and IE. Their brief, anonymous responses on IE informed follow-up and reflexive dilemma questions that stimulated in-depth discussions on (inclusive) classroom practices. Finally, we used creative community-based participatory methods, including photo-elicitation (Harper 2002), photovoice (Wang and Burris 1997) and participatory drawing (Literat 2013). These methods provide additional, more empowering ways to listen to and collaborate with students – commonly seen as a ‘voiceless’ population in educational research – on sensitive topics, enabling bottom-up, co-created perspectives and alternative, non-verbal output (Pink 2021).

Photo-elicitation implies using images to evoke deeper thoughts, feelings, memories and ways of talking that are more difficult to address through merely verbal discussions (Harper 2002). Participants were asked to individually select the image they considered most striking from a theoretically informed collection of 12 images, which represented key inclusive classroom practices, and explain their choice. Further, through photovoice, people can ‘identify, represent, and enhance their community’ (Wang and Burris 1997, 369). Participants were asked to identify with at least one character in their chosen image and give it a ‘voice’ through messages or text balloons. Participatory drawing is a non-mechanical visual research method considered highly efficient and ethical for research with young people. It ‘has the potential of revealing a more nuanced depiction of concepts, emotions, and information in an expressive, empowering, and personally relevant manner’ (Literat 2013, 84). We asked the participants to collectively discuss and depict their key inclusive classroom practices on a poster.

Data analysis

All data were transcribed and analysed in Atlas.ti using thematic analysis (Clarke and Braun 2021). We familiarised ourselves with the data and, by combining inductive insights with pre-existing analytical categories derived from the literature (CAST 2024; Katz 2012), generated initial codes, developed, reviewed and named themes, and reported. Triangulating multiple data types strengthened analytical depth and validity.

Ethical considerations

Informed consent was obtained following detailed discussions of the study's aims, participation requirements, rights to withdraw, and issues of privacy, anonymity and confidentiality. The research followed principles of feminist ethics of care, using inclusive methods, sensitive interview techniques and responsiveness to ethically important moments. Participants received catering and 15-euro Bol.com vouchers as compensation. All data were stored securely on encrypted, password-protected devices. Identity-sensitive pseudonyms were used, identifying details were removed, and explicit permission was requested for all presented quotes and figures.

Researcher positionality

The researchers' roles – one lecturer (first author) and two students (second and third authors) – required careful reflection. Because insider positions can increase the risk of social desirability bias, we engaged in reflexive journaling, regular debriefing and transparent communication about our dual roles. Furthermore, this study is collaborative: student perspectives informed all phases, supporting efforts to decolonise IE research (Timmis et al. 2024). In addition to collaborating with the participants, the second and third authors, as a student assistant and research intern, acted as co-researchers in all and most stages, respectively. The study also intends to be transformative. Its insights have informed a teaching guide and workshops designed to improve institutional policies, practices and awareness of IE. Students are expected to benefit both directly and indirectly from these outputs, and many arguably benefitted from their participation itself (Ainscow and Messiou 2018).

Results

Our analysis revealed that participants mainly valued multiple means of academic engagement, alongside substantial attention to varied practices of social inclusion and engagement, representation and action and expression. From their experiences, we identified six interconnected, mutually reinforcing key practices: (1) optimising relevance, value and authenticity; (2) fostering collaboration, interdependence and collective learning; (3) fostering supportive, respectful lecturer-student interactions; (4) fostering community and belonging; (5) representing a diversity of perspectives and identities in authentic ways; and (6) providing varied assessment types. Each practice aligns with an IE principle and is operationalised through specific guidelines, which are discussed in more detail below (Figure 1).

Principle 1: design multiple means of academic engagement

The study identified that participants highlighted two primary practices that enhance academic engagement: optimising relevance, value and authenticity, and fostering collaboration, interdependence and collective learning.

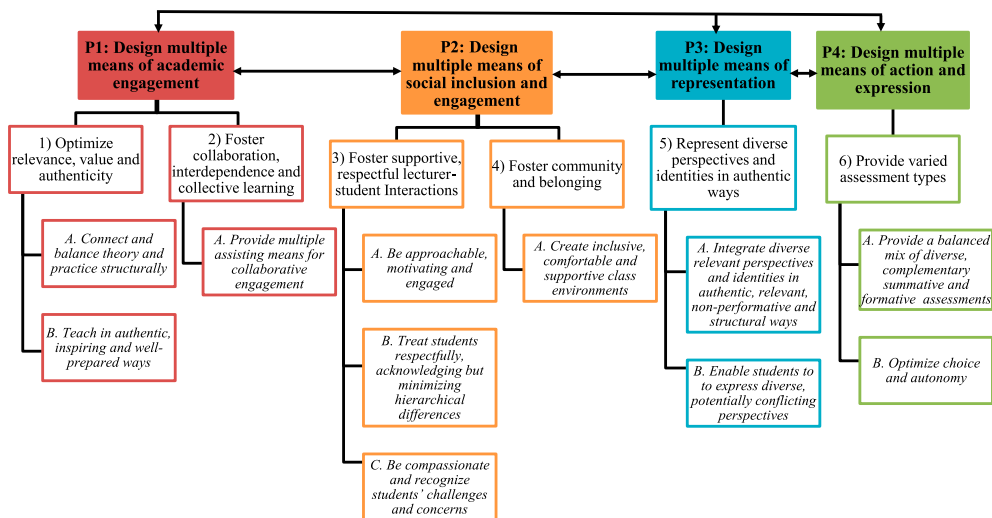


Figure 1. Key IE principles, practices and guidelines as perceived by university students, and theoretically informed by CAST's (2024) UDL model and Katz's (2012) TBM.

Optimise relevance, value and authenticity

Participants reported feeling more engaged by course content, activities and teaching styles that are relevant and valuable to their interests, goals and communities (cf. CAST 2024). Specifically, they suggested two main ways to optimise relevance, value and authenticity. First, the findings highlight that lecturers should *structurally connect and balance theory and practice*, moving beyond isolated case studies and examples, by including societally relevant and/or practice-oriented subjects, case studies, projects, skills development, assessments and industry engagement (e.g. guest lectures, panels or site visits). Such connections, after all, equip students for future professional contexts, particularly those with limited access to professional opportunities. As Diya argued:

‘As a non-EU person, I don’t get a visa or work visa to do full-time internships (...). So anytime someone brings an industry professional into a classroom, that’s the only time you get a glimpse behind the scenes’.

Moreover, the analysis revealed that connecting theory to students’ diverse personal interests, lifeworlds and/or backgrounds (CAST 2024) – or enabling them to do so by optimising choice and autonomy (cf. principle 4 [P4], *infra*) – enhances both academic engagement and social inclusion (P2). International students, in particular, reported feeling more included when topics connected to their home regions or cultures. As Hana mentioned, ‘I didn’t really experience learning something related to my home country. But sometimes I see a topic related to (neighbouring country). And then I feel more included’. These observations underscore that authentic representations of diverse perspectives and identities (P3) support social inclusion and engagement (P2) but also facilitate deeper understanding (P3) and more effective demonstration of learning (P4).

Second, the study identified that participants feel more engaged and better comprehend courses (P3) when lecturers *teach in authentic, inspiring and well-prepared ways*

(Faulkner et al. 2021). Demonstrating passion and expertise about the course, such as introducing themselves and explaining their personal connection towards the course, enhanced academic motivation. As Amala reflected: ‘She used to be a migrant, and now she’s teaching migrant studies (...). Those people really inspired me because they’re so passionate about their course (...) and bring their own positionality within the classroom’.

Foster collaboration, interdependence and collective learning

We found that most participants highly value practices that foster collaboration, interdependence and collective learning (cf. CAST 2024; Coffman and Draper 2022). These often enable them to feel more academically engaged and socially included (P2; cf. Thomas 2016), understand and learn the course content better (P3) and demonstrate their understanding and skills better (P4). Gabriel highlighted the importance of interactivity: ‘Because in these environments I’ve learned the most, because I’m involved, and I want to listen. And if there’s just one lecturer who talks maybe 90% of the class, then I tend to lose focus quite quickly’.

Various participants suggested that lecturers, therefore, should support collaboration through diverse formats (e.g. class and group debates, role-plays, group assignments, peer feedback, buddy systems), relevant and engaging subjects (P1), small group sizes, assistive and accessible digital learning tools, and sufficient time. Numerous participants appreciated being encouraged to collaborate and help each other. As Eva reflected:

‘If you have specific people who are willing to help and also share it if you wanna help (...), the others who are struggling would be more inclined to go to them (...). And I think it just helps the person that’s actually doing as well, because the more you’re talking about something, you understand it better yourself’.

The analysis identified that *inclusive, comfortable and supportive class environments* in which students feel safe (P2) form an important prerequisite for participation. Various participants, many of whom have attention issues, shy personalities and different cultural and/or academic backgrounds, explained that coercive participation or grading pressure often scares and demotivates them, inhibiting engagement. This suggests that lecturers should instead sensitively invite, listen to and acknowledge different perspectives (P3). Elena discussed a positive example:

‘She was always trying to engage people in a very comfortable way (...). I think everybody was participating in that class and (...) giving her feedback like ‘You just did great because you just involved everyone’.

Principle 2: design multiple means of social inclusion and engagement

The analysis demonstrated the importance of social inclusion and engagement (Katz 2012). Lecturers should support this by fostering supportive, respectful lecturer-student interactions and legitimate senses of community and belonging (Katz 2012).

Foster supportive, respectful lecturer-student interactions

The analysis identified that most participants feel more socially and academically engaged (P1) when lecturers foster supportive, respectful lecturer-student interactions

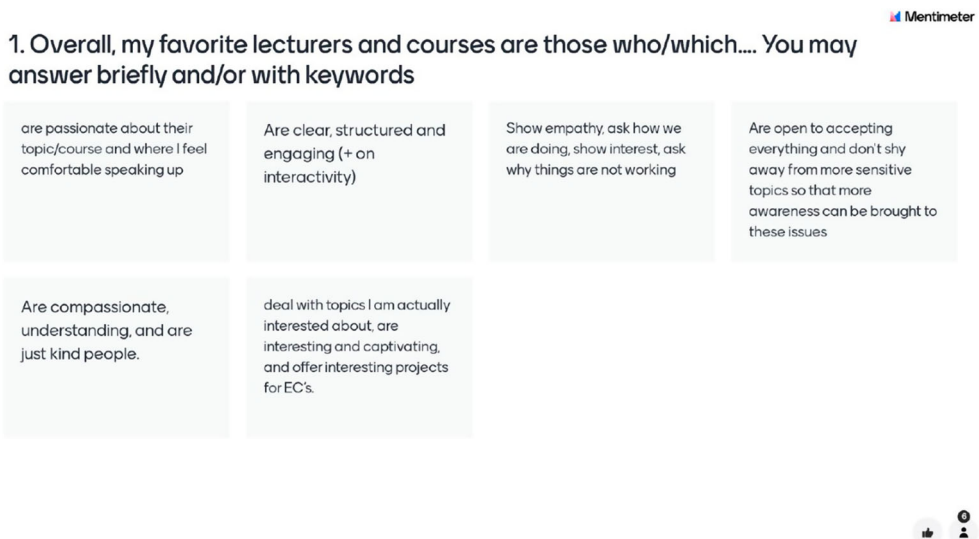


Figure 2. Mentimeter responses highlight the importance of approachable, motivating and engaged lecturers.

(Faulkner et al. 2021). First, we found that they value *approachable, motivating and engaged lecturers* (see Figure 2). As Nana elucidated:

‘Because I was having a hard time getting the participants in, he [thesis supervisor] told me ‘Send me an e-mail every day of how many participants you have’, so that really encouraged me to actually do more things to get the participants’.

Second, various participants argued that lecturers should *treat students respectfully, acknowledging but minimising hierarchical differences* (Faulkner et al. 2021). This includes addressing students by name, listening attentively and taking them seriously. In contrast, lecturers who are disrespectful, rude, intimidating, judgemental, distant, careless, overly strict and/or controlling are not appreciated. While most lecturers were considered open and respectful, negative exceptions can seriously harm students, both socially (e.g. not feeling socially included and engaged) and academically (e.g. struggling with a course) (P1). Eva discussed a negative case: ‘She allowed for discussion, but then did not respect any of our answers, saying that we’re wrong or fixing it over and over again (...). So, what’s the point of ever actually putting something out there?’

Third, we observed that various participants value lecturers who are *compassionate and recognise students’ challenges and concerns* (Faulkner et al. 2021). This includes checking in on how students are doing and providing appropriate accommodations. It enables them to more confidently demonstrate their understanding (P4). As Nori mentioned:

‘She would like every morning that we had her class, ask how everyone is doing. ‘Is there someone who’s like seriously going through something, who wants to talk?’ And I could realize that everyone in the class was just so much more at ease, and it would also help us to talk to each other. So, it would just sort of create a better sense of community’.

Foster community and belonging

The analysis found that *inclusive, comfortable and supportive class environments* – where students feel safe, recognised and connected – are critical for social engagement, well-being and learning (cf. Coffman and Draper 2022; Faulkner et al. 2021; Little et al. 2022). Such environments also enable students to demonstrate their understanding more confidently (P4, see Figure 3).

We identified that particularly students who are new, international, neurodivergent or from different academic backgrounds are particularly vulnerable to social isolation, especially early in the academic year or in competitive classroom settings (cf. Little et al. 2022; Ribera, Miller, and Dumford 2017; Tavares 2024). Clarissa, who experiences ADHD, explained:

'I was noticing that people were like super-efficient and doing their best for grades. And I was like, 'I'm just trying to survive'. And I felt that pressure kind of made me less motivated because I knew that I wasn't gonna be as motivated or maybe as efficient, because I just can't'.

To mitigate these challenges, we found that participants recommended *fostering collaboration, interdependence and collaborative learning* (supra) to facilitate comfortable classroom environments involving legitimate senses of community and belonging (see Figure 4). Ice-breaking activities and culturally diverse group formations facilitated by the lecturer help students connect, overcome social anxiety, and feel included. Ayce told us: 'It's always so nice when in the first class of the term you can start with introducing yourself to the class. Because this way you can have those very fruitful conversations outside the academic hours'. Participants also emphasised consistent use of the programme language (English) to prevent non-native speakers from missing information or feeling excluded. These findings suggest the importance of classroom practices that support equitable participation, engagement, and a sense of community.

10. I can show my knowledge and understanding of the course content and my skills better when... You may answer briefly and/or with keywords

Mentimeter

The environment created lets me express that information.

There is a good atmosphere in seminars, where I feel comfortable with asking questions and being critical of the literature and discussions

I feel comfortable enough, meaning that I will not be afraid of others judging me if I will say something wrong

Through the written assignments and the grades received for that assignment. But also through asking and answering questions in the class or in class activities

When I did actually enjoyed the course or because I got passionate about the subject and I managed to make information stick into my brain, perhaps also due to interactive modalities of teaching



Figure 3. Mentimeter responses highlight the importance of a comfortable classroom for students to act and express themselves.

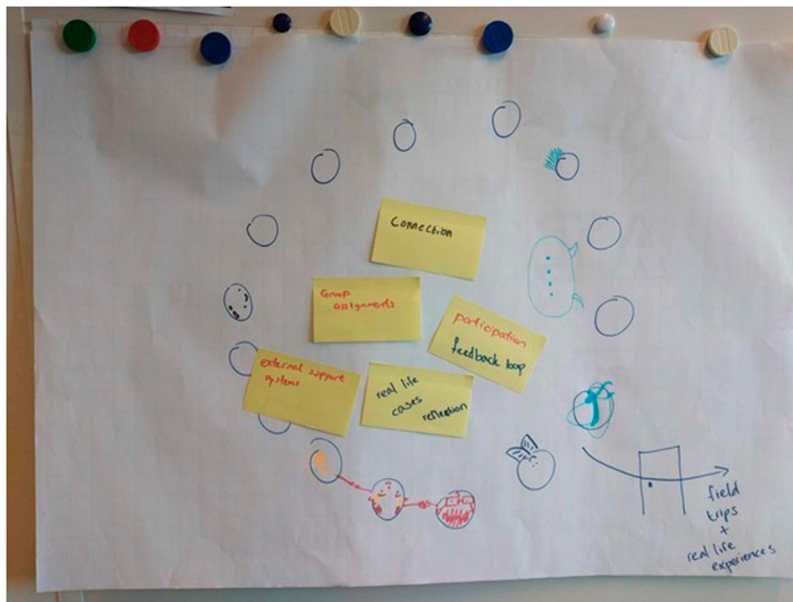


Figure 4. A co-created poster highlights the importance of collaboration, interdependence and collaborative learning for social inclusion and engagement.

Principle 3: design multiple means of representation

The analysis revealed that participants strongly valued courses in which knowledge is represented in multiple ways, particularly through the consistent inclusion of diverse perspectives and identities (CAST 2024; Coffman and Draper 2022).

Represent a diversity of perspectives and identities in authentic ways

Findings indicate that students value the structural and authentic integration of diverse perspectives and identities across lectures, readings, assignments, and examples, for three key reasons. First, the data suggest that a diversity of perspectives and identities enhances academic engagement by increasing the relevance, value, and intellectual richness of course content (P1). Exposure to varied viewpoints encourages collective learning and stimulates discussion (P1). As Chris highlighted, ‘It gets especially valuable when there can be different perspectives on things. Because then that stimulates a group discussion and there’s basically no right or wrong’.

Second, the analysis demonstrated that such representations strengthen social inclusion and belonging (P2). Students, particularly from minority groups, reported that they can more easily identify with particular perspectives and identities, fostering legitimate senses of validation, affirmation, community and belonging. As Ayce said: ‘So I was like “Oh my God, (neighbouring country of her country of origin) is being represented in the Dutch university!” Felt so cool’. Third, findings show that diverse and authentic representations deepen understanding (P3) and support students in demonstrating their knowledge (P4). They allow learners to question assumptions, de-universalize dominant narratives, and extend their knowledge. Elena explained: ‘The teacher was gay and very open about it (...). He put himself in a vulnerable

position, and that also helps you connect a bit more with him and learn from a different perspective’.

The analysis further revealed that participants, therefore, expect lecturers to *integrate diverse relevant perspectives and identities in authentic, relevant, non-performative and structural ways*, going beyond isolated case studies (see Figure 5). Many explicitly called for decolonising curricula, often perceived as Western-, Euro-, or Dutch-centric, by representing diverse (historically underrepresented) literature, perspectives, case studies and examples (Laing 2021). Lan emphasised this point:

‘I think like, after three years consuming so much European content, I’ve even become a little bit Eurocentric (...) It’s a bit too much, especially for the European students themselves; they don’t get to realize that there is so much more beyond Europe’.

Additionally, findings highlight that students want *opportunities to express diverse, potentially conflicting, perspectives*. Participants stressed the value of frequently discussing socially relevant issues (e.g. the Israeli-Palestinian conflict, P1) within supportive classroom environments. As Margaret noted: ‘[I]t’s nice to have the professor have the role of like, “Okay, so this is going on right now. Why is this going on?” And maybe have the space to talk about it’. Overall, the analysis indicates that these practices require inclusive, respectful, and safe classroom environments (P2) paired with low-barrier activities that centre diverse perspectives and identities.

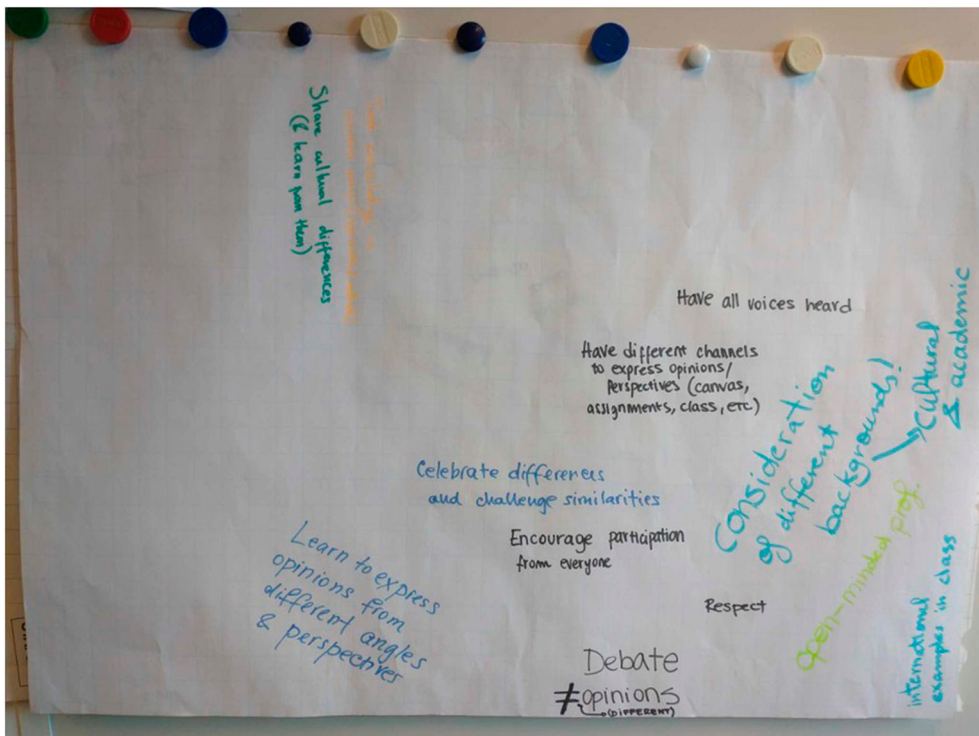


Figure 5. A co-created poster highlights the importance of representing a diversity of perspectives and identities in authentic ways.

Principle 4: design multiple means of action and expression

Provide varied assessment types

The analysis revealed that participants highly value varied assessment types (cf. Tai, Ajjawi, and Umarova 2024), as these foster academic engagement (P1), deepen understanding (P3), and enable students to demonstrate their learning more effectively (P4).

Findings indicate that students generally prefer *a balanced mix of complementary summative assessments* (e.g. exams, papers, projects, presentations, creative assignments, peer- and self-evaluations) *and formative assessments* (e.g. in-class activities, participation). The data suggest that such diversity should be implemented both at the course and programme levels. More specifically, participants consistently expressed a desire for more practice-oriented, applied, creative, and reflexive assessments, such as reflexive essays, video presentations, and real-world projects (see Figure 6). These formats allow students to draw on their strengths, increasing motivation and performance. As Victoria explained: ‘If you can be creative, maybe you can play into a strength of yours that will (...) make you more motivated to actually get a good grade and to read the material’.

Conversely, the analysis showed that some common exam formats, especially traditional knowledge-based or multiple-choice exams, are perceived as overly rigid and focused on rote memorisation. Neurodiverse participants in particular reported that these formats hinder engagement and limit their ability to demonstrate understanding. Relatedly, findings also indicate that students strongly dislike single-assessment courses, which they experience as both unengaging and disproportionately stressful.

The data further highlight the importance of *optimising choice and autonomy* in assessment. Participants valued having flexible options regarding both content (e.g. topic, method, case study) and approach (e.g. autonomy in dividing group-work

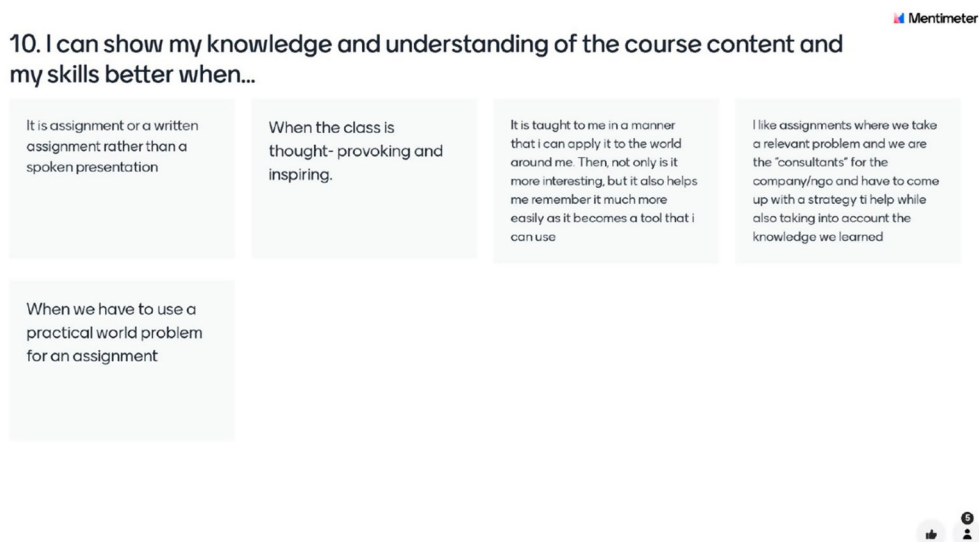


Figure 6. Mentimeter responses highlight the importance of practice-oriented, applied, creative and/or reflexive assessments, involving real-world issues.

tasks). As Nori noted: ‘When I have a course that I can write a paper about, I write about the things that are obviously present in the course and relevant but also interesting for what I wanna do, for example, later in life’.

Discussion and conclusion

This study demonstrates that students highly value UDL-driven inclusive classroom practices, with particular emphasis on practices that promote academic engagement, complemented by practices related to social inclusion, representation, and action and expression. Across the dataset, students consistently highlighted six practices as especially meaningful: (1) optimising relevance, value and authenticity; (2) fostering collaboration, interdependence and collective learning; (3) fostering supportive, respectful lecturer-student interactions; (4) fostering community and belonging; (5) representing a diversity of perspectives and identities in authentic ways; and (6) providing varied assessment types.

These practices have mostly been identified in existing literature (CAST 2024; Katz 2012), yet little is known about how students themselves perceive, interpret, and (re-)imagine them (Faulkner et al. 2021; Little et al. 2022). This study advances the literature by providing student-centred, empirically grounded insights into which practices students regard as inclusive, important and why. Crucially, our participatory approach enabled students not only to identify existing inclusive practices but also to (re-)imagine and co-create new practices and guidelines, addressing a gap in predominantly theoretical or descriptive IE and UDL scholarship.

Where previous studies often focus on a limited subset of IE principles (e.g. academic engagement, social inclusion and engagement, representation, or action and expression) (Hitchcock et al. 2016; Little et al. 2022), our open and exploratory design captures how students themselves interpret and prioritise these principles. The findings indicate that practices of academic engagement are perceived as particularly crucial, not only for sustaining motivation but also for understanding subject matter and demonstrating knowledge. This partially nuances existing work, which tends to foreground social inclusion as the most valued dimension (Faulkner et al. 2021; Little et al. 2022).

Nevertheless, our study also shows that students affirmed the importance of practices across all UDL principles, underscoring that IE extends far beyond single strategies or isolated domains. It highlights the importance and necessity of adopting inclusive classroom practices in all facets of higher education, from lecturers’ teaching styles and interactions with students, to teaching materials, activities and assessment methods. More generally, our findings provide further empirical support for the growing expectation among students for diverse, flexible, inclusive, collaborative, problem-based, and impact-driven education, rather than traditional, uniform, and rigid approaches (Coffman and Draper 2022; Faulkner et al. 2021).

An additional contribution concerns the dynamic interplay between UDL principles. Although CAST’s (2024) UDL framework acknowledges interactions across principles, our analysis reveals a more multi-layered and deeply intertwined ecology of inclusive practices. Students repeatedly described practices – especially optimising relevance and authenticity, fostering collaboration, interdependence and collective learning, and fostering community and belonging – as mutually reinforcing and inseparable in practice. This suggests that

UDL principles function less as discrete, isolated design choices and more as an integrated, relational system of classroom practices. We therefore recommend that future UDL models and institutional guidelines make these dynamic interactions more explicit, supporting more coherent and holistic implementations across higher education settings.

Overall, this study contributes to IE research in several theoretical, empirical and methodological ways. First, it enriches understandings of how inclusive classroom practices are perceived, interpreted and (re-)imagined by students within an international, diverse research university context, which has rarely been examined in-depth. Moreover, it provides comprehensive, bottom-up insights from a highly diverse student group, enabled by a non-categorical sampling lens that avoids reducing students to predefined demographic labels. Additionally, by combining and flexibly integrating two complementary UDL frameworks, the study offers a more comprehensive analytical lens for examining IE. Finally, it demonstrates the value of participatory, community-based, and creative methods – approaches seldom used in IE/UDL research – for eliciting co-created, arguably more empowered student perspectives, including non-verbal outputs.

These findings underscore the need for lecturers, management staff, and institutional decision-makers to recognise and adopt students' insider perspectives and (re-)imaginings of inclusive practices when developing educational policies, teaching approaches, and learning environments. Doing so can enhance the learning experiences and success of all students (Meyer, Rose, and Gordon 2014). However, research also shows that lecturers often perceive UDL-aligned practices as time-consuming, labour-intensive, or difficult to sustain without structural support (Moriña 2018; Zhang et al. 2018). We therefore emphasise the importance of systemic, institution-level approaches to inclusive teaching. Rather than framing inclusion as an individual responsibility, institutions should embed UDL principles in workload models, curriculum design processes, and staff development programmes. Such alignment is essential to meeting students' needs while supporting lecturers' capacities.

Finally, this study has several limitations. Although diverse, the sample is not fully representative in terms of gender, programme, or programme level. Because inclusion and diversity are prominent topics in the selected faculty, and due to the nature of the study, participants may have been (highly) engaged students with a strong affinity for inclusion. These factors may have influenced the results – for instance, in terms of what, how, and why classroom practices are perceived, interpreted, or (re-)imagined as inclusive – and may limit the generalizability of the findings, particularly beyond social sciences and humanities programmes. Future research should therefore draw on more representative samples, include STEM and professional programmes, and adopt multi-perspective designs that triangulate insights from students, lecturers, management, professional staff, and parents. Longitudinal research would be valuable for examining how perceptions of inclusion evolve, particularly in response to policy changes or pedagogical innovations. Finally, studies situated in the Global South remain critical to addressing the continued dominance of Western perspectives in IE/UDL scholarship.

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Data availability statement

This study's analysis documents are, given the involved vulnerable population and the theme's sensitive nature, available from the corresponding author upon reasonable request.

Ethical approval

The authors obtained ethical approval from ESHCC's research ethics committee at Erasmus University Rotterdam (Application Reference: ETH2324-0202).

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