

Empowering Diversity: A Case Study on Inclusive Assessment and Universal Design for Learning in a Post-secondary Programme for Students with Intellectual Disabilities.

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Abstract.

This paper addresses inclusive assessment and Universal Design for Learning (UDL) for students with intellectual disabilities in higher education. Inclusive assessment entails the creation and application of assessment methods and practices that are both fair and effective, allowing every student to showcase their complete capabilities in terms of knowledge, comprehension, and skills. Universal Design for Learning (UDL) is an instructional approach designed to make curriculum and learning more accessible for every student. Presenting findings of a case study from a post-secondary education programme for students with intellectual disabilities in an Irish university, this article aims to contribute to the knowledge gap existing on this topic in the current literature. The study explored students' perspectives on inclusive assessment which had been designed and implemented using a UDL approach in a two-year full time Level 5 National Framework of Qualifications (NFQ) course. Adopting a mixed-method approach, the students were invited to take part in two focus groups and to complete an online anonymous qualitative survey structured in an easy-to-read format. The survey and focus group findings provided valuable insights into student perspectives on assessment within the course, designed on UDL principles. Students recognized the multiple means approach in assessment as beneficial, enabling them to express learning without extra accommodations. Challenges cited include time management, assignment preference, and system consistency. Despite occasional anxiety, students felt empowered by engagement with assessments. Suggestions for improvement included more regular feedback, consistency in coursework management, and diverse assignment delivery options. The results of the case study underscored the significance of student voice regarding assessment, emphasising its invaluable role in advancing inclusive practices within a curriculum that adopts a UDL-based approach.

Keywords: Inclusive assessment; Intellectual disabilities; Post-secondary education; UDL.

1. Introduction.

Inclusive assessment practices are essential for accommodating the diverse learning needs of students in higher education, ensuring that all students, regardless of their backgrounds or abilities, have equitable opportunities to demonstrate their knowledge and skills. Over the past decades the university student population has become increasingly diverse, including students from minority backgrounds, socio-economic disadvantage, different languages and those with disabilities. While this reflects the efforts put into widening participation policies, and a change in how diversity is perceived in society, some groups are still underrepresented due to a complexity of factors. Historically, individuals with intellectual disabilities have been marginalised from higher education contexts due to ableist biases, limited opportunities to access university programmes and numerous systemic obstacles, including admission criteria, a lack of qualifications, and educational support (Kubiak et al., 2021).

Ireland has been at the forefront in the advancement of post-secondary inclusive education programmes within universities in Europe (Camedda & Aston, 2024). Through the implementation of local initiatives, the past decade has witnessed a notable rise in the number of university programmes catering to students with intellectual disabilities, now supported through national ringfenced funding (Camedda & Aston, 2023). This reflects a robust national commitment to improving educational opportunities in higher education for this specific student population. Ensuring quality and accessible education for students with intellectual disabilities aligns with the existing challenges of creating a more inclusive learning environment at university level. A noted wide range of abilities among students with intellectual disabilities also emphasises the need to respond to student diversity by increasing universal accessibility to the curriculum and minimises individualised learning accommodations (Karvonen et al., 2020).

Universal Design for Learning (UDL) is an instructional approach designed to make curriculum and learning more accessible for every student (Boothe et al., 2018) through three main areas: engagement, representation and action and expression (Meyer et al., 2014). This approach has gained a reputation among third level institutions for providing a framework that supports students in becoming expert learners while providing an accessible curriculum (Saha-Gupta et al., 2019, Healy et al., 2023).

While UDL has grown in popularity as a method of providing inclusive education in colleges

and universities in the USA and Europe (Fovet, 2020; Knarlag & Waters, 2016), there remains some ambiguity amongst educators as to the use of UDL as a framework or an intervention in post-secondary settings (Fornauf & Erickson, 2020) and the challenge remains for educators to provide UDL informed programmes that can be delivered to all students and not just those with disabilities (Griful-Freixenet et al., 2017). UDL is often associated with special education however UDL focuses on learner variability rather than disability (Fornauf & Erickson, 2020), and this focus allows curriculum development to encompass all learners in how the content is delivered and assessed.

Traditional assessment used by post-secondary institutions can prove very challenging for students with intellectual disabilities and therefore is a crucial element to be considered when looking to provide an inclusive higher education offering. This student cohort faces additional challenges when it comes to expressing or communicating what they have learned if provided with most traditional ways of assessment, i.e. exams, essays, tests. (Jones et al., 2019) with the use of standardised assessment methods potentially creating barriers for students aiming to showcase their true learning. This challenge doesn't necessarily stem from lack of learning but rather from the nature of the assessment itself. UDL based assessment and feedback can significantly reduce the barriers that all students encounter in their learning journey at university (Karvonen et al., 2020).

In this paper, the topic of UDL based inclusive assessment will be discussed presenting findings of a case study from the Arts, Science, and Inclusive Applied Practice (ASIAP) programme in Trinity College Dublin where students with intellectual disabilities were asked to share their views on the assessment practice adopted in the programme.

2. Inclusive Assessment and UDL.

Assessment is a crucial component of teaching and learning and an important part of the university student experience. Assessment in the traditional sense often measures the student's grasp and mastery of the medium chosen by the assessor e.g. writing skills, typing and vision rather than an understanding of the learning goal (Hitchcock et al., 2002). For students with disabilities who may struggle with a particular medium this can erect unsurmountable barriers.

Assessment can serve multiple purposes. It can be used to measure performance and outcomes for accreditation or to support personal student learning development. However, assessment can also prepare students for life after college by promoting future learning (Boud & Soler, 2016). To be most effective, assessment should be integrated into the overall teaching framework and coordinated with other curriculum elements, such as learning objectives, reflecting a constructive alignment approach (Ali, 2018).

Inclusive assessment it is defined as *'the design and use of fair and effective assessment methods and practices that enable all students to demonstrate to their full potential what they know, understand and can do'* (Hockings, 2010, p. 34). These processes provide for all students whilst also meeting the needs of specific groups (Norwich, 2002). Traditionally, research on inclusive assessment has focused on accommodations, changing ways in which assessment is administered to certain students to make it more accessible (Niebling & Elliott, 2005). However, a UDL approach to teaching and learning implies that assessment would be designed to offer different options or formats that respond to the diverse student population attending a course or module. The transition involves moving away from accommodating some students to designing (or redesigning) a range of optional assessment formats that every student can engage with depending on their own preference. Inclusive assessment design should aspire to ensure/increase significant educational outcomes for students. However, such design is often created by academic staff with little or no consideration of the students' perspective on the assessment process.

Using the UDL framework (CAST, 2010) acknowledges the variability in learning and provides *'multiple means of action and expression'* whereby the student has choice and ownership over how they can express their learning. As in UDL teaching, UDL-based assessment requires a clear understanding of the learning goals. When these are clear, educators can provide scaffolds to help students overcome media-related barriers and show what they know, emphasising the formative aspect of assessment over the summative nature of evaluation. While challenges remain with the implementation of student choice in relation to equity, perceptions of staff and students, transparency and alignment of assessment methods (O'Neill, 2017; Morris et al., 2019), overall, it is acknowledged that the offering of choice in assessment methods has a beneficial impact on the performance of students (Waterfield et al., 2006; Craddock & Mathias, 2009).

It is acknowledged that UDL is widely used in primary and secondary education (Ok et al., 2017) and in the past fifteen years, there has been a growing recognition of the need for higher education to adopt more inclusive assessment practices (Tai et al., 2022). However, the inclusion of diverse students in higher education so far has been primarily recognised through individual access plans which provide accommodations for students with disabilities, particularly in relation to assessment (Lawrie et al. 2017). UDL can offer universities a framework for instructors to meet most students' needs by the introduction and implementation of simple inclusive design elements (Houghton & Fovet, 2013) without disregarding the individual differences in learning but reducing the need for individualised measures.

2.1 The role of student voice in assessment research.

In recent years, higher education assessment methods have evolved, influenced by changes introduced through the Bologna process in 1999 (Pereira et al., 2016) that provided a referenceable and objective structure on how students' work is evaluated in different higher education institutions across Europe. The literature on the topic of assessment in higher education is extensive and in the past decade an assessment approach emphasising students and their learning was evidenced by studies highlighting the connection between assessment and the learning process (Pereira et al., 2016; Jackel et al., 2017). In Ireland, The National Forum for the Enhancement of Teaching and Learning in Higher Education (2017), in collaboration with staff and students in Irish higher education, aimed to establish a shared understanding of the purpose and language of assessment. This initiative emphasises fostering students' responsibility in assessment and feedback, guiding them towards developing self-monitoring and independent critical evaluation skills. A significant aspect highlighted by the National Forum (2016) is the transition towards students becoming partners in the assessment process, for example increasing their involvement in assessment review and design. Over the decades, in response to the increasingly diverse student population, inclusive assessment has gained attention within institutional guidelines and implementation, nevertheless published research on this topic is very limited (Tai et al., 2021). In particular, there is a dearth of specific research regarding assessment in third level education programmes for students with intellectual disabilities while literature focused on UDL and inclusive post-secondary programmes seems more prolific. The research presented in this article, is a novel example of research on inclusive assessment in higher education that

directly involves students with intellectual disabilities.

Focusing on student voice when researching assessment presents several benefits:

- Including student views enhances the validity of research findings by incorporating the first-hand experiences and insights of those directly affected by assessments (Nieminen, 2022).
- Students' input ensures that assessments align with their learning experiences, needs, and expectations. Research that incorporates students' views is more likely to produce assessment strategies that are relevant and meaningful to the student population during their study and after graduation (Boud & Falchikov, 2006).
- Students may uncover issues or challenges related to assessments that researchers and educators might overlook. Their perspectives can shed light on aspects of assessment practices that may be problematic or need improvement, leading to more effective and fair assessment methods (Winter, 2015; O'Neill, 2017).
- Involving students in assessment research aligns with the broader shift towards student-centred learning. It acknowledges the importance of considering students as active participants in their education, fostering a sense of empowerment and ownership over their learning experiences (Reason & Ward, 2022).
- When students feel that their views are valued and considered in the assessment process, it can enhance their motivation and engagement with their studies. This, in turn, may positively impact their overall academic performance (McConlogue, 2020).

In summary, the inclusion of students' views in research on assessment in higher education fosters a more comprehensive, relevant, and student-centred approach. It contributes to the development of assessment practices that are fair, effective, and supportive of student learning and success.

3. The ASIAP case study.

3.1 Background.

The Arts Science and Inclusive Applied Practice (ASIAP) programme is a two-year, level 5 course (NFQ) in the School of Education, Trinity College Dublin. The ASIAP programme is designed to equip students with intellectual disabilities with meaningful academic skills and

prepare them for future pathways, such as employment. The course consists of nineteen modules including work placement, organized around five themes: Learning Theories and Self-development; Applied Science, Technology, and Maths; Business and Marketing; Advocacy, Rights, and Culture; and Fine Arts and Languages. While the entire programme integrates Universal Design for Learning (UDL) principles, the assessment stands out as a key area where UDL has been extensively implemented over the years. This ensures that students have multiple means of action and expression as part of the assessment process.

The course caters for ten students each year, with a total of twenty students per academic year. While the ASIAP curriculum is specifically designed and tailored to be accessible to the intellectually disabled community, it provides challenges that support students to develop academic knowledge, skills and readiness to employability. The teaching staff working on the programme consist of lectures from Trinity College Dublin, subject experts from other institutions and professional support staff such as occupational therapists (Ringwood et al., 2024).

3.2 Assessment for learning and inclusive design.

Within the ASIAP programme, UDL-based assessment is aligned to the Assessment FOR Learning framework (William, 2021; National Forum, 2016) and focuses on the formative aspect of evaluation supported by structured feedback given to students through accessible documents and a one-to-one session with the lecturers to discuss their outcomes. Within the programme, assessment includes a variety of type of assignments including: live presentations, artwork and creative writing production, reflective journals, projects, mind maps, portfolios and self-assessment. This wide range of assignments is offered across the modules and often constitutes multiple components of an overall grade, offering the students multiple means of expression and action. The choice offered for these types of assignments is designed to match students' interests, allowing them to explore multiple ways in which they can demonstrate their learning, for example using presentations rather than an essay.

Although not every student with an intellectual disability finds it easier to communicate verbally than using written text, relying only on classic assignments such as essays or written tests places writing skills at the centre of the evaluation, an aspect that for many students with intellectual disability can be very challenging (Jones et al., 2019). Offering such a wide range of assignments has resulted in maintaining student engagement with the digital skills

developed by the students during the programme giving additional options when demonstrating their learning.

The need of conducting this case study stems from some challenges faced during the Covid 19 pandemic, when the course had to go completely online due to the lockdown.

During this time, assignments such as presentations, portfolios and reflective journals offered the possibility to stay connected and engaged with the classroom community while achieving individual academic goals. This aspect was fundamental for nurturing social belonging in a time where relationships and connections were so dramatically impacted. However, the application of UDL based assessment in those circumstances showed some challenges due to limited digital skills, access to digital equipment and support in the home environment. In this scenario, it proved to be more difficult to maintain the UDL standards achieved when classes were in person, especially around student choice of different types of assignment formats.

With the return to face-to-face teaching, the need for evidence of effectiveness in applying a UDL approach to assessment has become even more tangible and a review of assessment in the ASIAP programme took place. Student choice is a central element in the UDL approach but when it comes to some students with intellectual disabilities, the lack of direction and too many options can be confusing, thus creating more barriers (Winter, 2015).

In order to ascertain whether assessment was still aligned with the UDL principled approach, a case study involving the students' perspectives on the assessment component of the curriculum was carried out after obtaining ethical approval by the School of Education Research Ethics Committee.

4. Methodology.

This case study sought to explore students' perspectives on UDL-based assessment, aiming to gather evidence for the purpose of enhancing inclusive assessment strategies within the ASIAP course. The research questions identified are:

- 1) Does UDL based assessment give adequate means for expressing student learning?
- 2) What are the challenges faced by students when completing assignments?
- 3) What changes could be implemented in future assignments?

The project consisted of mixed-method approach including an online anonymous survey (Microsoft Forms) and an in-person focus group with students from the ASIAP course. The study used a convenience sampling approach involving students attending the ASIAP course (1st and 2nd year) with a total of ten participants recruited for the project. The invitation to participate in this case study was extended to all students attending the programme (n = 20). Participation in this study was completely voluntary and all research materials (invitation letter, participant information leaflet and consent form) were supplied in an easy-to-read format to allow a fully accessible explanation of the project and participants rights. Ten out of twenty students decided to partake in the research, 40% from the first-year group and 60% from the second-year group. One participant completed the survey but decided not to attend the focus group. A full ethical approval by the relevant institution was granted before running the project.

4.1 Survey.

The fully anonymous online survey consisted of 20 optional questions structured on a multiple-choice Likert scale. The questions aimed to investigate:

- students' awareness of the definition and nature of assessment (i.e., I understand what assessment is)
- variety and quality of proposed assignments in the programme (i.e., How much do you like these types of assignments? Options: presentation, portfolio, written text...)
- students' satisfaction in regard to the assessment and feedback structure
- clarity around assignment language, instruction and delivery (i.e., The language in the assignments is clear and easy to understand)
- alignment of assignments with students' interests (i.e., The topics of the assignments match my interests)
- feelings towards assignments (i.e., When I do assignments I feel: overwhelmed and tired, Engaged and stimulated, I can show what I learnt, anxious and fearful to fail)
- adequacy of time allocated to complete the assignments
- clarity of the marking criteria and grading processed (i.e. I understand how my coursework will be graded)
- choice around different type of assignment formats (i.e. I would like to choose in what

format to complete an assignment, for example preparing a video instead of an oral presentation)

- aspects that work well and aspects to improve.

Proportional analysis showing the percentage of selected answers was carried out for 18 out of 20 questions, the last two were open-ended questions that have been analysed using a qualitative coding approach. Results were organised in charts using Microsoft Forms settings.

4.2 Focus groups.

The focus groups were hosted in the School of Education premises and lasted about one hour each. To facilitate an open and relaxed conversation around the prompt questions, the focus group was not audio/video recorded but handwritten notes were taken by research assistants respecting the full anonymity of the participants. While this allowed a more informal setting, one limitation of not recording the focus groups is the reduced amount of direct quotes from participants. While the notetaker was able to capture most of the sentences due to the slow pace of speech for many participants, it wasn't always possible to take notes verbatim. Nine students attended the focus groups organised by year of attendance. A set of guiding questions was used by the principal investigator to facilitate the discussion. The prompt questions covered the following topics:

- variety of assignments and relation to students' interest
- assignment structure (time, instruction, templates, support)
- emotions and feelings around assessment
- marking processes and feedback
- what works and what doesn't work

Printed guiding questions and images were provided to the participants to offer a visual support during the conversation. Notes were analysed by the first author following an inductive thematic analysis with the aid of NVivo, a qualitative data analysis computer software. To analyse the focus group data researchers first familiarised themselves with the transcripts, noting initial ideas that emerge. They then generated codes from the data, identifying key elements. These codes were organised into broader themes ensuring they accurately represented the data and were distinct from each other. Emerging themes were subsequently

organised into two main categories: systemic/personal facilitators and barriers. Finally, the themes were visually organised to provide a coherent narrative of the focus group findings.

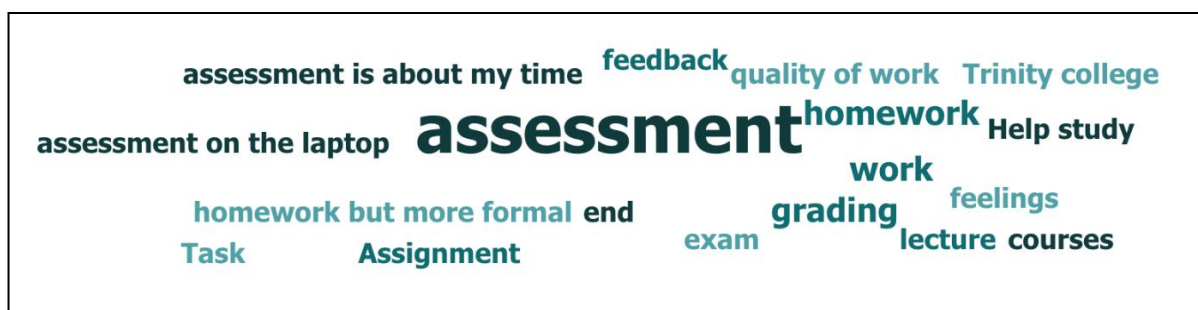
5. Findings and discussion.

The results stemming from the analysis of the survey and focus groups gave an overview of students' perspectives on inclusive assessment as implemented in the ASIAP programme. The following section of the paper will look at the findings from the focus groups and the survey separately, then the findings will be discussed in relation to the three research questions.

5.1 Survey: a snapshot on students' views.

The results of the survey indicated that students have a good understanding of what assessment is. Table 1 shows a word cloud of the most common words used by participants in response to the open-ended question on the definition of assessment showing students' awareness of the nature of assessment as a process.

Table 1: Assessment for me is...



One of the respondents stated that 'Assessment is more than grading, it measures the quality of work completed and allows feedback to help me improve'. This answer demonstrates a significant level of understanding of the nature of assessment and its formative aspect as implemented in the programme. The full answers given to this question by the participants demonstrated that students in the programme have clarity around the link between assessment and coursework as well as time management in relation to the completion of assignments planned for each module. Words such as task, homework, assignment reflect the practice of continuous assessment employed in the programme, where for many, module assessment is an integral part of the learning process (artwork, portfolio, reflection) rather than

an activity left as a standalone once the module ends.

With regard to the variety of assignment types, students indicated their overall agreement on that being sufficient (3 completely agree; 6 agree; 1 partially agree).

When responding to what extent the students liked the different types of assignments, the distribution displayed in Table 2 shows that reflection and art-based assignments were the most favoured among participants whereas written texts and tests were the least preferred.

Table 2: Students' assignment preferences.

How much do you like these kinds of assessments?

Type of assignment	My favourite	A lot	Enough	A little bit	Not at all
Presentation	4		3	3	
Portfolio	1	2	5	2	
Written text (reviews, essays)	2	1	3		4
Test	1	2	3	1	3
Reflection	4	2	2	2	
Practical exercise	1	3	3	2	1
Artwork, poetry, drama	7		1	2	
Discussion	4	1	3	2	
Concept maps, mind-maps	3	2	4	1	
Individual and group projects	4		5		1

In relation to choice of formats for their assignments, students indicated in the survey that they would like to have this option (4 completely agree; 4 agree; 1 partially agree).

General agreement was expressed around the match between students' interests and topics used in the assignments and clarity of language used (2 completely agree; 5 agree; 3 partially agree, respectively). On the matter of the marking process, only one respondent expressed their disagreement on the procedure being well illustrated across the programme.

Time allocation and assignment organisation seemed to match the respondents' satisfaction as well as the use of templates to scaffold students' work.

Feelings associated with doing assignments varied among the group of respondents. Given the possibility of selecting more than one option regarding their feelings, respondents reported the following:

- They felt that they could show what they learned (6 responses).
- They felt engaged and stimulated (5 responses).
- They felt anxious and fearful of failing (2 responses).
- Only one response indicated feeling overwhelmed and tired.

Their selections demonstrated a general positive outcome from doing assignments as a way of being engaged and stimulated and to show what they have learned.

While feelings of being overwhelmed and anxiety are mentioned, it is reassuring that assignments are not seen as a threatening practice but perceived as crucial components in the student learning journey. A further exploration of feelings related to assessment has been carried out during the focus groups as discussed later in the paper.

When asked about what they would change in the current assessment system, respondents indicated they would like more time for preparation, feedback on a more regular basis, the option to select the topics for their assignments and one stated:

'When doing a presentation if you could have an option to record giving the presentation at home and then showing it in class and the lecturer can ask you questions on your presentation or to do a practice presentation before doing the real presentation to get used to getting up and talking about your presentation'.

This suggestion is interesting as it shows the respondent's understanding of what would facilitate the reduction of anxiety when having to perform the presentation in front of a class if the recording option was offered in a more private environment without affecting the delivery of the assignment.

5.2 Focus groups: facilitators and barriers in assessment.

Focus groups were conducted separately for students attending the first (n =4) and the second year (n =5) respectively to facilitate free-flowing conversation and the contribution of

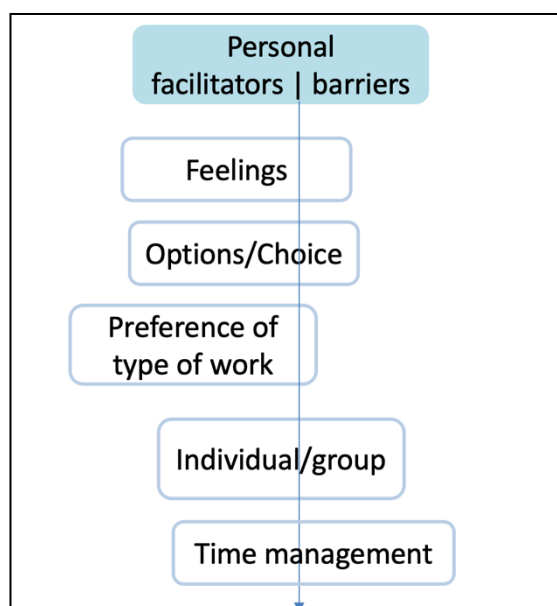
all participants. The results presented in this section were generated by a combined analysis of the notes from the two focus group through an inductive thematic approach using the research software NVivo. The graphical representations in Tables 4 and 5, summarise facilitators and barriers identified by participants according to the thematic coding. Facilitators and barriers emerged from the analysis were organised into two main categories:

- personal facilitators/barriers: related to personal factors, learning skills, work preferences, etc.
- systemic facilitators/barriers: related to the context, curriculum, structural organisation, etc.

5.2.1 Personal facilitators and barriers.

Five themes were identified under the personal facilitators/barriers as illustrated in Table 3: feelings towards assessment; options and choice; preference over the type of work; individual and group work; time management.

Table 3: Personal facilitators and barriers.



Upon examination of the feelings theme, it is notable that participants highlighted that they experienced a mix of emotions, feeling both prepared and nervous throughout the course. However, as they progressed through the assignments, they noticed a positive trend: the more they engaged with the tasks, the more comfortable they became. Knowing that they could reach out to the lecturers via email if they had any questions provided reassurance. Overall,

students referred to feel increasingly at ease with the coursework, as they gained clarity on expectations and felt supported in addressing any challenges encountered. So, while feelings were indicated as a potential barrier, students taking part in the focus groups mostly referred to positive feelings during the assessment which could be identified as facilitators more than barriers.

A similar trend can be seen in relation to options and choice, where the majority of participants indicated that having more choice in the format of their assignments would act as a facilitator for their learning. Some students mentioned that having choice around something unknown such as a new type of assignment or having to do a group assignment would make them feel less comfortable with the task, hence function as a barrier.

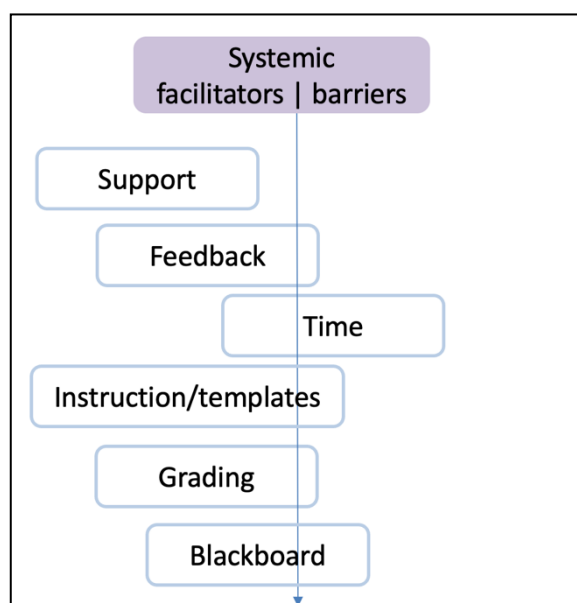
Overall, all participants expressed their satisfaction with the variety of formats for the different assignments in the modules, highlighting how finding assignments that match their interests helps to facilitate their learning. However, for some students, certain type of assignments were very challenging (e.g. visualising a poem) due to the more abstract aspect of the task. This finding resonates with the difficulty that some students with intellectual disabilities encounter in understanding abstract concepts.

When discussing individual versus group work for assignment, participants evidenced that for some working in group was a facilitator while for others it was a barrier due to group work dynamics, different personalities and engagement with the task. Interestingly, results from the survey highlighted sufficient time allowed to complete assignments, focus groups participants highlighted that time management when completing assignments is a struggle for some and support is required to hand in the work in time.

5.2.2 Systemic facilitators and barriers.

As shown in Table 4 facilitators and barriers organised under systemic factors included six themes: support; feedback; time; instruction/templates; grading; and Blackboard (the learning management system used in Trinity College Dublin).

The first theme centres on support and shows how the level of structured support provided to the students attending the ASIAP programme is valued by the participants. Participants mentioned the availability of lecturers and teaching staff to provide extra explanations or help when they did not understand what was required. They also availed of the occupational therapists' support in planning and organising their work.

Table 4: Systemic facilitators and barriers.

Feedback was another theme which emerged from the analysis of the focus groups. Participants expressed their appreciation for the level of feedback from their assessments and the review of their academic performance which they received from lecturers and staff working on the programme. Some students, in alignment with the survey result, highlighted that feedback on a regular basis is beneficial to them in order to understand how to improve in their learning going forward.

Time was indicated by participants as a barrier especially in relation to the end of the semesters when numerous assignments are required to be completed. Although across the programme many modules apply a continuous assessment approach, it is not unusual that students will have to submit multiple assignments towards the end of the teaching term. This point was identified as a barrier in the focus groups for both first and second year students.

When addressing the structure of assignments in relation to instruction and templates, the participants indicated the facilitating aspect of having a scaffolded structure with the aid of templates for completing the assignment. Equally, lack of clear instruction and templates can be identified as a barrier as it leaves students depending more on extra support often sought at home or from other roles (i.e. support workers) external to college.

Participants expressed their overall satisfaction around marking and grading processes as organised in the programme, in particular some of the students mentioned that is good to

know how their work will be evaluated at the point when they are given the assignment instruction. However, some pointed out that clear explanation around the marking and grading of their work was lacking in some of the modules.

When asked about the use of Blackboard, the Virtual Learning Environment adopted by Trinity College, students expressed their positive views on its use but also highlighted some challenges. The use of Blackboard, which included assignment instructions and submission processes, was being piloted at the time of the focus groups, so students were still new to the systems and not all the teaching staff was using it consistently. This caused some confusion for students as they did not know where to find course materials and shows the importance of consistency of centralised systems throughout the programme.

6. Discussion.

Results from the survey and the focus groups offered valuable insights of students' perspectives around assessment in the ASIAP course, which is inclusively designed on UDL principles. Combining the two sets of findings it is possible to answer the three research questions and make some considerations.

In relation to the first research question around UDL based assessment giving adequate means for expressing student learning, it is clear that the multiple means of action and expression approach implemented in the assessment structure is recognised by the students as a strength. According to the findings of this research, UDL based inclusive assessment can allow students with intellectual disabilities attending university to express their learning without the need of extra accommodations.

The second research question focused on challenges faced by students when completing assignments. The main challenges mentioned by the participants in this study are linked to personal and systemic factors such as time allocation and management, preference of the type of assignments proposed, alignment and consistency of systems and tools (i.e. Blackboard). Although feelings such as anxiety and apprehension can affect the students, overall the findings of this project indicate positive feelings of empowerment generated from the engagement with assessment.

In relation to the third research question on changes that could be implemented in the future, the combined findings show that more regular feedback would be beneficial for the students

as well as more consistency in coursework management through the university platforms. Offering more options for delivery of the assignments has also been highlighted as something that could be improved (i.e. recording a presentation at home) and that clearer instructions and scaffolded assignment templates should be used across the programme regularly. The findings of this case study have informed the annual review of the course and the suggested improvements became embedded in the course structure.

Moreover, following up on the challenges highlighted by students in relation to the use of Blackboard, further research has been designed and is currently being carried out to understand how to make it more accessible for students with intellectual disabilities studying in Trinity.

6.1 Limitations.

The use of traditional methodologies such as surveys and focus groups may present challenges when it comes to participants with difficulties around communication and verbal expression. To mitigate this risk, the research team developed data collection tools using simple English and visual aids. Although based on a small sized sample, this case study provided an example of how to conduct research around assessment in post-secondary inclusive programmes for people with intellectual disabilities. Future research in this area could include different ways of engagement of students in assessment design and implementation, i.e. in the form of co-assessment and through participation as co-researchers in line with an inclusive research approach.

7. Conclusion.

The paper has examined inclusive assessment based on UDL principles in a post-secondary course for students with intellectual disabilities in an Irish university. The literature review reveals a gap in evidence around this specific topic which this article aims to contribute to. The case study presented offers a valuable insight of students' perspectives on assessment in an inclusive higher education setting. A key strength of the project lies in its engagement with a relevant group of students, usually underrepresented in higher education, providing them with a platform to voice their opinions and contribute their perspectives. The findings of the presented case study illustrated that student voice in relation to assessment is paramount and can offer precious insights to further develop inclusive practices in a curriculum adopting a

UDL-based approach.

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