How students perceive different types of assessments in terms of authenticity, inclusivity, and ability to demonstrate performance: Exploring the impact of disability

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Abstract
Previous research has highlighted that students with disabilities have different learning experiences than students without. However, there has been little examination of student perceptions of individual assessment types in terms of inclusivity, authenticity, and ability to perform, which this study aimed to explore through an online survey. 180 Undergraduate students self-reported disability status and rated perceptions for each characteristic of assessment (authenticity, inclusivity, ability to perform) per assessment type. All types of assessment analysed varied in perceptions of assessment characteristics. Separate ANOVAs indicated that students with a disability tended to provide lower inclusivity ratings for in-person exams and group projects relative to non-disabled students. Students with a disability rated in-person group presentation and group projects as less authentic. In addition, disabled students perceived lower ability to perform during in-person exams, multiple-choice quizzes, online exams, and timed assessments. However, essays, in-person individual presentations and lab reports indicated no evidence of an effect of disability. Together, these results suggest that some, but not all assessment types are perceived as less inclusive, authentic or able to perform for students with a disability relative to students without a disability. This has implications for programme directors when considering assessments for their programmes.

Keywords: Inclusive Assessment, Disability, Assessment and Feedback, Student Perceptions.

Introduction

Assessments in higher education should be part of student learning (assessment *for* learning), enable demonstration of competency in skills and/or understanding for accreditation purposes (assessment *of* learning), and be authentic so that students are prepared for life beyond academia (Boud and Soler, 2016). Inclusive assessments achieve these outcomes in a way that proactively minimises disadvantage, is accessible, and mindful of the diversity in student learning (Tai et al., 2023). JISC, a UK agency focused on digital innovation to transform how knowledge is shared, produced guidelines for assessment and feedback in UK higher education institutions (Knight and Ferrell, 2022). A core principle of these guidelines is that assessments should support the personalised needs of learners by being accessible, inclusive and compassionate.

As student bodies become more diverse (Marginson, 2016), universities need to adapt assessments to be more inclusive within their institutional context (Hanesworth, 2019). Many factors may affect a student's experience and perception of assessment including their gender (Montolio and Taberner, 2021), whether they have a disability (Madriaga et al., 2010), whether they are studying in their first language (Salamonson et al., 2008), and demands on their time such as working responsibilities (Nidogon et al., 2024). As the number of students reporting neurodiversity, learning difficulties and mental health challenges continues to increase (UCAS, 2023), consideration of this is vital. Although

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work has been done to develop theoretical approaches to inclusive assessment (Madriaga et al., 2010), there is a relative paucity of research examining the practicalities of inclusive assessment (Tai et al., 2021). In addition, there is a lack of understanding of how different types are perceived by learners in terms of inclusivity.

As well as considering the inclusivity of individual assessments, inclusivity should be considered at a programme level (Tai et al., 2023). In other words, teachers should examine how integrated assessments are across the programme – recognising how each works for students with different strengths and challenges, how each assessment links to programme level learning outcomes, and how they could build upon each other to encourage learning through assessment. This approach recognises that the development of individual assessments involves compromise between inclusivity, authenticity, and the practicalities of assessment (Schuwirth and Van der Vleuten, 2011). Thus, each individual assessment is unlikely to be perfectly inclusive. However, by viewing assessment in a broader context, teachers may be able to offer equitable assessment opportunities for students across the programme.

Many universities have recently developed assessment strategies which prioritise inclusivity, including the University of Bristol, a large, long-established English city university with over 30,000 FTE students (University of Bristol, 2024). Their assessment strategy (Bristol Institute for Learning and Teaching, 2025), based upon principles set out in Jessop (2024), highlights that assessments should be integrated, inclusive, and authentic and that assessment and feedback should be designed for all (a synonym for inclusive), offering variety in assessment types. Programmes should have a balance between formative and summative assessments where formative assessment builds into summative and should acknowledge the diversity of student backgrounds. However, it is currently unclear how inclusive students perceive this approach to be and how their perceptions differ in relation to the variety of assessment types that are used within the university.

Therefore, the main aim of this study is to explore the perceived inclusivity of a range of assessments currently used within the University of Bristol and examine whether and how these perceptions differ based on student background. Specifically, we are interested in understanding what type of assessments are perceived by students to be a) inclusive, b) authentic, and c) best able to demonstrate their ability. We also aim to explore how these perceptions may differ between students with a diagnosed disability and those without. We also aim to explore student perceptions on how they may like the university to adapt future assessments to become more inclusive. This study was part of a wider project exploring student perceptions of inclusivity in assessment.

Methods

Design

Participants completed an online survey through Qualtrics (https://www.qualtrics.com, see supplementary material). The survey was divided into four sections; demographics, grade achieved, experiences of studying and associated assessments, and perceptions of different assessment types. Participants completed a series of demographic questions, including student status (home or international) and achieved grades, as well as questions pertaining to study experience and perceptions of inclusivity when completing various assessment types within their current course. The study was approved by the Research Ethics Committee at the University of Bristol (ethics code: 17653).

Participants

Current undergraduate and postgraduate students were recruited through advertisements sent via the student union, newsletters, and other university communications from May to July 2024. Student societies such as those for neurodiversity and international students were contacted directly via email

and asked to approach their members and promote the survey. Additionally, School Education Directors and Programme Directors on a range of courses were contacted to distribute the survey to students within their programme. The study was included in schemes that granted course credit in exchange for taking part in research (e.g., experimental hours schemes). In addition, students who had recently graduated (from 2023 onwards) were contacted in June and July via email communications from the Bristol Alumni Mailbox.

In total, 180 undergraduate and 44 taught postgraduate students currently enrolled at the University of Bristol completed the survey (Table 1.) with psychology (56%) students highly represented. Due to differences in learning and assessment experiences between postgraduate and undergraduate students, particularly in courses with professional competencies (Mattheos et al., 2009), and the relatively small postgraduate sample size, the following analysis focuses solely on undergraduate data. Alumni data (*n* = 14) was also omitted from analysis as it was unclear whether these participants were from undergraduate or postgraduate courses.

Table 1. Demographic information for participants.

Descriptor	**Postgraduate**		**Undergraduate**	
	Disability	No Disability	Disability	No Disability
n	20	24	88	92
Age				
Mean	28.30	27.92	21.77	20.04
SD	7.51	7.70	4.64	1.87
Gender				
Female	14	15	69	70
Male	5	9	9	19
Non Binary	0	0	7	2
Prefer not to say	0	0	2	1
Don’t know	0	0	1	0
Student Status				
Home Student	15	9	75	74
International Student	5	15	13	18
English as first language				
Yes	14	12	74	79
No	6	12	14	13
Caring Responsibility				
Yes	2	3	3	4
No	18	21	85	88
Suspected/undiagnosed disability				
Yes	13	10	55	58
No	7	14	33	34
Paid Work				
Yes	11	12	32	27
Mean hours per week	13.95	20.33	10.28	12.07
No	9	12	56	65

Measures

Demographics

Participants were asked to provide their age, gender, whether they had caring responsibilities, average amount of hours spent in paid work outside of university, and whether English was their first language. Participants were also asked to provide their student status (home or international), level of study (undergraduate, postgraduate or alumni), School, Programme of study, and year of study. To understand perceptions of whether demographic factors were perceived as related to inclusivity, participants were asked to rate, on a scale of 0 (not at all) to 10 (completely), the extent to which they perceived them to present as an inclusivity issue for completing assessments in their current programme.

To understand if perceptions of assessment were influenced by presence of a disability, participants were asked to provide information on any medical conditions they had. As some medical diagnoses within the UK currently have long waiting lists (e.g., Autism and ADHD, Morris, 2024; ADHD UK, 2023), this question was split to ask participants whether the condition was 'with a formal diagnosis' or 'suspected without a formal diagnosis'.

Information about grades was assessed through self-report, with participants reporting the highest mark they had achieved to date within the programme of study, the lowest mark and their average mark achieved.

Experience of Studying at University

The study experience survey included in this study was adapted from Madriaga et al., (2010), with questions orientated more towards assessment (e.g., "I have experienced some difficulty with physical access to the building **in which assessments take place**"). Participants rated 24-items relating to their experience of study and assessments (e.g., "I have problems writing continuously in examinations") on a 5-point scale (1 = Strongly disagree – 5 = Strongly agree). Cronbach's alpha in the current dataset was 0.87.

Perceptions of Types of Assessments

The main aim of this study was to understand how students perceive different types of assessment to be inclusive, authentic, or allowed them to perform to the best of their ability. To this end, the researchers reviewed what common types of assessment were available within the institution and devised an 11-point scale asking participants, for each assessment, to rate the extent to which they felt assessment types were inclusive, authentic, or allowed them to perform to the best of their ability (0 = not at all, 10 = extremely). So that participants had the same understanding of inclusivity, the descriptor '[the assessment] would enable anybody to perform the assessment regardless of background or diversity in their approach to learning' was used. For authenticity, the following descriptor was used: 'By authentic, we refer to assessments that mirror disciplinary and/or professional practice. That is to say that the assessment reflects the types of tasks you would be expected to do if you were to become a professional within your field'. Finally, for ability to perform, participants were given the descriptor 'you would be able to demonstrate your full knowledge and understanding when completing the assessment'. These descriptors were based on information provided to students within institutional webpages around inclusive and authentic assessments (Bristol Institute for Learning and Teaching, 2025).

Preference for future assessments

Participants were also asked to rate the extent to which they would value a number of potential adaptations to the ways that assessment could be implemented using an 11-point scale (0 = not at all, 10 = extremely).

Statistical Analysis

As the current study sample is substantially smaller than previous literature exploring the impact of disability on student learning (e.g., Grimes et al., 2021 had a sample of 2821), all analysis should be considered exploratory. Since sample sizes were relatively small and all other demographics very unevenly distributed, only presence of a disability was analysed comparatively (*n* disabled = 88, *n* not disabled = 92, Table 1). To compare groups on grades and perceptions of whether demographic factors were perceived as inclusivity issues, independent t-tests (or non-parametric equivalents) were conducted. The current study mirrored Madriaga et al.'s (2010) approach to analysing study experience by comparing individual items of the study experience survey, although here multiple linear regression was used.

As not all assessment types were frequently experienced in our sample, subsequent analysis was conducted on those that were experienced by ≥ 50% of respondents with participants that did not experience any of those assessments (*n* = 7) excluded from analysis of that type. An initial mixed ANOVA including assessment type, assessment characteristic (authenticity, inclusivity, ability to perform), and disability status was conducted to explore perceptions of assessments. However, as each type of assessment would have varying requirements (for example, an essay assesses writing style whilst group presentations assess verbal communication), we subsequently conducted separate ANOVAs per assessment type to further explore results and ease interpretation.

Results

Demographic factors and perceived inclusivity

Generally, the two groups (students with a disability and students without a disability) were evenly matched for student status, having English as a first language, caring responsibilities, and whether they were currently in paid work (Table 1.). Mann-Whitney U suggests that there were no significant differences between disabled and non-disabled students for perceived issues with inclusivity regarding age, student status, English as first language, caring responsibility, or paid employment. However, disabled students (*Mdn* = 0, *IQR* = [0, 1.00]) perceived gender to be less of an inclusivity issue (*U* = 402.5, *p* = .03) than non-disabled students (*Mdn* = 0, *IQR* = [0, 2.25]), although it should be noted that both groups had low ratings for the perceived inclusivity impacts of gender (median values of 0 in both groups indicate a strong floor effect in the data).

Assessments Experienced

For undergraduate students, essays were the most common type of assessment experienced, followed by Multiple-Choice Quizzes (MCQs), in-person exams, in-person group presentations, lab reports, timed assessments, online exams, group projects, and in-person individual presentations (Table 2.).

Table 2. Percentage of students having experienced each type of assessment, reordered so that the most commonly experienced undergraduate assessment is first.

Type of Assessment	Postgraduate	Undergraduate
Essay	95%	95%
Multiple Choice Quiz	36%	91%
In-person exam	34%	78%
In-person group presentation	77%	76%
Lab Report	18%	70%
Timed Assessment	57%	56%
Online exam	41%	55%
Group project	34%	54%
In-person individual presentation	61%	53%
Recorded group presentation	30%	49%
Sci-Comm	52%	49%
Reflective journal	39%	44%
Dissertation	98%	36%
Portfolio	16%	31%
Oral exam	25%	31%
Research grant proposal	52%	29%
Recorded individual presentation	36%	25%
Debates	23%	22%
Practical exam	9%	15%
Filmed Communication	5%	12%

Note: Postgraduate students n = 44, Undergraduate students n = 180.

Grades

Independent t-tests indicated that there was no statistically significant difference between disabled and non-disabled students for self-reported average grade (p = 0.73) or lowest mark attained (p = .20). However, there was a small effect when comparing self-reported highest mark (t = 2.260, p = .03, d = 0.34), where disabled students reported a slightly higher mark (M = 78.89, SD = 9.83) than non-disabled students (M = 75.64, SD = 9.44).

Study Experience

Multiple linear regression indicated that there was no significant difference between disabled and non-disabled students for overall study experience (t = -0.310, B = -0.05, SE = 0.17, p = .757). However, there were statistically significant differences between disabled and non-disabled students for item 3, “I have problems writing continuously in examinations” (t = -2.844, B = -0.68, SE = 0.24, p = .004), item 6, “The feedback on my assessments helps to clarify things that I haven’t fully understood” (t = -2.088, B = -0.50, SE = 0.24, p = .04), item 11, “My lecturers make it clear, right from the start, what they expect from me regarding assessments” (t = -1.982, B = -0.47, SE = 0.24, p = .05), item 19, “The assessment load is too heavy” (t = -2.069, B = 0.49, SE = 0.24, p = .04), item 21, “I have experienced difficulties with the amount of time available to complete coursework” (t = -2.824, B = 0.67, SE = 0.24, p = .005), and item 24, “It is easy to know the standard of work expected for assessments” (t = -2.288, B = -0.55, SE = 0.24, p = .02). All were rated higher (and therefore more inclusive) by non-disabled as compared to disabled students (Table 3).

Table 3. Descriptive statistics for items of the Study Experience survey for students with and without a disability.

Item	Disability		No Disability	
	Mean	SD	Mean	SD
I have experienced some difficulty with physical access to the buildings in which assessments take place	4.30	1.13	4.35	1.04
I have experienced some difficulty with handouts and other materials used in assessments not being in an appropriate format	3.98	1.23	4.16	1.09
I have problems writing continuously in examinations	2.91	1.52	3.64	1.27
I have had some problems when giving oral presentations	3.06	1.45	3.18	1.32
I sometimes experience difficulty with my literacy skills (spelling, grammar, etc.)	3.42	1.49	3.68	1.27
The feedback on my assessments helps to clarify things that I haven't fully understood	2.32	1.06	2.87	1.11
My lecturers make a real effort to understand difficulties I may be having with completing certain types of assessment	2.43	1.05	2.76	0.89
My lecturers give me helpful feedback on my assessment submissions	2.68	1.13	2.95	1.06
The feedback on my work helps me to improve my ways of learning and studying	2.53	1.09	2.92	1.08
My lecturers have been helpful when I have approached them about difficulties with assessment preparation	2.95	1.02	3.14	0.88
My lecturers make it clear, right from the start, what they expect from me regarding assessments	2.65	1.15	3.17	1.07
My lecturers give me plenty of examples and illustrations to help with my understanding	2.69	1.07	3.09	1.01
My lecturers are good at explaining things in a number of different ways	2.75	1.00	3.23	0.97
I sometimes find it difficult to discover what is expected of me in terms of assessments	2.12	0.91	2.47	1.06

Item	Disability		No Disability	
	Mean	SD	Mean	SD
Within my course, I have some choice over what aspects of the subject I want to be assessed on	2.64	1.32	2.67	1.20
My course is helping me develop my ability to work as a team member	3.50	1.06	3.70	0.84
I frequently find it difficult participating in discussions leading up to group assessments	2.91	1.36	3.09	1.16
I have experienced difficulties with coursework because it is not always clear what is required	2.28	1.16	2.63	1.09
The assessment load is too heavy	2.67	1.13	3.22	0.98
I have had some difficulties with participating in assessed group work	2.60	1.26	2.85	1.16
I have experienced difficulties with the amount of time available to complete coursework	2.27	1.11	3.00	1.05
I have experienced difficulties with the amount of time available to complete exams	2.50	1.19	2.97	1.22
I have experienced difficulties with the amount of time available to complete timed assessments	2.43	1.16	2.95	1.11
It is easy to know the standard of work expected for assessments	2.22	1.00	2.82	1.00

Higher scores indicate higher levels of inclusive experiences. Yellow highlighted = statistically significant difference between disabled and non-disabled students.

Perceptions of Assessment Type

Mixed ANOVA that included assessment characteristic and type of assessment as within-subject factors, and disability as a between-subjects factor (*n disabled* = 83, *n not disabled* = 90) on the dependent variable of rating (0-10) indicated a main effect of assessment type ($F = 25.370$, $p < .001$, $\eta^2G = 0.06$), a main effect of disability ($F = 10.555$, $p = .001$, $\eta^2G = 0.02$), and a main effect of assessment characteristic ($F = 5.722$, $p < .001$, $\eta^2G = 0.01$). Additionally, analysis also indicated that there was an interaction between assessment type and assessment characteristic ($F = 54.710$, $p < .001$, $\eta^2G = 0.08$; Figure 1. and 2.).

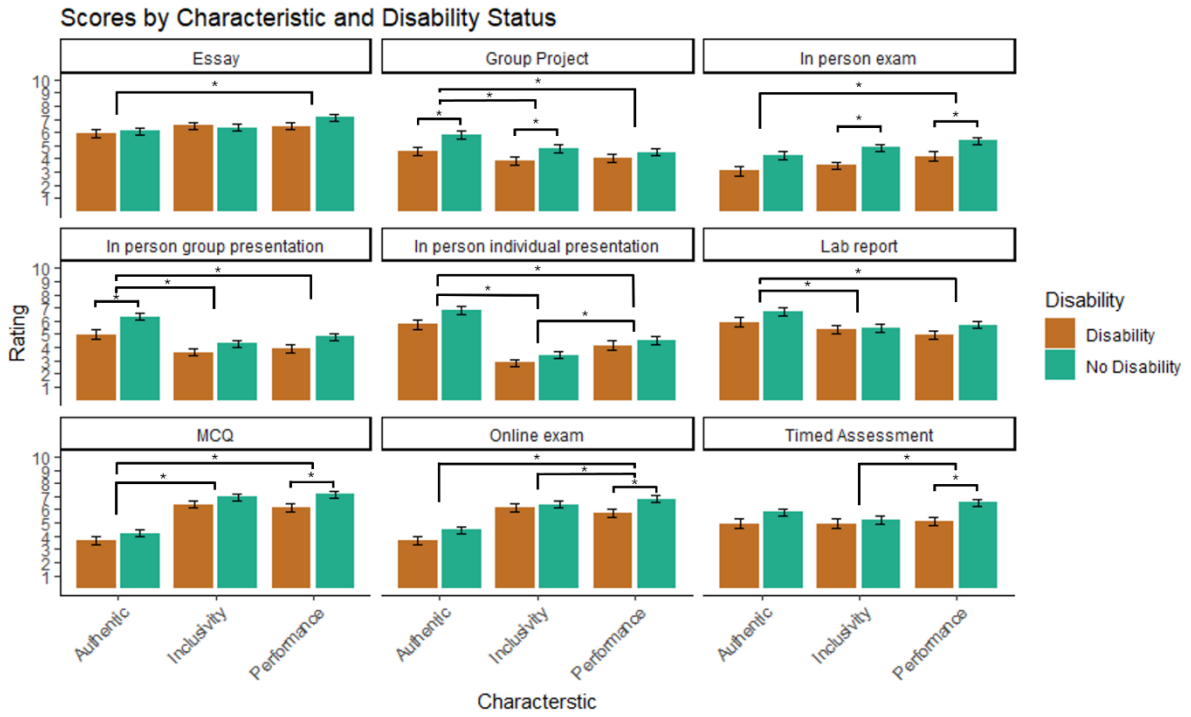

Figure 1. A visual representation of perceptions for each assessment type across assessment characteristic and disability status.

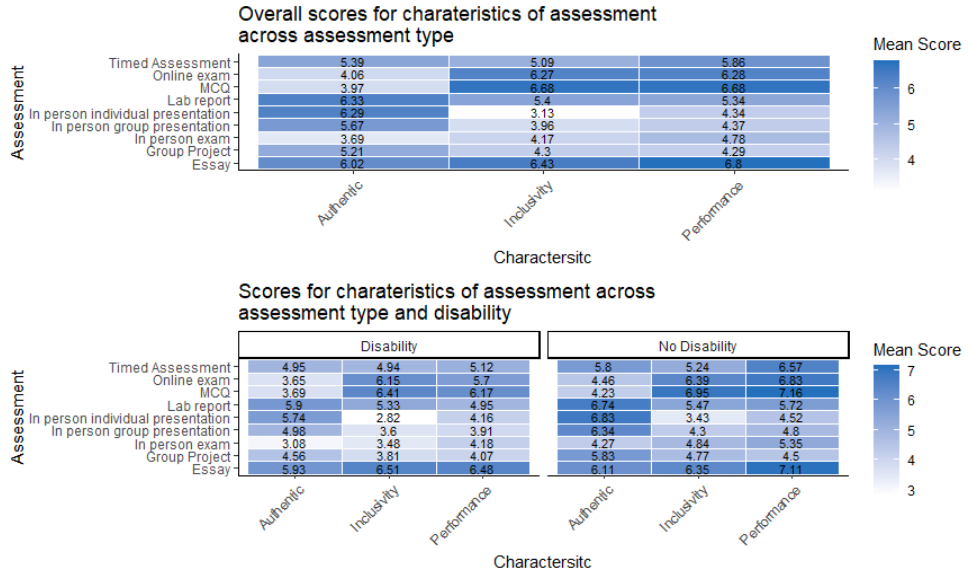

Figure 2. A heatmap of mean perception scores for each type of assessment across assessment characteristics.

The top figure visualises overall scores and the bottom are scores across disability status.

Essays

Mixed ANOVA indicated a main effect of assessment characteristic only (F = 5.757, p = .005, η^2G = 0.01). Pairwise comparisons (p = .04) indicated that ratings for authenticity were lower (M = 6.10, SD = 2.79) than ratings for ability to perform (M = 6.80, SD = 2.42).

In-person Exams

Mixed ANOVA indicated main effects of disability ($F = 10.149$, $p = .002$, $\eta^2G = 0.04$) and of assessment characteristic ($F = 12.880$, $p < .001$, $\eta^2G = 0.02$). Pairwise comparisons indicated that disabled students perceived in-person exams as less inclusive ($t = 3.120$, $p = .002$) and less likely to facilitate performance to their best ability ($t = 2.670$, $p = .009$) than non-disabled students. Further pairwise comparisons indicated that students rated in-person exams lower ($p = .001$) for authenticity ($M = 3.69$, $SD = 3.22$) than ability to perform ($M = 4.81$, $SD = 2.88$).

Multiple Choice Quizzes

Mixed ANOVA indicated a main effect of assessment characteristic ($F = 95.395$, $p < .001$, $\eta^2G = 0.20$) and a main effect of disability ($F = 4.033$, $p = .04$, $\eta^2G = 0.01$). Pairwise comparisons (ps < .001) indicated that ratings for authenticity were lower ($M = 3.97$, $SD = 2.86$) than for inclusivity ($M = 6.72$, $SD = 2.52$) and ability to perform ($M = 6.72$, $SD = 2.56$). In addition, pairwise comparisons indicated that students with a disability rated ability to perform ($p = .02$) as lower ($M = 6.23$, $SD = 2.79$) than non-disabled students ($M = 7.17$, $SD = 2.26$).

Lab Reports

Mixed ANOVA indicated a main effect of assessment characteristic only ($F = 17.211$, $p < .001$, $\eta^2G = 0.03$). Ratings for authenticity were higher ($M = 6.38$, $SD = 3.06$) than ratings for inclusivity ($M = 5.39$, $SD = 2.84$) and ability to perform ($M = 5.32$, $SD = 2.98$).

In-person group presentations

Mixed ANOVA indicated a main effect of disability ($F = 6.634$, $p = .01$, $\eta^2G = 0.02$) and of assessment characteristic ($F = 35.306$, $p < .001$, $\eta^2G = 0.07$). Pairwise comparisons indicated that disabled students ($M = 5.12$, $SD = 3.20$) rated in-person group presentations as less authentic ($t = 2.710$, $p = .007$) than non-disabled students ($M = 6.35$, $SD = 2.73$). Furthermore, pairwise comparisons (ps < .001) indicated that ratings for authenticity were higher ($M = 5.75$, $SD = 3.02$) than for inclusivity ($M = 4.01$, $SD = 2.50$) and ability to perform ($M = 4.44$, $SD = 2.75$).

In-Person Individual Presentations

Mixed ANOVA indicated a main effect of assessment characteristic only ($F = 98.003$, $p < .001$, $\eta^2G = 0.19$). Pairwise comparisons (ps < 0.001) indicated that ratings for authenticity were higher ($M = 6.39$, $SD = 2.86$) than ratings for inclusivity ($M = 3.15$, $SD = 2.47$) and ability to perform ($M = 4.39$, $SD = 3.10$). Furthermore, ratings for inclusivity were lower than those for ability perform.

Group Projects

We found a main effect of disability ($F = 4.629$, $p = .03$, $\eta^2G = 0.02$) of assessment characteristic ($F = 13.412$, $p < .001$, $\eta^2G = 0.02$). Pairwise comparisons indicated that disabled students perceived group projects as less authentic ($t = 2.500$, $p = .01$) and less inclusive ($t = 2.310$, $p = .02$) than non-disabled students. Furthermore, pairwise comparisons (ps < .01) saw ratings for authenticity were higher ($M = 5.25$, $SD = 3.08$) than ratings for inclusivity ($M = 4.32$, $SD = 2.72$) and ability to perform ($M = 4.36$, $SD = 2.94$).

Online Exams

Mixed ANOVA indicated a main effect of disability ($F = 3.906$, $p = .05$, $\eta^2G = 0.01$) and a main effect of assessment characteristic ($F = 62.500$, $p < .001$, $\eta^2G = 0.13$); disabled students perceive a lower ability to perform to their best ability ($t = 2.390$, $p = .02$) than non-disabled students, and scores for authenticity were lower ($M = 4.12$, $SD = 2.95$) than for inclusivity ($M = 6.35$, $SD = 2.60$) and ability to perform ($M = 6.34$, $SD = 2.58$).

Timed Assessments

Mixed ANOVA indicated a main effect of disability (F = 5.261, p = .02, η^2G = 0.02) and of assessment characteristic (F = 6.656, p < .01, η^2G = 0.01). Pairwise comparisons indicated (t = 3.22, p = .002) that disabled students (M = 5.16, SD = 3.02) rated ability to perform to their best ability lower than non-disabled students (M = 6.52, SD = 2.50). Furthermore, pairwise comparisons (p = .03) indicated that ratings for inclusivity were lower (M = 5.04, SD = 2.93) than perceived ability to perform (M = 5.87, SD = 2.84).

Future Assessments

On average, undergraduate participants indicated support for having more choice in the type of assessment they undertook and more choice in the topic on which they were assessed (Figure 3). There was also moderate support for increasing formative assessments, designing the assessment question, and increasing in-person or video feedback. Multiple linear regression indicated that there was no significant difference between disabled and non-disabled students for perceptions around future assessments (t = -0.224, B = -0.10, SE = 0.46, p = .823).

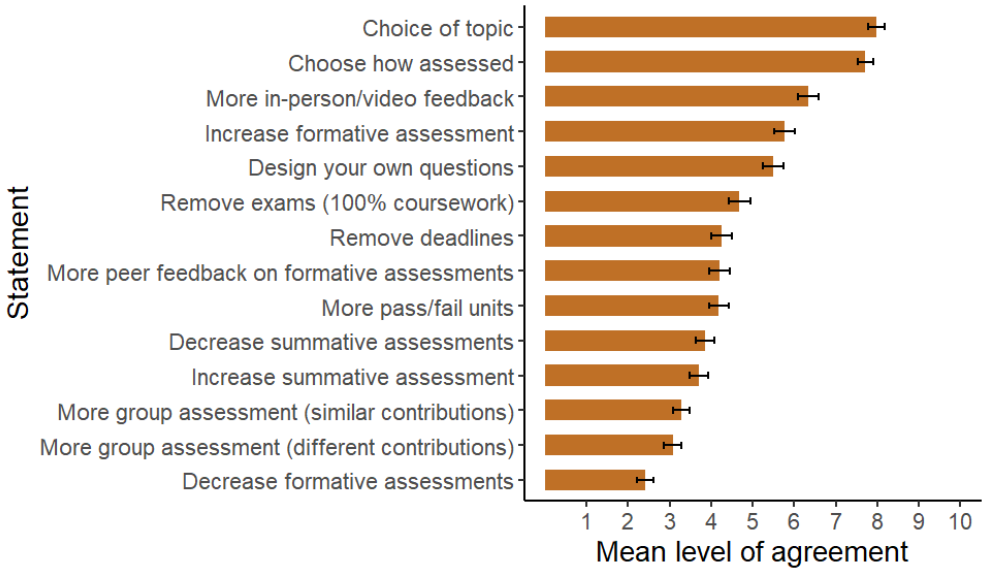

Figure 3. Visual representation of preference scores toward possible future aspects of assessments.

Discussion

This survey reported on study and assessment experiences of 180 undergraduate students enrolled at the University of Bristol. Exploration of how students perceive various types of assessment to be inclusive, authentic, or allowed them to perform to the best of their ability indicated that no single assessment type is perceived across these characteristics in equal measure (Figure 2). Student ratings indicate that MCQs are perceived as most inclusive, laboratory reports were perceived as the most authentic, and essays were perceived as the best format to demonstrate learning. Thus, there appears to be a trade-off between these different assessment characteristics (inclusivity, authenticity, and ability to perform).

In line with recommendations that assessment formats should be considered across the programme (Tai et al., 2023), our results suggest that teachers should also consider the competencies that various types of assessment are assessing, particularly in terms of balancing authenticity within a programme with inclusivity. For example, to assess student understanding of a topic, teachers could opt for assessments viewed as more inclusive (MCQs), whereas when assessing how students apply understanding in an authentic setting, teachers may opt for students to complete a laboratory report.

Thus, it is important for educators to understand what they are focusing on assessing, rather than deferring to established assessment types, to adequately choose the appropriate format. In terms of authenticity, student perceptions may suggest an assumption, perhaps not always a conscious one, that university study and the workplace operate in different ways. With regard to some types of assessment (e.g., lab reports), this assumption is shared by both disabled and non-disabled students and should therefore not be seen as primarily an inclusivity issue.

Achieved grades were similar in disabled and non-disabled students and the former reported significantly higher maximal grades, suggesting that institutional efforts to minimise disadvantage may have been successful. However, our results suggest that some perceptions of teaching and learning, but not all, differ depending on whether respondents reported a diagnosed disability or not. Thus, whilst a rudimentary examination of grades may lead us to believe assessment is inclusive, in-depth examination of student perception highlights that the experience leading to achieving those grades differs between the two groups. Disabled and non-disabled students significantly differed on ratings for five statements in the student experience survey, two of which were related to the way assessments are completed and the explanation of expectations and standards in advance of submission. This may contribute to the differences in perception for inclusivity in some assessment formats included within the current study. For example, disabled students perceived in-person exams and group projects to be less inclusive than non-disabled students. The other statements that differed in the study experience survey relate to feedback on assessments and to time management. Although the reason for differences between disabled and non-disabled students needs further investigation, Dawson et al. (2018) highlight that students appreciate feedback that is personal, criteria-focused, applicable to further improvement, and delivered in timely manner so that it supports time management for the next assignment.

While our study cannot itself draw any conclusions on the nature of guidance best provided to ensure disabled students feel able to perform, it seems sensible to apply the same principles to the design of guidelines, guidance, assessment briefs and other forms of assessment-specific support as to assessment overall. Specifically, they should be 'designed for all', which would reduce workload for staff (e.g., by removing multiple assessment briefs for different groups of students) and provide clarity for students (e.g., by having a single source of information). Research suggests that 'more detail' or simply 'more' guidance is not the solution (Ma, 2016). Furthermore, research cautions us against assuming that solutions to the problems identified in our analysis may be universally appreciated by students, or even that students are able to articulate, without a process of assessment co-creation in the wider context of teaching and learning, what forms of support would be most effective (Fricker et al in prep).

The current study cannot make any recommendations on how changes to improve inclusivity within assessments should be done. The principle of designing assessment 'for all' would suggest that it should not be done by way of mitigations alone but, rather, a redesign of the relevant assessment type. However, educators should also be mindful of offering authentic assessments based on industry practices. Two determinants may have an impact on this redesign: first, our survey only captures students' *perceptions* of authenticity. Students, especially at undergraduate level, and in spite of the best efforts of some of their tutors, may not be fully aware of the nature of workplace practices and may therefore misjudge the authenticity of an assessment type. Future study should examine authenticity from a tutor and industry representatives' point of view and identify where mismatches occur. The task for tutors would then be to clarify the extent to which assessment mirrors industry practice. Secondly, industry practices may themselves be non-inclusive. Here, the focus needs to shift to inclusive assessment preparation and feedback rather than the design of the assessment itself. In other words, the assessment itself should still mirror industry practice (and therefore be 'authentic')

but students should be well prepared in terms of assessment guidelines, assessment expectations, and the rationale for conducting the assessment in the way it is. In addition, to further promote learner employability (JISC principle seven of good assessment and feedback, Knight & Ferrell, 2022), university lecturers with links to industry could conceivably lobby for industry practices to evolve as well (where appropriate).

The current study is not without limitations that should be acknowledged when interpreting findings. This data is from a single UK higher institution and may not generalise to perceptions of assessment in other institutions. Despite best efforts to maximise recruitment, the study includes a relatively small sample that would not be representative of the student body at large. In particular, the current study focuses on undergraduate perceptions; postgraduate taught students are often under-represented in research on teaching and learning (Macleod et al., 2023). A more detailed study of their perceptions is required. A further consideration is that, whilst we analysed by diagnosed disability, there were many additional students with a "suspected" disability. This likely related at least in part due to the long waiting list for investigation and diagnosis of neurodiversity (Morris, 2024; ADHD UK, 2023). In the institution in which the study was conducted, the policy has changed subsequently to acknowledge that any disability apparent to the student (e.g., through behaviour and self-report), regardless of medical evidence, should be acknowledged as such and reasonable adjustments applied to learning and assessment (*Abrahart v University of Bristol,* 2022).

The quantitative approach we adopted has allowed us to poll average opinions and identify significant differences between different demographic groups. However, to understand the underlying causation of these differences and the subtlety of student opinion it would be valuable to also take a qualitative approach. We have subsequently conducted interviews and focus groups investigating opinions on inclusive assessment (Cobby et al. in prep; Fricker et al in prep).

To summarise, the current study indicates that undergraduate students perceive a variety of assessment formats differently in terms of inclusivity, authenticity, or able to demonstrate their understanding. In addition, some assessment formats are perceived differently depending on disability status (e.g., group projects). Each of these findings has practical implications for teaching and learning, and educators will need to consider their own programme designs to enable an assessment profile that is 'designed for all'.

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