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Humanising higher education through interdisciplinary student-devised assessments

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With the changing, post-pandemic landscape of higher education (HE), there is growing consensus that students should be equipped with the tools to transcend disciplinary boundaries and challenge the 'Signature Pedagogies' that have contributed to the long-standing and dominant teaching and learning cultures in our sector. These subcultures are often embedded in neo-liberal dehumanising discourses, practices and cultural artefacts that proliferate in the marketised HE sector, as well as pedagogies centred on institutionalised hierarchies and highly particular notions of 'valued knowledge', born themselves of hierarchical cultures. This paper focuses on the aim of humanising assessment through interdisciplinary HE. It explores how this pedagogical approach can redefine the (student) research culture in HE and foster opportunities for interdisciplinary student research within the curriculum. Practical approaches that integrate such cultural critical scrutiny of modernity into interdisciplinary assessment are missing from the literature. Such critical pedagogy calls for the development of social and emotional literacy and intelligence and these competencies need to be reflected in the development of approaches to assessment that are academically rigorous. We see the 'Student-Devised Assessment' (SDA) as an effective, *humanising* form of interdisciplinary assessment which challenges, stretches, and redefines the notion of 'research' in HE, and which can be evaluated reliably and even systematically, ensuring academic rigour and quality. The SDA is an ideal assignment to develop core interdisciplinary skills, such as coping with uncertainty, while enhancing student-centred learning and academic ownership. Furthermore, it is effective in promoting the ethical use of AI-generative tools in assessment across disciplines, and allows students to contribute to knowledge in exciting and creative ways.

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Introduction

In a recent (2022) chapter in *The Cambridge Handbook of Undergraduate Research*, the late Angela Brew writes that there has been 'an opening up of ideas about who is to be included in research practice through the democratisation of knowledge production' (Brew, 2022, p. 73). Debates and changing attitudes about the value of undergraduate research are driven, in part, by the Humboldtian idea that students are producers of knowledge, rather than mere recipients of information (Freire, 2016; Hodge et al., 2007; Jenkins and Healey, 2011; Fielding and Bragg, 2003; Hattie and Marsh, 1996). Many educational institutions today, such as the Institute for Advanced Teaching and Learning (IATL) at the University of Warwick, embed research into the curriculum and emphasise humanising values, such as socialisation and emotional maturation, rather than exclusively fact-based learning (Hamilton et al., 2019).

Humanising higher education through interdisciplinary practice. These changing attitudes are part of the 'humanisation' of higher education (HE), which we shall explore in the context of interdisciplinary assessment. All humanising discourses reflect certain stances on what it means to become 'more human' (Devis-Rozental and Clarke, 2020a, 2020b, p. 3; Galvin and Todres, 2013, p. 40). In the context of HE, some scholars emphasise the 'nurturing of humanity…and awakening agency' (Yu et al., 2025, p. 1), some focus on 'socio-emotional intelligence' (Devis-Rozental, 2018), others privilege improvisation (Midgelow, 2017), and others champion the unique first-person standpoint from which we each make sense of the world (Todres et al., 2009, p. 70).

Another core part of the human experience, which interdisciplinarity can facilitate, is the freedom to experiment. Students encounter new and varied ways of approaching a single issue, which encourages them to be more nuanced, and less reductive, in their thinking (Kadetz, 2024). Disciplines open up to them that once seemed distant, impenetrable, or without value, allowing them to understand in greater detail the different ways in which, say, philosophers, poets, and physicists approach and view the world. Experimentation, in this context, is not merely integrating the ideas, methods, and conventions of different disciplines but actively reimagining the relationships between them. For example, a student who combines the methods of film studies with the ideas of marine biology may also explore how these disciplines and their methodologies interact, or where there are tensions, which could generate new insights. Innovation and pedagogical experimentation are frequently part of (intra-disciplinary experiences, and interdisciplinary work can build on this foundation and develop it further, with students even deciding to venture beyond disciplinary boundaries into trans-disciplinary spaces, industry, and enterprise.

Our focus in this paper is humanising higher education (HE) through interdisciplinary assessment, specifically through the interdisciplinary 'Student-Devised Assessment' (SDA), which empowers students to design their own research assignments, with guidance from a robust interdisciplinary assessment programme built into an interdisciplinary module. Students are not only free to negotiate a research topic of their choosing (as it relates to the module), but they are also invited to articulate their ideas through an alternative medium, such as a poem or a painting instead of a conventional essay or report. Empowering students in this way not only humanises their learning experience, as each assignment is individualised and tailored to the student's personal, academic and/or career interests, but also serves to reshape research culture in HE by establishing a wider range of opportunities for how interdisciplinary research can be expressed. Through embedding such humanising assessment programmes directly into the curriculum, we argue that research culture becomes more inclusive for learners with different backgrounds, requirements and circumstances. The interdisciplinary SDA prioritises collaborative enquiry and creative autonomy, which inspires a culture in which independence and collective exploration are emphasised over standardisation and competition which can easily occur in the HE assessment space. Agency, emotional intelligence, and meaningful collaboration are promoted in alignment with the evolving demands of HE, fostering a more inclusive community of researchers through a humanised curriculum.

Student-devised assessment as a humanising pedagogical tool. This paper employs the humanising framework by Todres et al. (2009) as its central methodology to explore the value of interdisciplinary SDAs. This provides a lens through which to critically examine the student assessment experience, focusing on its potential to humanise the learning environment. The framework fosters emotional, social, and intellectual development by moving beyond traditional assessment practices, which can be dehumanising (Devis-Rozental and Clarke, 2020a, 2020b). There has been a growing effort in tertiary education and professional training, in both academia and beyond, to integrate practices that develop and support cultures of compassion as a result of dehumanising practices (Geduld and Sathorar, 2016; Grover, 2021). Todres et al.'s (2009) framework, initially designed to enhance health and social care provision by reducing clinical, dehumanising approaches, has been adapted to a broader educational context. Devis-Rozental (2018) expanded on it by developing the notion of 'socio-emotional intelligence' in HE practitioners and later explored the framework's wider relevance in HE in collaboration with Devis-Rozental and Clarke (2020a, 2020b). More recently, Wilson et al. (2024) has utilised the framework to facilitate socio-emotional learning as part of co-curricular activities, demonstrating its continued relevance to the promotion of emotionally intelligent and compassionate academic environments. Following this, the development of socio-emotional intelligence, e.g. leads to vertical literacy, which is increasingly recognised as essential in interdisciplinary education (see e.g. Cousquer, 2024; Scharmer, 2018).

In this paper, we draw on our own experiences with SDAs to evaluate their practical value and reflect on their design, implementation, and impact on both students and educators in interdisciplinary settings. Our methodology is primarily a reflective, experiential approach that considers our direct engagement with SDAs in teaching practice. As educators and practitioners, we have designed and facilitated several long-standing interdisciplinary modules[1] that incorporate SDAs over the past 13 years, allowing us to draw on real-world examples to evaluate their effectiveness. Our reflections are grounded in both the design and delivery of SDAs and on student experiences assessed through feedback and data collected over multiple academic cycles. Including the perspectives of both practitioners and students is essential to understanding the full scope of the impact that SDAs can have within interdisciplinary education. Using the humanising framework as a guiding tool, we critically assess how SDAs can support the development of compassionate, socio-emotionally intelligent learning environments in higher education.

Our aim is not to argue that traditional forms of assessment should be replaced with interdisciplinary SDAs. Our argument is that the SDA is a highly effective way of promoting student agency in HE together with important interdisciplinary skills, such as critical thinking, reflection, and dealing with uncertainty.

There are several challenges to humanisation, including the prioritisation of consumer values under neoliberalism. With rising tuition fees, universities are compelled to adopt practices defined by consumer choice (Rudd and Goodson, 2017), which often produces cultures in which students are treated more like homogenous workers-in-training than unique individuals embarking on deeply formative educational journeys (Downs, 2017; Freire, 2016, p. 4; McCulloch, 2009). These dehumanising practices thrive on the assumption that history 'ended' with the triumph of neoliberalism, which leaves no room for alternative visions of education (see Fukuyama, 2012). The risk here is that educators might passively conform to rigid practices and 'signature pedagogies' (Shulman, 2005), instead of championing alternative pedagogies that offer more critical, transformative, and democratic learning experiences (Olsen et al., 2020; Humphreys, 2017). One of our motivations, therefore, is to position the interdisciplinary SDA as a valuable option towards unsettling existing dehumanising assessment practices in HE.

The marketized neoliberal context, which treats knowledge as a commodity to be acquired rather than a relational process to be experienced, can understood in the context of McGilchrist's (2012) influential work on lateralisation and brain asymmetry. There are consistent differences between the left and right brain hemispheres, and McGilchrist argues that the dominance of the left hemisphere reduces the richness of human experience to manageable categories at the cost of the right hemisphere's capacity for contextual understanding, relational awareness, and holistic integration. Assuming this theory has credence, it could explain the dominance of measurable outcomes that disconnect learners from the embodied, contextual nature of genuine understanding. The humanising potential of SDAs is more apparent in the context of the distinction between *wissen* (propositional knowledge *about*) and *kennen* (experiential knowledge *of*), which McGilchrist (2012, p. 96) also mentions. Traditional disciplinary assessment primarily evaluates wissen as observed in a student's ability to demonstrate abstract, theoretical knowledge (wissen) that can be standardised and measured across contexts. The SDA prioritises *kennen* by giving space for the kind of intimate, experiential knowledge that emerges through creative expression and sustained engagement with complex interdisciplinary problems. This shift is humanising because *kennen* necessarily involves the whole person in a relationship with their subject matter. Whereas *wissen* can be acquired through detached analytical study, *kennen* requires right-hemisphere engagement as characterised by attention to context, appreciation for uniqueness, and openness to the unexpected.

We advocate for the SDA to be situated within the *interdisciplinary* teaching and learning space specifically because it reflects (and encourages) some of the core features of interdisciplinary learning, namely dealing with uncertainty, reflection and critical thinking (e.g. Christoph et al., 2015; Edelbroek et al., 2018). There is immense value in this, as the typical academic journey in UK HE can limit students' exposure to interdisciplinary perspectives and approaches. Engaging with issues that cross disciplinary boundaries or collaborating with peers from different fields can be uncommon, giving students few opportunities to challenge their disciplinary assumptions or develop the communication skills needed to engage with broader audiences (Turner et al., 2024). They may, in turn, graduate from university unprepared to address the 'wicked' problems that face us today, as they often require interdisciplinary approaches (Christoph et al., 2015, pp. 4–5). Where students' disciplinary excellence is built through learning that operates largely within specific boundaries and specialisms, interdisciplinarity supplements this disciplinary knowledge and skillset by encouraging students to approach a problem by reflecting on different disciplinary approaches, collaborating with peers from different disciplinary backgrounds and/or learning to deal with uncertainty by entering uncharted (disciplinary) waters. It leans on the argument by McGilchrist (2021) that different approaches to knowledge are not (and should not be) in conflict with one another, but rather seen as complementary to each other. As such, we can argue that the culture of learning can expand from what can be reductive to one that favours a matrix of diverse approaches to knowledge that encourages and enhances innovation and creativity (see Ambrose, 2012).

Although interdisciplinary thinking has its strengths, it faces several challenges with respect to assessment, and careful consideration is required when designing evaluation systems. First, it is difficult to create fair and equitable assessment methods, such as marking criteria, given the varied disciplinary styles and methods (Chandra et al., 2024). This problem is further complicated by legacy issues, such as implicit bias against knowledge associated with women scholars (Kim et al., 2022), and the generational inheritance of siloed thinking. Second, assessors who specialise in one discipline may lack the expertise to accurately evaluate students from other fields or who are drawing knowledge from unfamiliar fields. Third, assessment criteria must be deliberately designed to ensure that all students can thrive, despite their disciplinary background and/or the use of disciplinary knowledge and skills that they are using in their assignment. The criteria must be clearly communicated to students from diverse disciplines to ensure that fair and equitable levels of engagement and understanding are met. Fourth, disciplinary biases can unintentionally favour students from certain disciplines over others. With these challenges in mind, one of our aims is to explain how the interdisciplinary SDA can be evaluated systematically and fairly, ensuring academic rigour and quality within HE.

To effectively engage both students and staff, the assessment and learning environment should be designed with careful attention to the broader learner-centric curriculum (Ten Dam et al., 2004). Like any form of assessment, interdisciplinary assessment should align with the desired learning outcomes (DLOs). Biggs (2003, p. 2) outlines a four-step process for this alignment: (1) designing the DLOs; (2) selecting appropriate teaching and learning activities to meet them; (3) assessing how well students' learning outcomes align with the intended outcomes; and (4) determining the final grade. As interdisciplinary modules often emphasise skills such as problem-solving and critical thinking (Christoph et al., 2015), these elements must be central to the assessment process. This is especially important given that traditional assessment methods may not fully capture the diverse learning outcomes expected of students engaging in interdisciplinary work (Ivanitskaya et al., 2002). Designers of interdisciplinary assessments must therefore possess a deep understanding of the conditions that support interdisciplinary thinking (Stefani, 2009), including an awareness of whether (and to what extent) students need to engage with knowledge from other disciplines to meet the learning goals (Chen et al., 2009).

In the wider literature on interdisciplinarity, insufficient attention has been paid to interdisciplinary *assessment* (Laursen et al., 2022) though there have been attempts to provide criteria for equitable interdisciplinary assessment practice, such as Newell's (2002) list of 21 cognitive skills involved in 'integrative work', including critical thinking and sensitivity to bias. Other scholars emphasise the different outcomes for interdisciplinary assessment, including developing sophisticated views of knowledge and the capacity to evaluate and use multiple perspectives (Lattuca et al., 2004), arguing that with these interdisciplinary skills, students are better equipped to critically assess the relationships between disciplinary perspectives and analyse the themes of the course (Ivanitskaya et al., 2002).

Building on this, Boix-Mansilla et al. (2000, p. 222) outline three core dimensions for assessing students' interdisciplinary work, which we have found very useful in the development of our interdisciplinary SDAs and humanising this assessment approach. The first is the extent to which it is 'grounded in carefully selected and adequately employed disciplinary insights'. By 'disciplinary grounding', they mean the extent to which the work demonstrates 'rigorous understanding' and 'appropriate selection' of discipline-specific theories, knowledge, findings, and methods (Boix-Mansilla et al., 2009, p. 343). This, of course, requires the marker to have some familiarity with relevant disciplinary conventions and standards. The second dimension is the extent to which these insights are clearly integrated for the advancement of the student's understanding. 'Integration' here is how effectively the work draws connections between disciplines and articulates each perspective in a 'coherent whole' (Boix-Mansilla et al., 2009, p. 343). Practically speaking, markers might assess how integration is achieved (e.g. by means of apposite metaphors or bridging concepts) or whether and how integration has advanced the student's understanding. The third dimension is the extent to which the work clearly exhibits purpose, judgement, and critique. Purpose, in this context, is the extent to which the work is clear in its aims and target audience. For example, a marker might assess the rationale behind the student's use of certain disciplines and the suitability of their vocabulary. The practical markers of self-critique, which Boix-Mansilla et al. (2009, p. 343) elsewhere term 'critical awareness', might include reflection on the work's limitations and awareness of the advantages and disadvantages of the considered disciplines. Each of these criteria can be judged as naive, novice, apprentice or master, and Boix-Mansilla et al. (2009) give examples of work in each category. We draw on, and develop, this framework to defend the SDA as an effective, *humanising* form of interdisciplinary assessment which challenges, stretches, and redefines the notion of 'research' in HE.

What is a student-devised assessment (SDA)?

The SDA is an innovative approach designed to assess and foster interdisciplinary learning by challenging students to exercise ownership of their education. It encourages intellectual curiosity, creativity, and critical thinking while promoting the integration and application of knowledge from multiple disciplines. Through its open-ended structure, the SDA enables students to engage deeply with a range of disciplinary theories and methods, integrating and synthesising ideas, and reflecting on their learning journey. This form of assessment balances academic rigour with flexibility, fostering the development of essential skills for inter-disciplinary enquiry.

Students embarking on the SDA begin by selecting a central issue or topic, often inspired by the interdisciplinary content of their module but extending beyond its formal scope. This stage allows students to delve into areas of personal interest, drawing on disciplinary and interdisciplinary perspectives and approaches to frame a question or problem for further exploration. The SDA challenges students to think critically about how different fields intersect and how their insights can be integrated to address complex issues.

The SDA requires students to produce an artefact (e.g. a poem, a fashion show, an exhibition, an executive report, a piece of music) through which their overarching message or thesis is best articulated according to them, accompanied by a written (or video) account explaining the conceptual and methodological basis of their work. This flexibility in format is a defining feature of the assessment, empowering students to choose a medium that best communicates their ideas. They may opt for traditional forms such as essays or presentations, or explore creative formats

such as paintings, videos, comics, websites, performances, or diaries. Students must reflect on the relevance of their chosen medium to their research, justify how it enhances communication with their intended audience, and consider how the format complements the interdisciplinary content, using primary and secondary sources to support their arguments. This ensures alignment between the form of the SDA and the substance of their enquiry.

The bibliography showcases the depth and breadth of their research, including its potential as an interdisciplinary piece of work. Annotating key sources to highlight their relevance further underscores students' critical understanding of the materials underpinning their work.

The SDA's focus on both form and substance allows students to engage critically with the interplay between content and presentation. By reflecting on how different media shape and enhance the communication of interdisciplinary ideas, students develop an adaptive approach to conveying complex knowledge. This flexibility prepares them for diverse contexts, encouraging innovation in their communication practices.

Formative, pre-assessment learning activities are integrated throughout the module's student-devised assessment programme to support students in their learning and assessment literacy as they progress toward their final SDA project. Key formative stages include the development of an interdisciplinary abstract and peer review sessions to encourage collaboration, communication across disciplines, and research skills.

Writing an interdisciplinary abstract helps students refine their ideas, clarify their research focus, and articulate their project in a concise, accessible manner. This fosters interdisciplinary thinking by requiring students to synthesise complex concepts and present them in ways that resonate across different disciplinary and cultural contexts, and invites alternative formats of research into the space of abstract writing, which follows the traditional research convention of communicating research to fellow scholars.

Peer review of project plans or indeed the interdisciplinary abstract itself allows students to present their budding project plans to classmates, receive feedback, and refine their work accordingly. These sessions create a collaborative learning environment where students engage with diverse perspectives, challenge their assumptions, and deepen their understanding of interdisciplinary enquiry. This iterative process not only strengthens their projects but also enhances their ability to give and receive constructive feedback, an essential skill in both academic and professional settings.

Reflection is a central pillar of the SDA, encouraging students to document and explore their learning journey, the challenges they encounter, build on their disciplinary excellence towards interdisciplinary enquiry. and become actively aware of the personal growth they achieve through the process. Critical reflection is therefore built into the curriculum—giving students the opportunity to continuously reflect on their learning across disciplines as they go through their interdisciplinary module. This reflective format permits diverse forms of self-expression, including creative writing, first-person narratives, and testimonies on experiential learning. This reflective dimension deepens students' understanding of their interdisciplinary development, helping them connect their experiences to broader intellectual and practical contexts.

The SDA, implemented later as a summative assessment, is supported by these formative elements to guide students in building their research projects. By integrating feedback from peers and instructors, and by regularly reflecting on their learning, students refine their work, resulting in thoughtful and well-developed final submissions. This balance between individual

initiative and structured support allows students to take ownership of their projects while benefiting from collaborative input.

To celebrate and showcase student achievements, the SDA includes opportunities for assessment exhibitions. These exhibitions provide a platform for students to present their completed projects to peers, faculty, and the wider community. The diversity and originality of the showcased work highlight the range of approaches students take, reflecting the interdisciplinary and creative ethos of the SDA. Exhibitions not only celebrate student accomplishments but also serve as inspiration for future cohorts, offering insight into the process and potential of interdisciplinary projects. For an example of an assessment exhibition which includes SDAs from current undergraduate and postgraduate students, please see IATL (2025a)[2]. This culture of inviting students to showcase, share and disseminate assessed work, regardless of mark received, encourages students to perceive their work as valued well beyond the module's assessment programme, and opens the door for new possibilities. These include embedded pathways to submit their interdisciplinary work to the International Conference of Undergraduate Research (see ICUR, 2025), which welcomes submissions of alternative forms of research.

Implementing student-devised assessment (SDA): key implications. While the SDA offers significant pedagogical value, its implementation must be considered within the broader context of neoliberal pressures in higher education. Neoliberalism often prioritises efficiency and scalability in education, emphasising models that maximise economic output and minimise resource expenditure (Gasser, 2024). The individualised and personal nature of the SDA directly contrasts with these principles, as it requires substantial institutional support, particularly in terms of staff time and resources. Smaller class sizes are often more conducive to the iterative, feedback-driven process that underpins the SDA. Scaling this approach for larger cohorts would require investment in teaching staff, repackaging the SDA for groups (instead of individuals), or creating innovative methods for feedback delivery, such as digital platforms or group-based consultations.

One of the key challenges we have encountered along the way in the development of our SDA programmes is related to the evaluation process of such diverse assignments. While there is a continued push for the 'diversification of assessment' in higher education around the world (e.g. Zishiri and Mataruka, 2024; Opre et al., 2024; Yando and Simanjuntak, 2024), there is still a dearth in the literature on the mechanisms through which these diverse forms of assessment can be assessed equitably (Turner et al., 2024)—particularly if the outputs generated by students are in diverse formats. As such, not only are transparent assignment briefs and marking schemes vital in establishing the parameters and expectations of the respective module's assessment programme, the assessment criteria themselves need to be very carefully scrutinised to ensure that students from across a range of different disciplinary backgrounds can thrive. Moreover, it is essential that this scrutinisation considers its accessibility for staff from different disciplinary backgrounds who must ensure that their expectations are aligned and that they can subsequently provide feedback and apply a mark confidently in the evaluation process.

As we will argue below, the process of creating a robust SDA programme must involve heavy collaboration between staff and students from different disciplinary backgrounds to peer review assessment documentation before the module begins. Following this, teaching staff should introduce a structured formative process that allows ample time for students to 'digest' this alternative approach to assessment and crucially, acquire the assessment literacy and skillset to confidently approach their SDA towards the end of the term. As we will discuss later on, humanising the process can mitigate some challenges and make the assessment more accessible and inclusive for both staff and students.

Similarly, establishing a successful, interdisciplinary SDA programme on a module or course involves much reflection, review, moderation, and evaluation of feedback from everyone involved. Over the past decade of SDA implementation experiences, we have continued to enhance our provision through regular review and evaluation of our provision this includes:

- Module Leaders collecting, collating and reviewing mid-term feedback on accessibility of assignment briefs, marking criteria and students' overall reflection on their experiences so far engaging with the module's SDA programme. They then submit their reflections and action points to the department for follow up where relevant.
- Departmental analysis of termly, anonymised module evaluation feedback via questionnaires to all students involved—including the subsequent feed-forward to module leaders who will make any necessary adjustments accordingly.
- Termly student voice focus groups at the end of the module. This is an opportunity for students on each of our modules to feed back to the department on their experiences on the module, including reflections on their SDA experiences. This data is then collated by an interdisciplinary modules coordinator, who then arranges with the director of education next steps for review with each module leader.
- 'Peer Dialogues' involving module leaders from different disciplinary backgrounds teaching across the interdisciplinary module portfolio in the department revising and peer reviewing assessment documentation for future iterations of the module.
- Summer reviews of external examiner feedback on assessment for each module, with any action items to be completed by the next academic year.

This robust approach throughout the academic year, establishes a culture of compassionate practice and alignment between Module Leaders running interdisciplinary SDA programmes, and maintains a pace of regular dialogue across the academic year on the theme of assessment. This dialogic approach humanises the experience for Module Leaders—building a sense of community through the shared aspiration of maintaining team alignment, while keeping the much-valued focus of pedagogical autonomy in interdisciplinary assessment innovation.

While the challenges are greatly associated with the context in which the interdisciplinary module provision is situated (e.g. class size, disciplinary diversity of student cohorts, disciplinary background of staff involved, marking capabilities and workload pressures, etc), the general concept and ethos of the SDA can be implemented with tweaks, based on the teaching and learning context.

The SDA's value lies in its commitment to fostering meaningful educational experiences over purely efficiency-driven models. It aligns closely with the principles outlined in the assessment framework developed by Boix-Mansilla et al. (2009), emphasising the integration of knowledge across disciplines and the creation of novel insights. Furthermore, it incorporates the 'interdisciplinary skills' identified by Christoph et al. (2015): reflection, collaboration, critical thinking, and dealing with uncertainty.

Over the course of developing and fine-tuning our provision of the student-devised assessment across a range of interdisciplinary

modules for over a decade in our department, we have seen how undergraduate and postgraduate students from often radically different disciplinary backgrounds have engaged with, and excelled in the SDA assessment programmes. This is evidenced not only by the overall quality of the outputs (see e.g. IATL, 2025a), but importantly by testimonies each year from anonymised end-of-module feedback questionnaires, end-of-term 'student voice' focus groups, feedback from teaching staff, and our external examiners who moderate this provision from other higher education institutions (HEIs).

We argue, therefore, that by integrating interdisciplinary theories, fostering reflection, and encouraging creative expression, the SDA provides a robust framework for assessing and cultivating interdisciplinary learning. It empowers students to think critically and adaptively, preparing them for the complexities of contemporary academic and professional landscapes. As a model for innovative assessment, the SDA exemplifies the potential of interdisciplinary education to foster intellectual growth, creativity, and meaningful engagement with the world. And, as we discuss below, the SDA programme evidences how this form of assessment aligns with the sector's growing efforts to humanise learning at university.

Discussion: optimising the humanisation framework through an interdisciplinary student-devised assessment programme

To further consider the *value* of utilising the interdisciplinary teaching and learning space and the SDA programme to embed humanising interventions in HE, we can draw on Todres et al.'s (2009) value framework for humanisation, as well as Devis-Rozental's (2018) contextualisation of this framework to Higher Education more broadly. This framework offers eight crucial dimensions of humanisation and dehumanisation, which are situated as a 'spectrum of possibilities' for practitioners—in our case, facilitators of learning in HE—to implement in their practice. In this discussion, we explore and reflect on how these dimensions are applicable to the assessment experience, both in the design and delivery of the assessment programme from the practitioner side, and in the interpretation and experience of undergoing the assessment programme from the student side (Table 1).

It is important to signpost that the original eight dimensions proposed by Todres et al. (2009) are each located on a 'spectrum of possibilities' and should not be perceived as polarising or absolute concepts or experiences. This means that practitioners can view their efforts to humanise their assessment provision as highly contextualised and dependent on the structures in which their teaching and learning practice occurs—as such, we can argue that there is significant compassion in this model and approach, as there will undoubtedly be some degree of limitation to this (e.g. high number of students in a cohort, workload of the marking team, challenges in administrative procedures such as an inability for students to submit large video files, etc). These eight

dimensions can also certainly overlap, but 'each emphasises something special as captured in the name of the dimension in each case' (Todres et al., 2009, p. 70). Therefore, it is likely that our existing practice lies somewhere between and across them, and is very much impacted by its context, including the teaching and learning setting and the physical, social, and mental boundaries (Hernes, 2004) that comprise our organisational environment. Being mindful of these variables is significant, as the SDA calls for particular conditions which allow us to reach optimal levels of humanising opportunities and experimentation in the classroom. Not everyone is afforded this advantage in HE. This said, if we view the interdisciplinary SDA programme as one which is exemplary for humanising assessment (and therefore located somewhere towards one end of the spectrum), elements of the SDA can be extracted and applied to a range of teaching and learning contexts to humanise assessment along the spectrum of possibilities.

Here we use Todres et al.'s (2009) eight dimensions to illuminate the value of an interdisciplinary assessment programme, culminating in a student-devised assessment. Our aim is to advocate for a humanising and inclusive experience for both staff and students involved in the programme.

Insiderness—objectification. It has been shown in the literature that students may avoid or resist attempts at 'deep learning' in order to find a short cut that will enable them to pass—signalling disengagement (e.g. Mann and Robinso, 2009). Currently, with the 'cost of living crisis' in the UK that is negatively impacting well-being in students (Dabrowski et al., 2025), coupled with rising tuition fees, students have much on their plates to make ends meet and as such there has been an increase in disengagement with learning (Jones and Bell, 2024). Furthermore, Erturk et al. (2022) point out that the mental fatigue associated with the process of marking essay after essay itself can cause boredom and disengagement from staff. When the process of assessment becomes objectified, for often very legitimate reasons, our institution runs the risk of disengagement from both sides: students and staff.

The objectification of assessment programmes, regardless of academic level, has developed through a wide range of mechanisms which have been implemented with the best intentions, that is, to ensure a particular academic or professional standard has been met. The downside of this, of course, is that standardisation will nearly always involve a degree of dehumanisation. In an institution which relies on ensuring that certain quality standards are in place, we will always encounter these tensions when implementing an assessment programme. In this sense Todres et al.'s (2009) placement of these dimensions on a *spectrum* is very important to consider.

When assessment programmes become dehumanised, students (and teachers) are likely to feel little emotional or social engagement with the process (Rozental-Devis, 2020). Examples of this include the delivery and marking of exam papers; assignments that encourage and award rote learning styles; giving and receiving templated feedback (etc). In such cases, it is likely the student will disengage socially and emotionally from the exercise, and teachers will objectify their students to a certain extent, seeing their students as numbers or even 'grade output machines' (Rozental-Devis, 2020).

As seen, the interdisciplinary environment is a space which relies on collaboration, dealing with uncertainty, reflection, and critical thinking (Edelbroek et al., 2018). When these skills are required in an assessment programme such as the SDA, it encourages us to step away from templates, rote learning, memorisation, and even a degree of conventional teacher-

Table 1 'Conceptual framework of the dimensions of humanisation' (Todres et al., 2009, p. 70).	
Forms of humanisation	**Forms of dehumanisation**
Insiderness	Objectification
Agency	Passivity
Uniqueness	Homogenisation
Togetherness	Isolation
Sense-making	Loss of meaning
Personal journey	Loss of personal journey
Sense of place	Dislocation
Embodiment	Reductionist body

student hierarchical power structures to achieve student-guided outcomes. In doing so, we not only contest the 'standardisation and mechanisation of learning' (Wijaya Mulya, 2019), we also empower our students to become 'insiders'—where that student-centredness encourages them to engage with the assessment process in an individualised manner and to demonstrate their disciplinary excellence (which may differ from our own) while integrating insights from other fields of knowledge. In some cases, this may even translate into a 'transdisciplinarity' whereby varying forms of knowledge (including their lived experiences) can be integrated in a way that makes disciplinary boundaries too blurry or too irrelevant to use. Nevertheless, these potentially transdisciplinary insights can be valuable contributions to the problem-solving activity, and with an intentional transdisciplinary assessment structure and evaluation criteria which values a range of knowledges spanning beyond academia, forms of traditionally undervalued knowledges (Maringe and Chiramba, 2023) can be integrated into the teaching and learning experience[3]. Through this process, students become valuable contributors to the assessment space, and we teachers can provide tailored assessment literacy guidance and feedback on this learning (summative and formative) in a way that allows us to demonstrate that we have indeed 'seen' our students and recognised their individuality and their contribution to knowledge. This practice returns the favour to us as practitioners, as we will in turn have a more personalised experience where we can engage with our students' individuality and continue our own learning *from* them. The process is therefore humanised to ensure both staff and students have an 'insider' experience of the assessment programme. Thus the reciprocal nature of such pedagogical relations in the assessment space, despite its resource-heavy demand, can be deeply meaningful, engaging, and educative for both parties.

Agency—passivity. Todres et al. (2009, p. 70) powerfully argue that one's 'sense of agency appears to be very closely linked to the human sense of dignity'. Students being subjected to inaccessible, unclear and/or unattainable assessment criteria; or to non-inclusive assessment resources and administrative processes are indeed put in a position that is vulnerable to unwarranted passivity. The freedom to learn—that is, the ability to define, connect with, and shape one's own learning—is a humanising practice. When we apply this to spaces of learning where students are asked to explore problems which cross disciplinary boundaries and speak to personal interests, talents, and aspirations, we are offering a humanising learning opportunity.

An assessment programme that leads to an SDA project empowers students to take charge of their learning experience by encouraging them to regularly *reflect* on their personal, academic, and/or professional aspirations in the lead up to developing their project. This is an important pre-assessment intervention, as the SDA is specifically designed to ensure students are given the agency to identify their learning needs, requirements, and goals. There are many ways to incorporate this in formative learning spaces, including dialogic reflective blogs or 'ePortfolios', individual or collaborative tutorial sessions, and group homework activities involving students from different disciplinary backgrounds.

This gift of assessment freedom for the student involves relinquishing an element of 'content control' from the teacher. In the interdisciplinary learning environment, particularly those in which the teacher and students stem from different disciplinary backgrounds, the roles of teaching and learning can be subverted —with students teaching the teacher and vice versa in order to solve a complex, interdisciplinary problem. The SDA is an

opportunity for teachers or facilitators of learning to consider the assessment space as a site for the co-creation of content which transgresses disciplinary 'habits of hand', 'habits of heart', and 'habits of mind' (Shulman, 2005). By allowing students to teach us *through* their work (instead of expecting them to reinforce our way of knowing and doing), we shift our relationship with our learners to one that is more dialogic and, as such, humanise the process for both parties.

Uniqueness—homogenisation. Following this crucial element of agency, one of the most beautiful reasons to encourage a 'radical' interdisciplinarity (IATL, 2025b) in assessment programming is that it provides a space for all involved learners, including teachers, to actively reflect on how we regularly reproduce and co-construct meanings of what (academic) achievement in HE looks like. Interdisciplinary teaching and learning encourages flexibility in how learners engage with knowledge. This includes theoretical, methodological, and pedagogical approaches to the subject matter. When placed in a position which subverts and even challenges assumptions about pre-existing knowledge, skills, and learning approaches that are traditionally *relied upon* to deliver curriculum in homogenised ways, practitioners are encouraged to refocus their delivery in a way that becomes more individualised and student-focused (Burch et al., 2016).

It is important to acknowledge here that facilitators of learning in HE are met with exceptional demands which ultimately lead to dehumanising assessment practices, including high student-to-teacher ratios and the subsequent inability to tailor learning to the individual level; precarious teaching contracts which prevent opportunities for professional growth and the ability to invest in re-imagining and re-writing often inherited courses and their assessment programmes; and being a part of a culture which often incentivises, favours, and awards research output over pedagogical innovation (Evans, 2025).

Compassionately keeping these systemic challenges in mind, assessment programmes often do not (and/or cannot) incorporate pre-assessment tasks, formative feedback, or assessment literacy activities in the lead-up to the summative assessment(s), and as such, can homogenise cohorts of learners through assumptions about skills, knowledge, and abilities (Nieminen et al., 2024). Expectations can therefore be implicit, lack transparency, and can produce high levels of anxiety for students. This is the case in particular for learners who fall outside the scope of these expectations (Nieminen et al., 2024). The homogenisation of assessment is therefore very closely linked to inclusivity problems that we face as a sector.

To encourage uniqueness—the ability for students to feel as though they are contributing something important, positive, and 'unique' to the module or course—we can start by embedding inclusive practices into our assessment programme. This can include:

- co-creating the assignments, marking schemes, and assessment literacy tasks with students from across disciplines to ensure the programme is indeed as accessible as we may believe (see Supplementary Information for an example of co-created assessment criteria for interdisciplinary SDAs);
- consulting with academics across disciplines in the creation of the assessment programme to encourage reflection on disciplinary bias and hidden curriculum which enable particular students to thrive over others;
- limiting activities where students are expected to recite, reinforce, repeat, or reproduce content that has been delivered by the instructor, and encouraging more opportunities for students to incorporate elements of their individuality into the entire assessment programme—a

space that 'allows students to showcase their learning in unique ways' (Nieminen et al., 2024, p. 5);

- creating a learning environment which is approachable, *tolerant* to learning, and holistic in order to establish an assessment programme that allows students to showcase their strengths, interest areas, and/or aspirations;
- and providing formative and summative feedback which is accessible, growth-focused, and individualised.

Interdisciplinary SDAs guide teachers and learners away from a wide range of homogenising assessment practices, such as deficit models, towards the development of humanised learning experiences. This approach is based on the poignant observation that 'assessment does not always have a uniform effect on students' (Barrow, 2006, p. 370).

Togetherness—isolation. We argue that effective interdisciplinary teaching and learning involves sustained collaboration with others from different disciplinary backgrounds. As such, a pedagogical approach which opens the space for a certain level of co-creation amongst contributing staff and students is an important component. This approach places a strong emphasis on experiential teaching and learning practices, where students and staff collaborate in the co-creation of knowledge. This also means that we can reimagine, experiment, and reconceptualise how we understand the notion of 'content'. The SDA assessment *programme* challenges us to question what we mean by 'content' when the learning environment is collaborative. If 'content' is, in part, delivered by students, does it, in fact, count as module 'content'?

This term, 'content', can be problematic when expectations from students are to be passive consumers of knowledge. This form of teaching 'content' in the traditional sense (i.e. standing at the front of the room lecturing at students with slides they will 'consume') encourages isolationism in both the teaching and learning experience. It encourages educational hierarchies, power structures of knowledge exchange, and passivity in student learning. Significantly, this model isolates students from engaging (Chipchase et al., 2017).

When student experience, disciplinary knowledge, and skills are established forms of educational 'content', the learning space requires collaboration and a sense of togetherness. Collaboration and the co-creation of 'content' is an essential feature of interdisciplinary learning, and when applied effectively in the classroom, students are discouraged from feeling as though certain disciplinary skills are favoured over others. As seen, in interdisciplinary assessment, the goal is to ensure that all students (regardless of disciplinary background) can thrive in their own way, and thus an interdisciplinary assessment programme, as a mechanism *for* learning (Martinez and Lipson, 1989), should ideally empower each person in the room to be an integral part of the learning experience.

An interdisciplinary assessment programme that leads to an SDA will work towards building a sense of community by valuing individual contributions to 'content' and knowledge exchange. Strong educational and learning communities require a common goal and aspiration (Meyer, 2021). If value is consistently and effectively placed on the goal of creating a student-devised research project which is *unique* to the student's individual goals, and to the wider interdisciplinary learning experience of the cohort, then we can establish a strong sense of collective responsibility, accountability, and shared ownership in the interdisciplinary assessment programme.

Sense-making—loss of meaning. Loss of meaning takes place when a student is unable to apply the 'content' they have learned in a meaningful way to their own life and aspirations. This often happens when there is a rote learning style that is implemented into an assessment programme and where achievement is awarded based on this. Examples include some exam and essay formats where the *focus* is to repeat or restate/reformulate a discussion that appeared on the module. Loss of meaning can also occur when the fear of delivering the content in the 'right' way through the module's assessment programme—what Jones et al. (2021) aptly call 'your life in a piece of paper' (p. 441)—supersedes the joy of engagement.

When learners are *expected* to engage with modular content (including other students' work which is unique to them) through sense-making activities designed to place value on personal experience, a humanising culture of student-centredness occurs. In the interdisciplinary teaching and learning environment there are ample opportunities to establish a culture where identity matters in learning. This is because it relies on the integration of knowledge across disciplinary boundaries and as such, new ways of thinking and doing. Thus, it is an optimal space to empower students to showcase their knowledge and feel represented (Devis-Rozental, 2018, p. 114).

The SDA provides an opportunity for students to construct their own patterns of knowledge, learning, and doing which draw on and link to the 'personal'. This is not only achieved through the creation of their artefact through which their message is conveyed, but significantly through the reflective elements embedded into this form of assignment which showcase and celebrate the individuality of the learning experience.

It is vital to stress that fragmentations in the sense-making experience occur when the SDA is not appropriately framed and organised as the culmination of a wider learning experience in which pre-assessment tasks have been thoughtfully integrated over the course of the module. Particularly in postgraduate interdisciplinary education, where students from established disciplines often are already socialised into disciplinary norms (Holley, 2017) that can impede their engagement with humanising interdisciplinary pedagogies from the onset, it is essential that tailored scaffolding is put into place that factors this limitation in.

Part of the interdisciplinary learning experience is developing the ability to positively encounter and engage with uncertainty; critically reflect; and create links between knowledge gained through collaboration and their own learning—all of which we can expect will appear at some stage of the development of an SDA at the undergraduate and postgraduate levels. Therefore, it is essential that the SDA, as a sense-making (and humanising) tool to assess learning, is perceived by practitioners as the final component of a much larger, well-structured assessment programme.

Personal journey—loss of personal journey. In a post-pandemic era, following the unprecedented scramble to establish a system and culture for online learning, HE practitioners have settled into a new educational space where students face a range of challenges including a continuation of managing blended and face-to-face learning with rapidly changing technology and resources (including developments in AI), financial concerns, and a cost-of-living crisis. These challenges have shaped attainment, accessibility to learning, and students' academic, professional, and personal aspirations. It is therefore essential, now more than ever, that students in HE have sustained opportunities for high-quality, person-centred education which is experiential and humanised (Devis-Rozental and Clarke, 2020a, 2020b), and that this experience incorporates regular *reflecting* on their 'learning gain' or 'distance travelled' as defined by McGrath et al. (2015). Assessment is a compelling space to begin (and host) this process.

Assessment programmes (particularly at the curricular level) should ideally be built with mechanisms in place to ensure that facilitators of learning not only have generous amounts of time to acquaint themselves with their learners, but that they also have the right fora for this dialogic process to occur. It is essential to build socio-emotional intelligence (Devis-Rozental, 2018) to facilitate assessment programmes which encourage students to acquire the skills they need to explore who they are and to develop vertical literacy. This makes the interdisciplinary SDA assessment programme particularly applicable, as students are explicitly asked to reflect on their learning, their personal interests, and where they want to go in the future in order to devise their project. Exploring who they are and who they want to become, in a holistic way, encourages interdisciplinary and transdisciplinary thinking. Therefore, in a humanising curriculum, and by extension, on SDA programmes, students will encounter a variety of options to engage with the relevance of their learning to their individual identity and learning journey (past, present, and future). This also encourages the SDA output to become conceptualised as an entity that exists well beyond the interdisciplinary module's assessment programme itself—with undergraduate and postgraduate students volunteering to submit their work to showcase in Assessment Exhibitions, apply for internal project funding to support the development of their SDA even further[4], present their work at conferences[5], and even revise their SDA work into interdisciplinary academic papers for publication[6]. This forward-trajectory of assessed work beyond the module demonstrates 'lifelong learning skills' which Chițiba (2012) describes as 'the continuous development and improvement of the knowledge and skills needed for employment and personal fulfilment through formal and informal learning opportunities' (p. 1944), where the sense of personal learning is heightened.

The loss of personal journey occurs when the learning experience becomes routine and habitual (Todres et al., 2009). Within the scope of assessment, we often see this occurring when there is little diversity in assessment formats, such as continual, rote-style exam taking or essay writing throughout a student's learning journey. Students have reported going on 'auto-pilot', entering a 'state of unconsciousness', or 'sleepwalking' through this journey (Kazmi, 2010), which evidences not only disengagement but also the devastating effects of a dehumanising educational experience.

This student experience of 'sleepwalking' can also be linked to concerns about the inappropriate use of AI in assessment. If a student resorts to using generative AI, it may suggest that their engagement, purpose, and curiosity to learn have diminished, and that they wish instead to deliver an output quickly and achieve a passing mark (Sullivan et al., 2023; Schiff, 2022). This is of particular relevance to assignments which repeatedly occur in curriculum and are a habitualised assessment practice. The academic essay or research paper is one example of this.

In fact, according to Hyland (2001) a range of academic disciplines regularly adopt a convention of 'sanctioning' authorial presence in research—this includes using personal and possessive pronouns, incorporating passive writing styles, and avoiding reflection or lived experiences in academic work. This is quite literally 'dehumanising' the output. When we are encouraged to write impersonally and disconnect the 'self' from our work, generative AI is alluring because the differences between impersonal prose and AI-generated prose are often imperceptible. Not only this, but by eliminating authorial presence, we lose our ability to create an authorial identity (Hyland, 2001) and sense of journey through our work.

Assessment programmes which incorporate and value the *human* through unbridled reflection, creativity, and emphasis on

personal growth and 'learning gain' present optimal spaces for learning continuity and connectivity to past, present, and future. As such, we argue then that the use of AI can be repurposed as an *educational tool*, and less as a mechanism to generate a (dehumanised) output. The design of the SDA programme and the subsequent outputs we have received over the past couple years from our undergraduate and postgraduate students has shown that reliability on AI-generated content is largely not enough (currently) to achieve a 'passable' standard on our interdisciplinary modules. The SDA programme (including the evaluation system that reinforces the humanised approach) appears to be, at this stage, relatively robust against exclusively AI-generated content[7].

To ensure this element of agency in developing interdisciplinary competencies, creativity, and personal growth in assessment, we will need to turn to *how* we evaluate students within the existing university structures, systems, and processes which enable us to deliver our SDA programme. With clear, robust marking schemes which foreground learning outcomes that are transferable and free to contextualise across the landscape of disciplines *by the student*, we open the possibility and humanise the space for students to shape their own learning. Evaluation criteria can be one of the key challenges here, provided that students can negotiate their own topics and formats through which their research is articulated. As such, we incorporate interdisciplinary and humanising criteria such as: 'critical thinking' as it applies to their chosen point of enquiry and engagement with sources[8], how the student themselves conceptualises 'interdisciplinarity' as it relates to their work, 'reflection' on their learning journey and engagement with resources, and how they have chosen to communicate their ideas to their chosen intended audience. Each of these criteria provides students the agency to shape their own learning journey, and as such, humanises the assessment.

Sense of place—dislocation. While in recent years we have, as a sector, seen indication of improved awareness of systemic accessibility and attainment challenges, particularly for marginalised communities, we still have much to learn, particularly in the area of assessment (Nieminen et al., 2024). Students (and staff) who hold a particular form of social and cultural capital are accepted and thrive more than others in our university system (Longden, 2004, Noble and Davies, 2009, Clegg, 2011). There is evidence of this through a range of indicators including the 'hidden curriculum' (e.g. Koutsouris et al., 2021), trends in attainment and awarding gaps (e.g. Clegg, 2011), and the limited diversity we see in leadership positions across the sector (e.g. Reis and Grady, 2019).

The cultural capital required to succeed in HE is deeply rooted in HE learning spaces where educational traditions and signature pedagogies are reconstructed to ensure a legitimacy and longevity of academic disciplines. Strong educational communities have mechanisms to construct very clear boundaries which reproduce, perpetuate, and maintain meaning-making processes. This includes *what is valued* and who belongs (Meyer, 2021). There are benefits and drawbacks to this dynamic.

Interdisciplinary teaching and learning environments have the potential to subject us to entirely new ways of doing and knowing, and as such, to a certain extent, to the opportunity to subvert the boundaries we become accustomed to. It is a site where, ironically, a brief experience of 'dislocation' can lead to a strong sense of place within our wider academy. It is a chance to redefine what is considered 'valued' knowledge and skills, and reimagine how we establish new learning networks and communities of practice. A humanising assessment programme incorporates

opportunities for students to feel a sense of belonging and community within the academy. This is achieved by interventions, including:

- establishing early the boundaries of the interdisciplinary learning community, and the pool of skills and knowledge which the environment requires in order to function (including the co-creation of 'content');
- making clear the new value systems and norms which would allow a student to thrive, contribute meaningfully and find a sense of place that will complement their sense of belonging within the disciplinary realm;
- positively framing the feeling of 'fish out of water' (i.e. uncertainty) as one that is essential to interdisciplinary learning;
- creating a culture that places value on student-led learning and collaboration;
- and establishing a common goal of learning for the interdisciplinary context.

Given the above, the SDA programme has enormous potential to create pathways for students—particularly those from marginalised backgrounds—to establish a sense of belonging to the academic world. The SDA's inclusive structure empowers students to identify, reflect on, and apply knowledge and skills in ways that work best for them, and to contribute to an environment and assessment space in which these attributes are welcomed, valued, and validated. This process leads to wider, more inclusive, and positive implications on how we are defining and reshaping research culture in HE.

Embodiment—reductionist. A humanised assessment programme requires a *holistic* approach which factors in the role of embodiment and how this plays into the teaching and learning process. To facilitate meaningful learning, it is essential that we have the tools to support the well-being of our students (and of ourselves) as they navigate the assessment programme. In the interdisciplinary teaching and learning context where disciplinary and professional signature pedagogies are less pronounced, we are invited to explore assessment programmes in novel, and ideally holistic, ways. This means reimagining not only the intellectual dimension of assessment but, crucially, the social and emotional experience of assessment for students and how these can positively impact their well-being.

Nurturing, supportive, and compassionate learning environments lead to positive outcomes (Devis-Rozental and Clarke, 2020a, 2020b), yet as a sector we still encounter established cultures of fear in the area of assessment (Ray et al., 2022), such as the fear of underperforming; of 'getting it wrong'; of disappointing oneself, the teacher, classmates, family, or friends; and ultimately, of failure (see e.g. Choi, 2021). This culture of fear-based learning is regularly reconstructed in education systems around the world (Holt, 2022) through the continued reliance on deficit models, a culture of negativity bias, and dehumanising assessment programmes through which students are placed in a position in which they are not in control of their own learning narrative.

A humanised assessment programme that factors in the embodied experience of learning can be achieved through the aforementioned characteristics and aspirations of interdisciplinary thinking proposed by Edelbroek et al. (2018)—particularly in the area of reflection where students can be invited to explore how their individual embodiment of learning appears and transforms over the interdisciplinary assessment programme. This also works as a communication strategy leading to collaborative interactions between teaching staff and students.

This can appear through formative feedback interactions, in tutorials, and through classroom and online exchanges.

The inclusive design of the SDA programme provides a humanising approach which factors in the embodied experience of learning—one which considers student and staff well-being and which provides a pathway for learners to feel 'seen' and to thrive in a holistic, inclusive manner. When implemented successfully, such 'strategically ambiguous' assignments like the SDA have been found to incite significant levels of pride in students in their assignment, as they were empowered to lead and take control the project design, leading to a more satisfying outcome (Bratslavsky et al., 2019).

It is important to note here the relevance of the wider context of learning outside the physical or virtual classroom, and the impact this has on students when encountering an assessment programme that may be different to what they are used to. A 'reductionist' approach to learning would consider only what happens in the learning space itself or during "class time". This is potentially dehumanising because students often continue learning beyond the (virtual) classroom, which means their experiences, including any mental health struggles they might face, could go unnoticed. To avoid a reductionist approach, particular well-being pedagogies (WIHEA, 2024) can be incorporated in the assessment programme including:

- quickly establishing a safe and secure learning environment which promotes compassion, kindness, and support;
- making transparent all assessment expectations early on—honestly and openly—and ensuring these are consistently applied (and ideally remain unaltered) throughout the duration of the assessment programme;
- swiftly identifying and implementing reasonable adjustments where relevant;
- embedding strategies to ensure all students have access to assessment materials, pre-assessment / assessment literacy activities, and peer-review opportunities;
- sign-posting professional services to support student well-being over the course of the assessment programme;
- regularly checking in on students who appear to struggle (e.g. those demonstrating low levels of engagement or not attending class).

Keeping these factors in mind, we can ensure that students' learning requirements are met, and that this form of an interdisciplinary assessment programme can greatly improve the well-being of our students. As Devis-Rozental (2022) so eloquently points out, 'being well means doing well'. If we keep this in mind as we humanise our assessment programme for our students, we will be one step closer to establishing healthy, embodied experiences of learning.

Conclusion

While it is observable that the sector is making gradual progress in exploring ways to reimagine and humanise assessment for its students despite substantial barriers, we still have scope to challenge the rigidity of now-normalised practices in the assessment space. This is an important and much needed change in educational culture which requires a subversion of conventions, as change-making is not easy within formalised, long-standing educational traditions. Yet we have seen here that even the smallest amendments to assessment which do indeed incorporate humanising practices have the potential to positively transform a learning experience.

With the increase in interdisciplinary education across the sector, we are exposed to new possibilities to experiment and innovate as practitioners. What's more, through the conscious

effort to humanise our assessment programmes—no matter how big or small these interventions are or where they might exist, conceptually, along Todres et al.'s (2009) 'spectrum of possibilities'—we can contribute to small cultural shifts within HE which significantly change lived experiences in our community.

By placing value on the 'human' within academic discourse, as seen in our SDA example, we produce more inclusive learning opportunities, wider accessibility and attainment possibilities, and broaden the scope for enhancing the well-being of our students as they undergo their studies. Significantly, by formalising the value of the 'human' in academic outputs, including research, we also contribute to a more inclusive approach to research culture. As a community in HE, we can always do better. We can continue facilitating positive relationships with our teaching, learning, and scholarship, by humanising the experience for all.

Notes

1 Approximately 12 of our long-standing interdisciplinary modules feature SDAs. Our other interdisciplinary modules ~50) that have been developed over the years innovate through other 'alternative forms of assessment' that offer a similar ethos to that of the SDA.

2 The University of Warwick's Institute for Advanced Teaching and Learning (IATL) Assessment Exhibition is a rolling showcase of assignments (including student devised assessments) produced by students who have taken an interdisciplinary module through our department. The IATL assessment exhibition has been co-created with departmental staff and students, and features a range of interdisciplinary and transdisciplinary projects that have been produced through humanised assessment programmes (IATL 2025a).

3 See e.g. EUTOPIA (2025) for an example of how this transdisciplinary approach to assessment is practiced as a Collaborative Online, International Learning (COIL) activity between European partner universities.

4 See e.g. student projects which have developed into published work, Charles-Novia and Olubode (2022) and Savvias (2025).

5 Conferences which regularly accept undergraduate SDA projects for presentation include the International Conference of Undergraduate Research (ICUR, 2025), the British Conference of Undergraduate Research (BCUR, 2025) and the World Congress on Undergraduate Research (WORLDCUR, 2025).

6 *Reinvention: The International Journal of Undergraduate Research* has published interdisciplinary work stemming from such projects (Reinvention, 2025).

7 We have also conducted trials of student-led peer reviews of AI-generated SDAs, by asking our students to evaluate them using the SDA marking criteria of their interdisciplinary module—and unanimously these have been returned from our student reviewers as failed (or near-failed) marks.

8 Assessment criteria where notions of 'criticality' need further contextualisation and unpacking (particularly for cohorts of students stemming from wide-ranging disciplinary backgrounds), are where there is much potential to embed in formative pre-assessment tasks and assessment literacy activities. This can also be clarified further in assignment briefs, e.g.

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HM led this study, with contributions from ER, FL and AN.

Competing interests

The authors declare no competing interests.

Ethical statement

This article does not contain any studies with human participants performed by any of the authors.

Informed consent

The study does not involve human participants or their data.

Additional information