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The role of pedagogy and the curriculum in university students' sense of belonging

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The role of pedagogy and the curriculum in university students' sense of belonging

Abstract

The special issue aims to explore the possibility of pedagogy and curriculum design for promoting 'belonging'. Relevant to this aim is the question which we address in this proposed paper: To what extent, and in what ways, do students understand their learning experiences (i.e. of pedagogic and curricular practices) to be relevant factors in contributing to their sense of belonging? This paper draws from a study into students' sense of belonging that has so far run for two years, in Winter-Spring of 2019-20 and 2020-21. Building on existing research that has systematically sought to understand the dimensions and factors shaping students' sense of belonging in higher education, our mixed-methods study combines three methods of collecting data from students: a Sense of Belonging Scale, an open-ended questionnaire item, and in-depth semi-structured interviews. The data captures the views and experiences of ~500 students at one research-intensive university in the UK. Our findings have implications for teachers and institutional policy by revealing how particular pedagogic and curricular practices can both enable and undermine students' sense of belonging, as well as the limits of pedagogy/curricula in influencing belonging. We also explore how these factors interact with students' biographical characteristics, with some students facing particular challenges with regards to 'belonging'. We conclude that pedagogy and the curriculum have their main influence not directly, but rather by contributing to a broader 'academic sphere', within which students do or do not develop a sense of belonging.

Practitioner Notes

1. Certain pedagogic and curricular practices and experiences promote sense of belonging
2. Sense of belonging is 'situated' and 'relational', as emphasised in other recent literature.
3. Pedagogy and the curriculum have their main influence on students' sense of belonging by contributing to a broader 'academic sphere' that shapes students' holistic experience.
4. Students' understanding of belonging is grounded in their perceptions of the specific institution that they belong to.
5. Strategies for promoting belonging should therefore be contextualised, since there is unlikely to be a 'one size fits all' model

Keywords

belonging, pedagogy, curriculum, higher education

Introduction

The issue of students' sense of belonging has emerged as central to the challenge of maximising the higher education experience. This special issue raises one of the most promising and challenging questions associated with belonging: how higher education institutions and instructors can design learning experiences and environments that promote students' sense of belonging; in other words, the possibility of pedagogies and curricula for belonging. This is particularly pressing at a time when higher education is an increasingly fragmented experience (Barnett, 2021), so that what higher education is expected to be, and what 'belonging' to higher education should feel like, may be different from one student to another. Should we expect there to be common experiences of and pathways to belonging amongst students? And – particularly in the post-Covid context of increased experiences of isolation (as we have indeed found in our own data) – when we talk about pedagogies and curricula for belonging, are we talking only of promoting a sense of belonging to that educational context, or are we also talking of how higher education can satisfy the basic human need to feel a sense of purpose and meaning in the world?

The present paper raises a related question: to what extent, and in what ways, do students understand their learning experience to be relevant factors in contributing to their sense of belonging? We draw on data from research at one institution that spanned the academic years immediately preceding and immediately following the arrival of the Covid-19 pandemic, allowing us to consider, where relevant, the impact of the increasingly online (or at least 'blended') forms of higher education that have emerged in response to the pandemic, on students' constructions, experiences and challenges associated with belonging.

How belonging became mainstream in higher education

We situate our work within a trajectory of interest in belonging in higher education that started in the 1990s, since which time there has been a relatively sustained focus on the topic, although only recently could it be said to have become mainstream. Early studies focused on specific contexts or subgroups, primarily centred around the notion of an academic community, for example: how a lack of community feeling contributes to low retention of engineering undergraduates in the US (Alexander et al., 1996; Anderson-Rowland et al., 2000); efforts to reduce feelings of isolation amongst Australian postgraduates (Johnston, 1995); and the ways that part-time students attempt to build communities in Hong Kong (Kember et al., 2001). Hurtado and Carter's (1997) research on US ethnic minority college students stands out amongst this early work for attempting, quantitatively, to disentangle how different aspects of students' backgrounds intersect and interact with university settings and culture to influence their overall sense of belonging. Read et al. (2003) took up this theme qualitatively in the UK, interviewing 175 students at one university. Although both these studies (Read et al., 2003; Hurtado & Carter, 1997) looked at only a subset of student populations, they advanced the study of belonging by focusing not only on specific sites of learning or students' immediate interactions with teachers and course peers, but on broader aspects of students' identities in relation to their holistic experience of belonging to and in higher education.

Read et al.'s (2003) research is of particular relevance for our purposes. They demonstrated that sense of belonging is mediated by both the specific sociocultural context of a given higher education institution and by students' active engagement with this context. Moreover, their work was part of a broader strand of UK higher education literature characterised by a sustained sociological analysis of the structure-agency relationship that underpins experiences of higher education, including feelings of and practices of (not) belonging (e.g. Archer & Hutchings, 2000; Bhopal, 2008; Quinn, 2003, 2005; Reay et al., 2001). This strand of literature has been influential, including outside the UK (e.g. Kahu & Nelson, 2018; Ostrove & Long, 2007). Significantly, this literature was an important conceptual source for two nationally funded

projects on students' sense of belonging in the UK and Australia that represent further landmarks in bringing belonging into the mainstream of higher education research, at least in those two countries¹.

In the UK, the What Works? Student Retention & Success programme (hereafter the What Works? programme) consisted of seven projects that collected data from several thousand students across twenty-two higher education institutions. Thomas' (2012) analysis of the overall programme singles out promoting students' sense of belonging as its number one recommended strategy for increasing student retention and overall success. This widely cited report argued for belonging to become a mainstream idea not only for higher education research, but also policy and practice more generally: "Nurturing belonging ... should be a priority for all staff ... and changes need to be mainstreamed... The central finding from this programme of work is... to recognise the importance of *nurturing a culture of belonging*" (Thomas, 2012, pp. 9, 69, emphasis added).

The Australian Capability, Belonging and Equity project was smaller in scale, with data from around 800 students across faculties at one university, but similarly homed in on belonging as central to understanding students' experience of higher education and of "an inclusive pedagogical environment in which trust is established" (Burke et al., 2016, p. 8). The report concluded that "it is vital to understand and acknowledge the social relations that shape pedagogical experiences and identities. These relations are formed within pedagogical spaces (virtual and physical) that develop (or undermine) capability, confidence and belonging" (Burke et al., 2016, p. 82).

For at least a decade, then, belonging has been an increasingly central idea informing how universities should seek to manage students' transition into higher education (Meehan & Howells, 2019) and promote student engagement (Kahu & Nelson, 2018), with emphasis on how this principle can be implemented through core activities such as teaching and course design. A key point of departure for us in the present paper is the place of these core learning experiences in students' own constructions and perception of what is important to their sense of belonging.

Theoretical framework: Belonging as relational and emergent

Our approach follows recent conceptual developments which construe belonging as a construct and experience that is situated and relational (e.g. Ahn & Davis, 2020; Gravett & Ajjawi 2021; Guyotte et al., 2019; Thomas, 2015). We also align with Kahu et al.'s (2020) critical realist framing, which conceptualises reality as multi-layered, complex and non-determinative, such that social experience (e.g. of belonging) and social phenomena (e.g. of a university that successfully promotes a sense of belonging amongst its students) can be understood and explained as the outcome of the interrelations of social agents and different levels of reality (see below), but that such knowledge is always only partial, and similar outcomes cannot be accurately predicted even under apparently similar conditions. Kahu et al. (2020) see students' sense of belonging as shaped by "an interaction between students and institutions" where this refers not only to the specific higher education institution but also to institutions in "the broader socio-cultural context" (p. 658). For example, institutions which sustain unequal life chances and outcomes along lines of social class, race and gender represent underpinning socio-cultural realities which are reflected in the traditional underrepresentation of certain identities in higher education. Although these are highly likely to shape one's experience of higher education, their influence is not uniform or determinative, since other factors and forces also play a role, such as one's past schooling experiences, the role of the family (e.g. their support and expectations

¹ In the USA, the notion of 'belonging' remains largely subsumed under the country's long-standing research on sense of 'community' theorised as important to counter low retention rates (e.g. Tinto, 1987).

regarding higher education), university policies, expectations, practices and provision (e.g. around curriculum, pedagogy, assessment, workload), interpersonal relations with teachers and other students and of course one's own motivation and agency (Kahu et al., 2020). We would add to this, in light of other recent work (Ahn & Davis, 2020; Gravett & Ajjawi, 2021), the spatial and material environment. This inexhaustive list highlights that there are a range of factors and processes that shape how a student participates in higher education, of which some operate mainly in specific sites of learning (e.g. a classroom or study group), while others shape their whole university experience or even their whole lives and identities.

Sample and context

The context of this study is a highly selective, research-intensive university in central London, UK. The university's current Learning and Teaching Strategy commits to facilitating a 'sense of belonging' amongst all students. This paper draws from the 'Belonging, Engagement & Communities' (BEC) project, a mixed methods study into how students from across the university understand, construct and experience 'belonging' at university.

We collected survey data from 497 respondents via Qualtrics between November 2019 and January 2020 and then again between November 2020 and January 2021. 486 participants completed both parts of the survey while eleven completed only the 10 Words Question and not the Sense of Belonging Scale (described below). Additionally, we interviewed thirty-two students, eleven of whom have also participated in a follow-up interview.

Table 1. Demographic detail of survey participants

Demographic detail		Proportion of participants
Gender	Women	48%
	Men	40%
	Nonbinary	1%
	Did not disclose	10%
Fee status	Home	57%
	International	36%
	Did not disclose	7%
Course level	Undergraduate	64%
	Postgraduate taught	22%
	Postgraduate research	11%
	Did not disclose	3%

Methods

The 10 words question

We administered a two-part online questionnaire via Qualtrics. First was a single, open-ended item developed by Ahn and Davis (2020) who researched students’ sense of belonging at Bangor University. Their starting point was similar to ours in their aim to open up the question of what students themselves have to say about what is important to their sense of belonging in order “to collect an extensive body of textual data” that is “amenable to quantitative as well as qualitative analysis” (Ahn & Davis 2020, pp. 623-4). The 10 Words Question asks participants to: *Write down up to 10 words or phrases that come to mind when they think about ‘belonging’ to [institution].*

Sense of belonging scale

The Sense of Belonging Scale consists of ten items adapted from the Panorama Student Perception Survey (Gehlbach et al., 2015) and Yorke’s (2016) Sense of Belonging in Higher Education survey. The scale aims to capture the extent to which students feel different aspects of belonging, such as the sense that one matters to, feels understood by, respected by, welcomed by and connected to others at the institution. For all ten items, participants were presented with five phrasal options to select from (see Figure 1).

Item 1: How well do people at [institution name] understand you as a person?

Do not understand at all	Understand a little	Understand somewhat	Understand quite a bit	Completely understand
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Figure 1. Example item from Sense of Belonging Scale

To generate simple descriptive statistics, responses were coded with values from 1 (e.g. ‘do not understand at all’) to 5 (e.g. ‘completely understand’).

Semi-structured interviews

The invitation e-mail distributing the survey link also included an invitation to participate in an interview. Participants could opt into the interview either by ticking a box in the Qualtrics survey or e-mailing us directly. Interviews explored students’ understandings about what is meant by ‘belonging’ and related constructs such as feeling ‘at home’. They also probed examples and experiences of feeling a sense of belonging and a lack of belonging in both educational and non-educational contexts. Although interviews tended to focus mainly on students’ experience at university, we explicitly asked participants to talk about any communities that they felt a part of within and beyond the university and describe their participation with and sense of belonging within these communities to understand how students experienced and conceptualised belonging.

The central role of the ‘academic sphere’ in students’ sense of belonging

In response to the 10 Words question (see above), no participants used the words ‘pedagogy’, only two mentioned ‘curricula/curriculum’ and none used the word ‘teaching/teacher’. The most frequent words that participants associated with belonging related to aspects of their social life: ‘community’ (107 counts), ‘societies’ (89) and ‘friends’ (85). Following Ahn and Davis (2020), we chose not to be guided simply by the most frequent individual words, but rather sought to

understand the structure of students' understandings of what constitutes and shapes their sense of belonging by classifying the words used. First, we combined words that we felt were getting at the same aspect of experience. Examples of words that we combined in this way were 'clubs' and 'societies' (a combined count of 124) and 'friends' and 'mates' (108). In this paper, we focus our analysis on composite words that arose at least 20 times amongst the 497 responses (or, put another way, words that were used by at least 4% of participants) in order to home in on those aspects that have the most prominent place in students' sense of belonging, leaving us with 27 composite words (see Table 2) that were used a combined 1,407 times and account for around 40% of all words collected.

The second step was to group these into different aspects of student life and experience. Ahn and Davis (2020) followed a similar procedure and grouped the students' words into four 'domains of belonging'. Borrowing this term, we also identify four domains of belonging, although ours differ slightly from theirs. The different domains of belonging are not fully discrete and distinct aspects of life but represent different major structural components of the higher education experience. As such, there are some important overlaps between them and some words could belong to more than one domain. We therefore provide a range of lower and upper frequencies for the different domains, where the lower figure excludes any overlapping words and the upper includes all overlapping words. By both counts, the most frequent domain of belonging is 'academic sphere' (a range of 570-72) followed by 'social environment' (273-372), 'social participation' (252-333) and 'physical environment' (133-157) (see Table 2).

Table 2. Most frequent words and domains of belonging (10 Words Question responses)

Rank	Word / Composite Word	Frequency	Domain of belonging
1	Clubs; Societies	124	SP
2	Community	108	SE
3	Friends(hip) / mates	107	SP
4	Diverse/ity	103	SE
5	Prestige/ious	96	AS
6	Places (words indicating specific places/locations)	86	PE
7	Group(work)	81	SP & AS
8	Science/scientific/scientist; 'STEM(M)'	73	AS
9	(hard) work	72	AS
10	pride / proud	56	AS
11	Smart	52	AS
12	London	47	PE & SE

13	research	44	AS
14	support	42	SE
15	Academic/academia	40	AS
16	Opportunity(ies)	38	AS
17	stress	33	AS
18	like-minded	28	AS & SE
19	Department / departmental	24	AS & SE & PE
19	inclusive	24	SC
21	competitive	23	AS
23	innovative	22	AS & SC
23	technology	22	AS
25	socializing + socialise	21	SP
25	career	21	AS
27	home(ly)	20	SE
Frequency ranges for domains of belonging (in descending order)			Academic Sphere (AS): 570 – 725 Social Environment (SE): 273 – 372 Social Participation (SP): 252 – 333 Physical Environment (PE): 133 – 157

Of most relevance to this paper is the most frequent domain, the ‘academic sphere’. At face value, the importance of this domain is less obvious than ‘social environment’ and ‘social participation’, which are clearly represented in the top four most frequent words. However, the wide-ranging importance of ‘academic sphere’ emerges from the sixteen words in Table 2’s list, so that this domain has a greater overall frequency than ‘social participation’ and ‘social environment’ combined. Perhaps reflecting the highly selective nature of the institution, the most frequently mentioned aspect of this is the ‘prestige/reputation’ of the institution (96 counts). Students expressed ‘pride’ (56) to be there. They valued being in what they perceived as a ‘hardworking’ (72) and ‘competitive’ (23) environment with ‘smart’ (52), ‘like-minded’ (28) people, and in this context they particularly valued ‘group/teamwork’ (81). They also highlighted their disciplinary interest (‘science/STEMM’ received 73 counts), as well as words

like 'research' (44) and 'academic' (40) which, while somewhat generic terms, may again be reflective of the highly academic and research-intensive reputation of the institution.

The predominant role of 'academic sphere' or academic experience in our participants' understandings of what constitutes their belonging to university also came out through our Sense of Belonging Scale. As Table 3 shows, participants responded most positively to questions related to their academic experience, or what might be termed their 'academic belonging': they are very happy with their choice of university (4.0), find their university experience to be enriching (3.8), and feel generally well respected by students (3.9) and staff (3.9). By contrast, participants reported somewhat less positive experiences of more social or 'interpersonal' aspects of belonging: they do not feel particularly well understood by (3.2), or that they matter much to others (2.9), nor do they feel a strong sense of connection to staff (2.8).

Table 3. Sense of Belonging Scale questions ordered by average response. Higher values indicate more positive response.

Question	Value (1-5)	
How happy are you with your choice to be a student at [institution]?	4.0	Academic belonging
How much respect do members of staff at [institution] show toward you?	3.9	
How much respect do other students at [institution] show toward you?	3.9	
How enriching is your experience at [institution]?	3.8	
How welcoming have you found [institution] to be?	3.7	
Overall, how much do you feel like you belong at [institution]?	3.5	Overall belonging
How 'at home' do you feel at [institution]?	3.3	
How well do people at [institution] understand you as a person?	3.2	Interpersonal belonging
How much do you matter to others at [institution]?	2.9	
How connected do you feel to the university staff at [institution]?	2.8	

That participants feel more positively about aspects of their academic experience or 'academic belonging' than about the social or interpersonal aspects of belonging at university does not itself mean that the former are more important than the latter. However, given that our participants self-reported a relatively strong overall feeling of belonging (3.5, therefore above the mid-value of 3), our findings suggest that academic belonging and experience is highly important to our participants in contributing to this general sense of belonging within higher education. The 10 Words data and the Sense of Belonging Scale data highlight a prominent role of our participants' experiences and perceptions of the 'academic sphere' in their understandings of belonging to university.

Belonging in the academic sphere

We borrow the above concept of ‘academic sphere’ from Thomas’ (2012) report of the aforementioned What Works? programme since we wish to agree with and emphasise her argument that when we think about pedagogy and the curriculum in terms of their influence on belonging, it is best to think of the broadest sense in which the university can be said to offer pedagogic and curricular experiences to students, beyond merely the classroom and course requirements. In other words, we should adopt a “holistic view” (Thomas, 2012, p. 31) of the factors and mechanisms through which the academic sphere influences belonging, of which the What Works? programme report highlights seven:

Staff-student relationships

Curricular contents and relevant opportunities

Learning and teaching

Assessment and feedback

Personal tutors

Peer relations and cohort identity

Space/place

We use these seven factors or mechanisms to structure our qualitative findings into how students experience belonging in this academic sphere. Although there are overlaps between these aspects of the academic sphere and some of the other three domains of belonging we described earlier (social participation, social environment and physical environment), we stress that it is the specifically academic content of these characteristics that underpins their central importance to most students’ sense of belonging and which justifies our alignment with Thomas’ (2012) aim to focus our attention on how belonging is shaped by the holistic environment and experience the university creates for its students.

Staff-student relationships

Burke et al. (2016) note that for some students, a major barrier to belonging at university is having a less personal relationship with teachers than they are used to from school. Relatedly, one of our interviewees explained:

The main thing for me to feel at home would be direct contact with the authorities. ... I remember back in school, it was a small school ... and we had direct contact with [the school principal].... I get that it’s not really possible for me to go and meet [head of the university] ... but ... in my department it’s not even like that. (International undergraduate)

The same student contrasted two “pedagogical relationships” (Burke et al., 2016, p. 81) which demonstrate their importance to a sense of belonging:

I have a professor... I know that even if I go ask him a thousand questions after class, he will answer them, he won’t get annoyed ... it builds a connection... He sort of wants me to be excited about the subject rather than just care about getting a First [degree classification]. And if all the professors would be more like that ... it would probably be ... way more community-like. ... And it’s not like that with my maths professor

because he's just like ... "just learn it and get the exams done". That's not what university's about. So then I can't ask him follow-up questions and that sort of creates this rage in me. (International undergraduate)

The above quotes are from a second-year student in November 2019, a few months before the first lockdown in the UK due to the Covid-19 pandemic. In a follow-up interview midway through their third year, they told of having been diagnosed with depression shortly after the first lockdown, with a significant feature of depression being self-criticality in relation to their capabilities as a student. Although they praised the support from the university, they reflected that while the depression may still have come on, it would have probably been less severe if they had felt more connected to staff in the 1.5 years prior to the diagnosis. They had developed much better relations with staff since the third year and this gave them the perspective to realise that they did not feel able to ask for emotional help from staff when studies became difficult and instead they "took it on myself saying like, oh, maybe I'm not talented enough ... I spent a lot of time kind of attacking my own self confidence and ... capabilities".

Curricular contents and relevant opportunities

Although students very rarely explicitly mentioned the curriculum, there was evidence of students deriving a sense of belonging from the way that their course resonated with their sense of (future) self. However, when students feel less confident that their course will provide relevant opportunities, this can give a sense of alienation. The contrasting examples of two students illustrate this:

I sort of do define myself quite a bit by the subject maths ... all of my friends are from maths and we talk about maths a lot. ... I want to keep doing maths forever basically. ... I would like to do a PhD and ... eventually what I would like to be doing is research. (Maths undergraduate)

Similarly, one engineering student chose this university somewhat reluctantly because it offered the specific engineering course that she had been passionate about for years:

one good thing about being here is that I get a course of my choice.... I was so focused on [this area of engineering] right since the beginning of fifth grade, this is what I wanted to do! So that's one reason I'm really happy to be here. (Engineering undergraduate)

For the maths student, a feeling of belonging is when your "presence" and "participation" in a community generates a "genuine positive reaction" in others (his words). And when he experienced this, it made him feel not just belonging in the present, but was also able to imagine himself belonging within academia in the future:

[The lecturers] ... recognise your drive and ... take pleasure in enlightening you I guess, or helping you sort of develop. And I could definitely see myself ... being able to sort of, call people like that my peers. (Maths undergraduate).

By contrast, the engineering student, although equally passionate about her subject, did not feel the same sense of opportunity opening up to her and the staff interaction that was so important for the maths student was precisely what was lacking for the engineering student:

I would rather that they [were] helping me achieve what I want to do eventually, rather than just like you've come here just for your degree. ... [U]niversity's not just about getting a degree, it's much more than that. ... [The university] needs to give us a platform to build the connections, to become the people we want to be in the future,

which I don't think it does... Like, I have no idea what my ... professor is researching apart from what's written on his website. (Engineering undergraduate)

The role of the curriculum in promoting a sense of belonging therefore rests not only how engaging or interesting the topic is, but also on its ability to resonate with students' sense of their future selves.

Learning and teaching

There was a clear preference of teaching practices that are interactive. While there were complaints of excessively teacher-led lecturing being alienating, lectures which were interactive, draw on real-life contexts and case studies, involve groupwork, and use teaching time to focus on the most difficult concepts were seen as stimulating and promoting a learning community. The limitations of non-interactive teaching were exacerbated when they shifted online due to the pandemic. For example, non-interactive lab demonstrations lost the only engaging feature of proximity to the experiment. Particularly for students who started their degree during the pandemic, being online made it more difficult to overcome non-interactive sessions.

Excessive teacher-led lecturing not only reduces interactive opportunities within the class but can also encourage an isolating approach to self-study. For example, one international undergraduate explained he was “trying to make notes for every lecture” which ends up taking ten hours a week and he felt torn between keeping this up and socialising. More interactive teaching could promote more group-based private study so that this distinction between study and socialising could be lessened.

Indeed, groupwork was by far the preferred learning experience for our participants, both in terms of learning quality and for promoting a sense of belonging. One participant complained that “I don't think there's enough groupwork to form a sense of community” and spoke enviously of his friends on a different engineering course that involves “a lot of group projects, and they're allocated so they're forced to work with different people” (engineering undergraduate). A group environment promotes a cycle of positively reinforcing a sense of belonging because “the team actually acknowledge you being helpful, which makes me just want to contribute more” (medicine undergraduate).

Assessment and feedback

Several students took issue with the structure and culture of exams at the university, particularly where yearly exams were concentrated rather than spread throughout the year, with several students talking about how this influenced their wellbeing and ability to belong comfortably.

One engineering undergraduate hoped to see reduced and standardised intensity of assessment to promote a feeling of being part of “one big [university] family”. He perceived that many students feel the need to be perfect across the board – in their attendance, tests, exams, etc. – and that what was needed was an increase in students' ability to structure their own study alongside institutional reform to reduce workload. For example, the university's policy of allowing 24-hour library access could be seen as promoting flexibility, but for this student it was the wrong kind of flexibility and “sends a message that students should study for the full 24 hours”, particularly during exam periods. And when university shifted online due to the Covid-19 pandemic, debates about how best to conduct teaching and assessment prompted this student to imagine a new ideal form of higher education in which lectures should become optional and all exams cancelled (although this desire was also partly prompted by concerns about students being able to cheat in remote, online exams).

Another engineering student agreed, distinguishing exams from genuine efforts to establish learning:

I kinda wish they didn't do tests anywhere in the world... I wish they measured how much people learned. ... Every time I see my grade it's like, A, happy, but B is like, shit. You kinda forget that you can still improve after that. (Engineering undergraduate)

Feedback is also an important component of the academic sphere. One medical student described how formal feedback opportunities were limited, partly because exams were taken in one end-of-year block. In the absence of effective feedback from teachers, students created their own peer-to-peer feedback process, organised around Faculty of Medicine clubs and societies:

[The Faculty] lacks a lot in personalised ... teaching, in that the feedback you get, there's not many opportunities... But ... that gave rise to this whole peer-to-peer phenomenon. And that's one of the reasons I came to [this university], because the peer-to-peer stuff is so good. (5th year medicine student)

The downside to this unofficial feedback culture is potentially significant alienation for the minority not part of feedback groups:

So like, if you're part of netball [in the Faculty of Medicine] then you'll get access to all these textbooks or Google drives, or if you're part of football they have tutorials for their own members, which is fine. But if you're not part of these things then you're almost missing the [university] medicine experience. ... [When] I was part of hockey they had practical exams and mocks and they give you really good feedback and it's much more personal teaching but if you're not part of that society then you're not gonna get that benefit ... [and] it can be so isolating. (5th year medicine student, same as above)

Personal tutors

For some students, personal tutors played a significant role in promoting a sense of belonging. One international student felt that the proactive encouragement and support she received from her personal tutor was a major factor in feeling settled and confident and not suffering from homesickness. Another undergraduate student explained how his personal tutor's willingness to really listen and understand him when he was feeling pressure and stress from intensive second-year exams helped him to put things into perspective and feel more relaxed. A student who we interviewed as part of a separate project (on the experience of students in receipt of the university's means-tested bursary) at the same institution praised his tutor for taking her tutees out to cafes as a group, making it easier to create a more natural and friendly environment and build trust, both amongst the tutees and with between tutee and tutor.

However, other students found that their personal tutors, even if well-meaning, were less effective and in some ways even increasing alienation. For example, one student complained that their personal tutor tried to use the time to "solve maths questions", giving the impression that "he doesn't care about our wellbeing..., that's not what a personal tutor is supposed to do". And another student whose personal tutor organised group tutorial meetings found that the group setting made it less rather than more likely that they would "talk to her about things, because ... it's done in groups in which you wouldn't reveal anything personal".

The personal tutor role therefore seems one that can have high 'value added' in terms of promoting a sense of belonging. However, there is clearly scope for more research and dissemination of best practice. The experience of the two students with such contrasting experiences of group tutorials suggests that there can be a fine line between a good and bad experience when it comes to personal tutor practices.

Peer relations and cohort identity

Peer relations are important across several aspects of the academic sphere and were particularly relevant to ‘learning and teaching’ and ‘assessment and feedback’, above. We will therefore use this section to focus on the role of participants’ sense of belonging in relation to their cohort or the student body as a whole.

Several students used the word “familiarity” when asked what creates a sense of belonging. For three participants it was among the very first words that came to mind. Another described seeing familiar faces as “an incredibly powerful sentiment, because you get that feeling where if you’re walking into the cafeteria or something, I know I’ll say hello to three people”.

While several students, especially those in their first year, sorely lacked this simple aspect of belonging to their cohort when study went remote due to the pandemic, there were also some positive online communities mentioned. The most positive online community-building experiences involved mainstream social media platforms that directly related to students, for example creating posts for university clubs or engaging with informal pages by/for students (although one student also mentioned deliberately avoiding such pages as they are a distraction). The university student newspaper also received significant praise from some students and instilled a sense of pride.

Some students experienced alienation from their cohort based on identity characteristics such as their age, sex, sexuality, socioeconomic background and personality type. We foreground such issues in other papers, either published (Viola, 2021) or in preparation. Here, we want to highlight the main tension point that we found related cohort identity, namely, that between a sense of belonging to a community of like-minded, high academic achievers on the one hand, and the pressure and competitiveness of this environment on the other.

Looking back to the 10 Words Question survey responses, words like ‘stress’ (33 counts), ‘competitive’ (23) and ‘pressure’ (18) were relatively common. In many cases, these were framed as positive challenges rather than negative experiences (all emphases added):

‘*stress*, we’re in it together’.

‘the *pressure* gets to me sometimes, but I actually really enjoy being part of a community with so many smart people’

‘academic, hardworking, *competitive*, logo, camaraderie, helping’

‘proud, well-prepared, *competitive*, resourceful’

‘home, community, high academic *pressure*, reliability, *competition*’

In interviews though, several students expressed feeling alienated by the competitive, grade-oriented culture perceived to come from both student attitudes and university expectations.

Students [at this university] were probably top ten in their high school ... and when you bring all of that together, that sense of competitiveness will always be there and it generates insecurities and inherent pressure. ... I see people break down actually. (Engineering undergraduate)

Similarly, one Natural Sciences undergraduates said that they “think second year was a real failure really for the department in the sense that the expectations for the exams were awful to be honest”, while a Business School taught postgraduate student explained that their peers “are

always stressed, they're probably studying for ten hours a day ... because you don't just have to outperform yourself, you need to outperform so many people around you like it's a very ... competitive environment". The result of this is the normalisation of being (seen to be) overworked:

for some ... it seems like they're just being seen to say "Oh my God I've got so much work", it becomes part of their identity... [W]hen someone says "there's a big workload", someone says to them "yeah that's [this university] though, what can you do"? (Second year medical student)

Space/place

In line with Thomas (2012), we will focus on the way that campus spaces relate to sense of belonging (although there were several students who also spoke about belonging in relation to the London location, or just in terms of generally knowing one's surroundings).

Almost all participants at least mentioned physical spaces as relevant to their sense of belonging. For some students, their sense of belonging is particularly deeply tied to specific places. Three international undergraduates who had been through periods of loneliness or depression placed strong emphases on space. For example, one gave a detailed description of their university accommodation kitchen and the specific places where individuals who he gets on with most would normally sit and chat. Another felt a strong sense of belonging to the university's entrepreneurship space, which completely changed his university experience once he discovered it around half-way through his degree and said if he was to visit the university in the future he would probably not be interested in visiting any other space. The third had several meaningful spaces: one was the library, particularly the café, where she developed close connections with the staff after they comforted her when they saw her crying; another was a workshop within the department that she often used between classes, sometimes just to relax, speak to the technicians or write up notes; and lastly the department in general, particularly the common room. Another international undergraduate felt that the overall campus was welcoming and felt like home because of the multicultural and diverse student body.

Participants who, at the time of the interview, had spent all or most of their time studying remotely due to the pandemic could feel more "disconnected to the institution itself" (European undergraduate), even if they felt a connection to people on their course. And several students who had experienced 'normal' university before the pandemic felt their sense of belonging to the university diminish, or that their wellbeing was suffering due to a lack of access to these meaningful spaces.

Discussion

Our study supports the findings of the What Works? programme that, on current evidence, the most important way in which pedagogic and curricular practices and experiences contribute to students' sense of belonging is through their contribution to the academic sphere in general, rather than through direct effects. Students in our study only relatively rarely explicitly consider the curriculum and pedagogic practices as directly relevant to their sense of belonging. However, curricular and pedagogic practices do play an important role in shaping the broader academic sphere (Thomas, 2012) which is central to how students experience and understand their sense of belonging. The What Works? programme consisted of several distinct but interrelated projects across UK universities and exhibited evidence of seven main factors or mechanisms through which the academic sphere shapes belonging: student-staff relationships; curricular contents and relevant opportunities; learning and teaching; assessment and feedback; personal tutors; peer relations and cohort identity; space/place. Our findings support the importance of these mechanisms.

We build on Thomas' (2012) conclusion by incorporating the insights of more recent scholarship that conceptualises belonging as situated and relational (e.g. Gravett & Ajjawi, 2021; Thomas, 2015). These aspects of belonging may be better appreciated by first putting it a slightly different way; that belonging is fundamentally *contextual*, not just in the sense that people develop and experience belonging differently in different contexts but that students' understandings of what constitutes and contributes to belonging is partly informed by their perception of the context that they belong *to*. We saw in our study that students do not conceive of belonging to higher education in the abstract but rather in relation to, and mediated by, their perception of their university – its prestige, academic selectiveness, research intensity, characteristics of the student body, and its ability to provide opportunities (to take some examples from our participants). Belonging is situated and relational, then, partly because students situate themselves within and understand themselves in relation to these perceived (and often also objective) contextual features of their university.

For example, the above discussion of *curricular contents* and good *student-staff relationships* is not just focused on how these relate to learning. Rather, they suggest that belonging is enhanced by a feeling that desired future identities (e.g. mathematician, engineer) are becoming more achievable, and this belief can be fostered by intellectually and emotionally supportive staff and curricular opportunities relevant to career goals. And under *learning and teaching*, groupwork was seen as important not just because of its pedagogical value or social element, but because the group environment gives students opportunities to enact their own identities and be helpful to others in ways relevant to their desired futures, while also reinforcing elite identities and trajectories by engaging with 'smart', 'like-minded' people (see the 10 Words analysis). Not all aspects of this situated, relational belonging are positive; the key theme under *peer relations and cohort identity* is in fact present throughout our analysis, that is, that student attitudes and behaviours interact with wider university practices and expectations (e.g. around workloads, exams and grades) such that students are in a sense 'taught' to overwork and even to do so conspicuously and competitively, sometimes with significant negative implications for wellbeing and mental health.

Conclusion

In addition to this paper's guiding question about the role of pedagogy and the curriculum in shaping students' sense of belonging, our concluding remarks will also briefly respond to Gravett & Ajjawi's (2021) challenge to critically reflect on the question: "what do richer understandings of belonging enable us to do"? (p. 7).

Although pedagogic and curricular practices and experiences in the narrow sense are rarely at the forefront of students' understanding of what constitutes and contributes to belonging, students do have a strong sense that the broader academic sphere is core to their experience and their sense of belonging or not belonging. The academic sphere is a complex and multidimensional context that is shaped by university characteristics such as, in our study's case, the selective nature of the university and competitive nature of much of the student body (or at least the perception of competitiveness), as well as aspects of pedagogic practice and curricular structure, such as: the forms and intensity of assessments; the opportunities for collaborating and networking with students and staff at different levels; and the ability to provide experiences relevant to desired futures. In short, the best evidence suggests that pedagogy and the curriculum have their main influence indirectly, via this complex multidimensional academic sphere. The key conclusion to highlight then, and what a richer understanding of belonging allows us to do, is to understand that our investigations into sense of belonging should never be satisfied with a final set of components of or pathways to belonging, but rather must be shaped and contextualised by knowledge of this broader academic sphere and students' perceptions of it.

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