



Digital feedback histories: Tracing the influence of past experiences on undergraduate students' university transitions

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ABSTRACT

A persistent challenge in higher education (HE) is students' dissatisfaction with feedback as they transition from school to university. An under-explored aspect of this issue is the role digital technologies may play in shaping students' perceptions and expectations of feedback – particularly in the shift from low-digital, personal school settings to the highly digital, large-cohort university context.

Limited attention has been paid thus far to how digital technologies in earlier learning contexts might inform students' expectations and attitudes towards HE feedback. Much of the current literature explores cultural and linguistic influences on feedback experience, or treats technology as either overly instrumental or as having inherent potential to improve feedback practices. A more critical view of the complex ways digital technologies intertwine with experience is missing.

This 'On the Horizon' piece draws on preliminary findings from a PhD study following 24 first-year STEM undergraduate students using interviews and diaries. I explore how students' previous encounters with digital technologies and feedback shapes their perceptions at university. Initial findings, generated using a Reflexive Thematic Analysis approach, indicate two significant themes: the materialisation of care and trust in feedback and the shifting role of peer comparison across educational contexts.

As educators face increasing demands to deliver personalised feedback practices, it is essential to recognise how students' prior experiences might interplay with their engagement in feedback processes.

Keywords: feedback, digital feedback, sociomaterialism, transition to university

Introduction

A persistent issue in Higher Education (HE) is students' dissatisfaction with feedback compared to other elements of their university experience, as shown in the UK National Student Survey (NSS) and similar international instruments. Students report receiving insufficient, generic comments from their teachers, or that comments are not provided in a timely manner to support subsequent learning (Henderson et al., 2019; OfS, 2025).

This dissatisfaction must be understood in relation to wider structural changes in HE, such as increasing cohort sizes and resource constraints, which can make personalising feedback a considerable workload for teachers (Biggam, 2010). These pressures are particularly acute in first-year modules, where larger cohorts are common. In response, institutions increasingly engage digital technologies to support feedback processes (Elkington & Irons, 2025). Examples include grading systems, audio-visual tools, learning analytics software and Artificial Intelligence (Dawson et al., 2023).

In addition to technological approaches, pedagogical strategies have emerged that encourage students to recognise and mobilise the diversity of feedback available to them. These may include seminars, tutorials, peer discussions or digital platforms. Such approaches are closely linked to the well-established concept of *feedback literacy*, defined as students' capacity to understand, interpret and apply feedback effectively (Carless & Boud, 2018).

This concept shifts attention from feedback as a *product* to feedback as a *practice*, focussing on the actions students take to generate meaning and take ownership of their learning. However, a growing body of research suggests that students' meaning-making of feedback is shaped by their prior educational experiences and associated expectations – their 'feedback histories'. Rovagnati et al. (2022) found that both culture and context shaped postgraduate international students' feedback literacies. Students' experiences of strict hierarchies between professors and students in their home countries discouraged them from asking questions. Such experiences may conflict with Western academic norms where students are encouraged to approach professors. As a result, such behaviour could be viewed as a lack of engagement with feedback. In her work using pre-arrival questionnaires for undergraduate students, Morgan (2024) found that their school digital learning experience was highly variable and influenced how they perceived digital technologies might be used at university. These ideas are particularly salient when viewed through an Academic Literacies lens, which highlights how feedback practices intersect with issues of inclusivity (Lea & Street, 1998).

Yet much of this work on students' prior experiences with feedback remains largely human-centred. Less attention is paid to the role of the broader material and digital environments in which feedback is enacted (Nieminen et al., 2022). Recent studies have begun to argue that the material world can shape learning (Gravett, 2022; Gravett et al., 2023), suggesting that students' expectations can be influenced not just by their personal histories, but by the technological and institutional environments they encounter. Gravett and Carless (2023) shared a students' feedback experience of talking an essay through with her tutor which was impacted by the cost of parking and the tutor's office set-up, highlighting the material elements of the student's experience that may not usually be recognised.

A pressing question then, is whether current perceptions of feedback may be traced to students' past experiences with digital technologies and their expectations of what feedback in HE should look like. A sociomaterial perspective offers a useful theoretical lens to address this gap, treating digital technologies as active participants in the feedback process (Fenwick et al., 2015). In this model, students' meaning-making of feedback is not solely due to individual capacity but from the entanglement of learners, teachers, technologies and institutions. Empirical work applying sociomaterial perspectives to the transition to HE remains scarce, particularly in relation to feedback. Developing such research is vital for understanding how the interplay of students' prior experiences and digital technologies may shape feedback perceptions in the contemporary university.

Having identified these literature and practice gaps, I aim to address the following research question: How do students' prior experiences with feedback influence their perceptions of the role of digital technologies in feedback at university?

The following sections outline the methodological approach to addressing this question, followed by two key findings from the data and implications.

Methodology

This paper reports findings from an ongoing PhD study undertaken at an elite UK university. 24 first-year STEM undergraduates from a range of backgrounds took part in a longitudinal qualitative study, comprising two semi-structured interviews and a diary-keeping period between October 2024 and March 2025. The diary asked participants to share *feedback moments*, to surface typically unseen elements of their feedback experiences (Gourlay & Oliver, 2016). Ethical approval for this project was obtained by the institutional Ethics Committee in August 2024.

Data was analysed following a Reflexive Thematic Analysis approach (Braun & Clarke, 2021). All student names have been pseudonymised in this paper.

Findings

Participants' school feedback experience was typically discussed in terms of verbal and written interactions with teachers in the classroom rather than with any digital technologies. The two themes I share here emanate from this perceived low-digital school landscape. The first concerns the ideas of care and trust in feedback and how they become materialised through the different digital contexts of school and HE. The second discusses the nature of peer comparison in feedback and how this may change across contexts.

Materialising care and trust in feedback

Participants' accounts suggest that their prior experiences of feedback in school had a relational character. Teachers were described as knowing students personally which enabled feedback to feel tailored and authentic. Cicily reflected that her teacher "knew me and my tendencies...she'd say 'it's better this time than last time, but it can be even better.'" (Cicily, Interview 1)

For some participants, the material form of feedback was important to these feelings of authenticity and care. Several described handwritten comments as proof that effort had been invested in them. As Cole observed, "having a written thing feels more authentic...more impactful and memorable." (Cole, Interview 1)

For many participants, therefore, trust in feedback derived from knowing – and being known by – the teacher. The feedback artefact, in these cases a marked piece of paper, became a performance of care. The teacher's care is inscribed onto the page and then manifests in affective conversations between teacher and student (Mulcahy, 2018). This gives the impression that for participants, school feedback was tangible and trustworthy.

In contrast, participants anticipated that feedback at university would be largely digital and less personal than in school. Many expressed concerns that digital systems would make feedback feel anonymous and detached. For example, when speaking about feedback comments delivered through a digital medium, Dalia said "I'd just brush away the feedback because it's not personal, so you're not going to or try to implement [it], because maybe someone else had exactly the same feedback." (Dalia, Interview 1)

This perceived loss of material traces of care was perceived by some participants as undermining the trustworthiness and relational quality of feedback. This distinction highlights how the infrastructure of feedback itself can carry social and relational meaning, in line with recent theoretical work that bridges relational pedagogy with posthumanism (Gravett et al., 2021). Handwritten comments can therefore

materialise relationships of care, whereas digital comments could make participants feel feedback was standardised. Through a sociomaterial lens, we can analyse feedback at school functioning as a *relational network* where teacher, student, paper and pens made care more visible (Gravett & Carless, 2023). As feedback becomes digitalised in HE, participants may perceive these affective and material signals of care as less apparent, potentially resulting in disengagement.

Shifting practices of peer comparison

Another key perception about feedback concerned its social and comparative dimensions. In school settings, participants described feedback as embedded within peer interactions and collective classroom dynamics. Knowing how they were performing in relation to others was central to how they judged their own progress: "It motivates you seeing people get a certain grade or doing certain things. You get a broad overview of different revision methods...hearing other people's questions helps me to see different perspectives." (Dave, Interview 1) For Dave, feedback was experienced through observing, discussing and comparing with peers, suggesting a socially distributed process of meaning-making (Lindblom, 2014).

In contrast, many participants experienced university feedback as a more individual, less socially mediated endeavour. They experienced fewer opportunities to discuss work with others and found it harder to gauge their own progress. Several participants expressed frustration at being unable to compare their performance to that of peers, which left them uncertain about what their grades meant:

I am by myself at home and refreshing the grades tab to see if anything has come up. When the grade came [...] I feel very lonely and discouraged, there isn't even a dataset for the class to see how I situate myself compared to others. (Louis' Diary)

Louis perceived the grades tab as materialising the isolation and detachment he felt about feedback in this moment. For participants who are accustomed to a more social and embodied manifestation of feedback in school, the move to perceived digitalised and individual systems represents a reconfiguration of how understanding one's progress is known. This suggests that the sociomaterial conditions of feedback, which include peer visibility, and the digital infrastructure itself, shape what kind of comparison, motivation and sense of belonging become possible for students (Felten & Lambert, 2020; Gravett et al., 2023).

Conclusion and next steps

These findings suggest that students' perceptions of feedback are shaped by sociomaterial conditions and past experiences. School feedback was typically embodied in face-to-face discussions and the visible material care of teachers (Gravett et al., 2021). It was also social, situated in classroom exchanges and peer comparison. I shared evidence of participants expecting and experiencing feedback in HE as detached from the people and processes behind it, potentially risking losing meaning-making opportunities. These findings emerge from participants within an elite institution and so may not be applicable to other contexts – but they do illustrate how sociomaterial aspects of feedback may be shaped by past experiences. This emerging research speaks to early discussions of how relational pedagogies can be enacted in the increasingly digital, but nonetheless always material, world (Gravett et al., 2021).

This paper highlights the need for future work to reimagine the role of digital technologies in feedback, not as transmission of information, but as an opportunity to materialise care and community in new ways. Moving forward, educators and technologists should design digital feedback practices that foreground

human presence and relational connection, helping to restore the trust students associate with meaningful feedback. Institutions should intentionally create spaces for safe peer discussion and collective sense-making to support healthy social comparison. Future research should empirically explore how different sociomaterial configurations of feedback shape students' emotional and epistemic engagement.

Biographies

Lauren Shields is a PhD candidate at Imperial College London. She is a trained chemistry teacher and has worked in Widening Participation at elite HE institutions. Her PhD explores the role of digital technologies in students' experiences of feedback as they transition from school to university.

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