

Exploring experiences of educational exclusion for engineering undergraduates: reflecting on the value of staff-student partnerships for researching sensitive topics

Helen Knowler, Irina F Lazar (University College London), Jules Godfrey and Mayra Rivera-Lopez (University of Bristol)

Introduction

This paper has two interconnected objectives. Firstly, it will describe the processes of an interdisciplinary project focused on the ways that educational exclusion can impact students' learning experience and feelings of belonging at university (Rohde et al, 2019). While the focus of the project was located within an Engineering Education context, there are relevant implications for the HE sector, particularly related to widening participation and student wellbeing and belonging (Gravett & Ajjawi, 2022). The second objective is a reflection on the affordances of staff-student collaboration on the issue of exclusion from education. We make the argument that since exclusion from education is a sensitive issue that is not likely to be discussed openly in university classrooms due to feelings of shame or fear, staff-student collaboration is vital because modelling and demonstrating what we would call 'affective solidarity' (Hemmings, 2012) is important in communicating a transparent and open approach to talking about issues of inclusion, belonging and engagement.

We argue that student engagement is vital in researching and reflecting on the impact of sensitive issues. We describe the research project where students and staff worked together as co-researchers to ask undergraduate students about their experiences of exclusion in and from education. We outline our methodology for reflecting on the project to date to think about how we developed our working processes and principles for collaboration, given we knew that there would be sensitivities around talking about being excluded from education.

In the final sections, we discuss the implications of this work for our team and draw upon specific reflections from our student co-researchers. Wider implications for staff-student collaboration are considered when looking at what Soan (2006) calls the 'dark side' of inclusion in education.

Exclusion and education

Educational exclusion¹ is a persistent feature of the education system in England (UK Government, 2019). In 2020-21, 352,454 pupils were suspended from school (DfE, 2022) and 3928 were permanently excluded. These statistics confirm that educational exclusion disproportionately affects pupils on a gendered basis - boys account for more than twice the number of suspensions for girls - at 248,000 compared to 105,000. This equates to a suspension rate of 5.86 for boys compared to 2.58 for girls. Further intersecting disproportionality is observed when ethnicity, disability, and socio-economic status are factored in – e.g., rates are higher for pupils eligible for free school meals, and pupils of mixed White and Black Caribbean ethnicity have the second highest rate of permanent exclusion.

While 'official' statistics demonstrate that exclusion is common in the disciplinary system in the UK, research has also demonstrated that there are a significant number of 'unofficial' or unlawful exclusions where pupils are removed from a school role by a managed move, elective home school or move into alternative provision – these are unlawful but can be an effect of schools 'gaming' their attainment data (Done & Knowler, 2020; Done, Knowler & Armstrong, 2021). This means that while exclusion in its formal manifestation is shown to be very damaging (Gazeley, Marrable, Brown, and Boddy, 2015) and that learners will find accessing higher education much harder, other students may have experienced multiple forms of exclusionary practices but have still managed to navigate educational challenges whilst masking the affective impacts of experiencing informal exclusionary experiences. In universities that work hard to develop widening participation policies to ensure opportunities

¹ By educational exclusion we mean the removal of a pupil from their class, or the school, for a fixed amount of time, or permanently.

for pupils who come from a 'non-traditional' route², it is therefore reasonable to assume that some pupils will have experienced educational exclusion before they began their university courses.

There is currently little research that explores what happens when students who have experienced prior educational exclusion begin their university education. While the university offers a fresh start for many pupils for whom compulsory education has been a challenge, the shame of educational exclusion (Goodman & Cook, 2019) means that students might be reluctant to discuss their prior experience and therefore not access the support offered for fear of 'outing' themselves as educational failures. Engineering UK briefing *Social Mobility in Engineering* (2018) argues that there is further work required to ensure that pupils from disadvantaged backgrounds (who are also vulnerable to school exclusion) can pursue a career in Engineering and that 'unequal educational outcomes are a clear obstacle to social mobility in engineering' (p 2) and to participation and engagement across the discipline, and there is still a great amount of work to be done to fulfil the promise of social mobility. Engineering as a discipline offers an interesting context for an exploration of students' prior educational experiences because it is so often cited as having actively engaged with issues of social mobility (Rich & Fowler, 2021), underrepresentation of minoritised groups and inclusive approaches to employability (Miller, 2022). We argue that the need to keep exploring and reformulating understandings of exclusion is crucial given that while quantitative data can evidence a problem with participation, more sophisticated explanations and understandings from groups that experienced exclusion remain absent from Engineering undergraduate courses. Qualitative data can therefore further enhance our understanding of the experiences of students from excluded and minoritised student groups. As far as we are aware, there is no requirement for undergraduates from any discipline to disclose exclusionary experiences, whether formal or informal. While developments in inclusion and inclusive education in HE have made a considerable impact on aspects of admissions, curricula, assessment and pedagogy (Collins, Azmat & Rentschler, 2019), how students navigate their experiences of

² Non-traditional routes into higher education refer to those instances when students were admitted onto their programmes of study based on qualifications other than the traditional A-levels (or their equivalents), via access routes, or where there has been a significant gap between completing pre-university education and accessing a degree.

inclusion and exclusion and access support services when they have experienced educational exclusion in a previous educational setting tends to be overlooked.

Exclusion as a sensitive research topic

We position exclusion as a sensitive issue in our work from both an ethical and methodological perspective. There is little consensus about what constitutes a sensitive issue in HE, not least due to the wide range of intersecting and context-specific factors at play in any classroom or within any one research team and their participants. According to Lowe and Jones (2010), most issues in educational contexts can be 'sensitive' if not handled in the right way. Sensitivity can be thought about from two perspectives – those relating to identity (for example disability, gender, ethnicity) or from experience (for example, harm, gender-based violence, trauma). Concerning exclusion, these perspectives intersect, as exclusion from education is often experienced disproportionately by minoritized groups (Bei et al, 2021). It is extremely difficult to predict what might be sensitive for one person over another issue (Colbert, 2017) and so, rather than try to 'second guess', we worked from the premise that exclusion is often associated with shame, guilt and associated negative emotions that individuals might want to hide in a teaching and learning context. We also recognised Lowe's (2015) argument that the concept of 'sensitive issues' might be better described as 'personal discomfort' and so, working from this starting point, we decided that we would centre an ethic of care for potential participants (Bussu et al, 2021). This meant that we intentionally made space in planning meetings as a research team to think about the experiences of potential participants, what would encourage them to be involved in this research and how we would look after participants throughout the project. Lowe (2015) suggests that students value working around sensitive issues, and this was reflected in the interest in the student co-researcher roles when we advertised them. Rather than being perceived as niche interests, it appeared that students do want to engage in sensitive topics such as exclusion. Bovill et al (2019) note staff and student partnerships are not a new idea but the way that they are conceived and managed has developed in recent years to take account of agendas such as mental health, inclusion and employability. Pilcher (2017) asserts that it is important to address and develop approaches to sensitive issues so that we can resist the perpetuation of social inequalities in education through co-produced approaches. She goes on to argue that

the increasing neoliberal marketisation of HE means there is a related risk of students not being interested in looking at sensitive issues because it might not contribute towards assignment grades, final degree classification or graduate outcomes.

The Research Project

In recognizing the sensitivity of the topic, we gained internal seed funding to work on a multi-faceted collaborative project, with staff-student partnerships at its core. The project was designed to be an exploratory project drawing on qualitative methods and analysis (Stebbins, 2001). Working with students as co-researchers and co-producers is a key component of an inclusive approach to educational development (Bishop et al, 2012), and student-created solutions to 'wicked' problems (Lonngren, 2021) in education are crucial, we would argue, to 'reverse' engineer present university experiences to better understand the impact of prior barriers to learning for future attainment.

The research questions guiding this work were:

- What kinds of exclusions have undergraduate engineering students experienced and when did this happen?
- How do students say they overcame these barriers (for example, support from an adult, determination, moving school)?
- How can students who experience exclusion be supported to pursue STEM subjects more widely, but engineering specifically?

Our research team consisted of staff (n=2) and doctoral students (n=2) from the fields of Education and Engineering. The doctoral students were selected following an application and interview process where the recruitment advert went out to doctoral students in Engineering and Education. The team was strategically built to support new or different insights into the impact of exclusionary practices on Engineering students. In the early phases of the project, we intentionally built in time to explore the project aims and objectives, to listen to our experiences of doing research and to build trust and openness within the research team. We planned two workshops to explore the challenges we might face as a team and ensured that communication routes, roles and responsibilities were very clear. We talked as a group in the

Reflective essays

early stages about our capacities as individuals and the ways that we could mitigate potential hurdles to the project. This was vital for attending to the relational dimensions of doing research together and was important for thinking about flattening assumed hierarchies within the group and attending to the 'hidden' power relations that often go unobserved in research teams until something prompts them to be suddenly visible.

In the first stage, our student co-researchers designed and circulated a survey that was completed by 132 undergraduate students at 6 universities in England. Student co-researchers also interviewed 4 peers who volunteered to talk about and reflect on their educational experiences before starting their undergraduate degrees. We intend to report on the findings of this phase in full in another paper, but here we offer some broad themes that have emerged to date from our thematic analysis (Clarke et al, 2015) of textual and numerical data. Textual data was generated from longer responses in the online questions and interviews, while numerical data was collated in the form of counting responses to closed questions in the online survey, for example: demographic data and counting responses to particular instances and examples of exclusion.

We found that students said that they had experienced exclusion during their time at school and could describe and explain these exclusionary practices. They outlined a range of coping strategies for managing the challenges they then faced during their undergraduate studies and some described reticence to use official forms of support such as those offered by Widening Participation teams or Student Wellbeing Services. Some students suggested they had 'moved on' from these self-reported negative experiences while others talked of the enduring impacts of exclusion such as fear of failure, imposter syndrome and being seen as 'different' from their peers at university. This means that the initial phase of the project demonstrated that students who experience exclusion at school do go on to attend university and that there are therefore likely to be a range of implications for the ways that university-based support services can support them. We tentatively hypothesise that for students who do not access support when they need it, this could be a result of previous experiences of educational support that are either not appropriate or require students to 'out' themselves as educational failures. Talking about exclusionary experiences is difficult enough, but even more so in overcoming the impacts of such experiences to get a university place. Shame is a

Reflective essays

common emotion when talking about exclusion and anxiety about 'outing' oneself at university when it is so often characterised as a 'fresh start' for students.

Reflective Methodology

What follows is our reflection on the process and procedures of the project and how students involved in the project felt about their work. We were deliberative in using a reflective approach in our team meetings and email follow-up throughout the project by making time to think about what we were learning as we proceeded, what had gone well and what needed further development. To write this paper, our co-researchers wrote their reflections on taking part in the project over a year later. We have used this reflective analysis to inform our plans for the next steps and develop our approach as we expand the project to work with more universities. Using a cycle of reflection to think about how our aims and outcomes aligned (or not) and how students were empowered (or not) is an important task but also plays a role in ensuring that all team members' thoughts and experiences were heard and acknowledged. Gibbs's (1988) well-known reflective cycle was used to structure our thinking and our questioning of the process and approach adapted as we worked together. This approach offered a framework for examining our experiences and lends itself to reflecting on repeated experiences, allowing learning and future planning from things that either went well or didn't. In Figure 1, the model covers 6 stages:

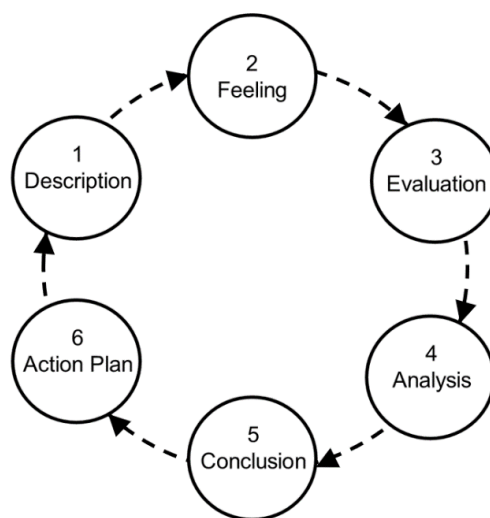


Figure 1: Gibbs's reflective cycle

Adapted from: <https://www.ed.ac.uk/reflection/reflectors-toolkit/reflecting-on-experience/gibbs-reflective-cycle>

Reflective essays

In our Findings section that follows, we will focus on the first four aspects of Gibbs's cycle - **Description** of the experience, **Feelings** and thoughts about the experience, **Evaluation** of the experience, both good and bad, and **Analysis** to make sense of the situation. In our Discussion and Implications section, we cover '**Conclusion** about what you learned and what you could have done differently' and '**Action plan** for how you would deal with similar situations in the future or general changes you might find appropriate'.

Findings - Making sense of staff and student collaboration when researching educational exclusion

An important dimension of successful collaboration in our view is that all team members deeply understood the aims and outcomes of the project. As Bovill (2019) suggests, understanding our respective roles within the team would support student co-researchers to experience agentic engagement (Reeve and Jang, 2022) meaning they would feel empowered to make contributions based on their prior experiences and not on their perceived position within the team. It was vital that we all understood at the outset that educational exclusion is a complex and dynamic process, rather than simply a disciplinary response to breaking school rules, and Mayra noted this in her reflection:

'It is usually assumed that he/she doesn't have the discipline, therefore a suspension or something similar needs to be applied.'

Jules's reflection highlighted her understanding that the project was aiming to do something 'different' and not simply position exclusionary experiences as due to a deficit within learners. She also noted the perspectives of staff and students are important for including different ways of understanding exclusion. She explains:

'Simply working from a staff or student perspective would effectively continue to reproduce the same exclusionary practices we want to mitigate... Many professionals working with children have begun to understand the life history approach to understanding the context of

Reflective essays

the children they work with; those life stories do not cease to have meaning once a student reaches HE.'

Mayra noted the way that the topic is not always well understood in higher education contexts and her own learning as part of her involvement. She reflected:

'Most importantly, based on the research, I was surprised about the factors that partially led to exclusion, and a high percentage was related to the lack of support from teachers and career advisers. I think that there is lots of room to learn and use different teaching tools to improve the relationship between student-teacher, making exclusion a more open topic.'

This quote relates to Bovill's (2019) suggestion that authentic staff/student collaboration is built around helping each team member to make sense of their experiences as the project is planned, carried out, and evaluated. This builds on Cook-Sather et al's (2014) assertion that partnerships built on the values of shared respect, shared responsibility and reciprocity are likely to be more successful. This was important to evidence in our work as we wanted to avoid Jules and Mayra feeling that they were 'passive participants' in the processes of recruiting research participants, collating data and working on analysis with us. The 'making sense' of exclusion dimension was important too, because we knew the project was based around a sensitive topic with a likelihood that we might not be able to recruit participants to talk about exclusion openly. As part of the preparation work, preparing Mayra and Jules for the possibility of failure felt uncomfortable at the outset but was crucial for building shared responsibility. The fact that things might go wrong was situated around the sensitivity of the topic and we talked at length about what we could do to mitigate this likelihood and to ensure that there was no blame if this did happen and to see this as an important opportunity for becoming researchers (Kinchin, 2021). As Jules noted, this resulted in discussions about understanding the relationship between the topic and our methodological strategies:

'there is a sense, first of the importance of working on projects such as this, the need to fully understand the exclusionary experiences experienced by students before their degree studies and understand how institutionally these experiences intersect with students' present studies.'

Reflective essays

Then begin to think about how we truly work with students to help them overcome these experiences.'

In our experience, educational exclusion and associated feelings of shame and guilt are not commonly discussed in the higher education context and therefore working with Jules and Mayra to sit with difficult emotions was very important in the preparatory stages of the project. Jules reflected on the relationship between her own prior experiences as a school leader and the research topic which demonstrates Bovill's (2019) call to ask team members to examine the values underpinning their work:

'I struggled initially working on the issue of exclusion, I am painfully aware of my role in the past in perpetuating some of the punishments which can make students so miserable and potentially continue to affect them long after the event. Here I am specifically talking about formal exclusions. I suspect that other forms of exclusion, those actioned less consciously, I was far less compassionate with, following school behaviour policies, without really questioning the impact and consequence for students and their peers. It is tricky, as it is a case of meeting the needs of many to the detriment of individuals.

Being able to work on issues of exclusion is, therefore, as difficult for me. But also, important not to shy away from it, as I do have some 'insider' school knowledge and a sense of the context and background of exclusionary practices. Having the opportunity to explore the impact of those practices with those students who have survived them and still managed to achieve success, has enabled me to reflect professionally and personally on those practices.'

One of our aims was to think about the ways that involvement in the project would help Jules and Mayra to experience being a researcher. As Kinchin (2021) notes, it can be valuable for student co-researchers to learn about understanding research cultures and problem solving. This helps them see that exploratory projects on sensitive topics may not have an 'end point' after the first iteration of a project. Additionally, we could not claim to offer every skill or research 'tip' they would need going forward. Rather, as postgraduate students, Jules and Mayra got a sense of the complexities of doing research and had to negotiate that we might not reach any significant conclusions. We would of course know more at the end than we did

Reflective essays

before. We were also keen that they found the experience rewarding and engaging, despite complexities around research design (e.g. designing sensitive and appropriate questions to ask peers in interviews). Mayra noted the way that working with other students offers an opportunity to learn about the ways in which her peers overcome barriers and obstacles. She reflected on her interviewing work:

'It is very rewarding, I always find it inspirational to work closely with students, because they give fresh perspectives on different current issues. In general, I like to hear about the multiple experiences that they have faced and overcame to be in the place that they are right now. Moreover, I think if the students feel comfortable talking about their previous experiences during their GCSE, A-level, etc. we, as staff members can find earlier solutions to problems, focusing on exclusion concerns. For example, we could advise implementing more support for students by having one-on-one meetings with mentors or supervisors, promote the counselling services or even having accessible extra-curricular activities to avoid loneliness.'

Jules reflected that working with students is rewarding but highlighted that, when working around sensitive topics, ending research relationships can be difficult. She noted that listening to challenging experiences from peers presents something of a double-edged sword:

'I love working with students, there is never a moment when I haven't found the relationships you build with your research participants a privilege. I find their willingness to open up and be honest and reflective about their experiences incredibly touching and revealing. The most difficult part of the process is moving on, knowing that they continue to live with these experiences, and we move on to the next participant. It has been really important in this project in particular, to 'read the room' and use professional experience and human empathy to know when to pause, when to encourage further reflections and when to offer access to support.'

We worked hard together to explore how, as Baumber et al. (2020) suggest, we could each 'step out' of our traditional roles as staff and students. Jules and Mayra reflected that their overall experience was positive and despite the complexities of working as a co-researcher whilst doing their doctoral research and the ongoing impacts of the COVID-19 pandemic on

Reflective essays

university life and the overall sensitivity of the topic, they seemed to have gained something from being part of the work. Mayra notes the way that bringing education and engineering together was significant for her:

'Working on this project has been an incredible opportunity, it is the first time I was involved in research with exclusion as the main focus between two different faculties. I have always been interested in the education topic, as well as how to encourage students from different backgrounds to pursue engineering degrees. I think the research that we carried out as a team is an excellent example of the multiple reasons why students could face exclusion. Also, I enjoyed the fact that I could provide my perspective and contribute to the project based on my experience as a previous engineering student, but also see the side of the other members of the team that works in education. I think engineering has a really low representation diversity, but with research like this, we could identify the issues and tackle them from the beginning (before students select their future degrees) to encourage them to join the Engineering team!'

Along the same lines of collaborating across our differences, Jules notes that, as a team, we worked with these differences, rather than attempting to make everyone work in the same way:

'Working in our team has been a real pleasure, despite our different experiences, backgrounds and disciplines, we all have a commitment to the aims and objectives of the project and to achieving these aims in a supportive manner. We often listened to aspects of each other's experiences and how these related to our work, as well as being a listening and sympathetic ear when our difficulties intruded into our workspace. This made sense and was crucial to our working relationship, I don't think we could do this work and not have this approach to each other and this acceptance of our life challenges.'

Discussion and implications for future practice

We now address the final stages of Gibbs's cycle (1988) in thinking about our learning as a team and what we might have done differently, as well as thinking about the next steps for our work. Our research experience and reflections on the development of our ethical protocols meant we considered peer-to-peer communication would likely yield increased participation from students and avoid the fear that, by talking about exclusionary experiences, students might place themselves at risk of stigma or negative stereotyping. We think that Mayra's and Jules's reflections demonstrate success with this element of the work.

This also manifested in the research design process where our discussions from the perspective of student experience meant we were more aware of using inclusive language for our recruitment processes and data collection. We think this directly impacted our ethic of care for student participants who had overcome significant barriers to inclusion at university and who might not have otherwise participated in research on this sensitive topic. We think that this might only have been possible through student-led involvement in this work.

Having worked together on reflective work for eighteen months, we think that we have been successful in building what Davis and Parmenter (2020) call a community of inquiry (Garrison, Anderson and Archer, 2010). We understand this to mean that together we created a space where we could think about the complexities of the topic and how this would influence the way we would work with research participants. We think this directly helped us avoid the temptation to oversimplify the issue of educational exclusion because the project included student co-researchers and we need to be able to support them in articulating this complexity as they recruit and work with peers. The multidisciplinary nature of our team contributed to the success of the first phase, as there was necessarily considerable discussion of learning about how things are done in different disciplinary contexts. As Bovill (2019) suggests, this focus on understanding our respective experiences means we paid attention to the values we all brought to the work and supports feelings that we could legitimately try different approaches to working with participants. This relates to Kinchin's (2021) argument that a willingness to experiment with ways of working helps to develop a research approach that is more designed around participant needs rather than those of the research team. In Salazar's

Reflective essays

(2022) research working with undocumented students in the US, including student co-researchers was a vital strategy for working with research participants who would never talk to university research staff, as the risks of disclosure of their experiences was too high. Therefore, the inclusion of student co-researchers in sensitive topics is crucial to ensuring that we can hear the stories and experiences of excluded or marginalised students.

We intentionally placed critical awareness at the heart of our work, and this simultaneously created interesting debates and discussions within the research team where we could acknowledge each other's experiences as learners, researchers and professionals. But it also created a risk that Jules and Mayra may have felt overwhelmed or worried about working with other students on a sensitive topic like exclusion. From their reflection, it seems our approach worked, in that we offered enough space to talk about aspects that were challenging – for example in recruitment, and how to express the aims of the project to participants. However, this was a small team and, as we move forward with a larger team to incorporate more student co-researchers, it will be important to note whether the same reflective and dialogic approach is viable. We have reflected whether our team organisation might have to change and whether it would be possible to spend as much time in the preparatory phases on work that explores underpinning values and experiences. This resonates with Bovill et al (2016) and Baumber et al (2020), who note that 'student-staff partnership practices are best considered as situated context-specific processes of co-creation' (Baumber et al, 2020, p 406) and we are aware that our approach in this paper cannot be a one-size-fits-all strategy in future work. Instead, the principles of developing critical scholarship with an openness to being flexible in terms of processes seem to be more likely to be successful when working around sensitive issues. We think that what we did in the process of working together was supporting Mayra and Jules in feeling credible as knowers (Fricker, 2007) as suggested by Davis and Parmenter (2020), who note that this is an important dimension in effective teams - to support everyone to feel they can make contributions to design decisions.

One challenge for our future work is related to the issue that ethics often must be in place before recruitment for co-researcher roles. Jules and Mayra were not recruited at the point of ethics development and so many decisions were likely made that never changed

Reflective essays

throughout the course of the project, and this is where funding and ethical processes do not align neatly with fully integrated student co-production. Our learning is to think about ways to offer more funding for students to be involved in the stages of ethical approval as experience and training is vital around sensitive topics. It also encourages students to not be concerned about sensitive research topics and to reflect on the benefits of working on them, as Jules reflected:

'Making sure that students were safe and had good support networks was crucial. I left each interview, a little richer and very appreciative of their generosity to share some insight into their lives, for a short while. I hope we can achieve something which will honour their contributions.'

Concluding thoughts

In this paper, we have described and reflected upon a research project that sought to explore the ways that exclusion from school can impact subsequent university experiences. We have reflected on the importance of staff and student collaboration when researching sensitive issues and have explored the preparatory work done to support the establishment of the research team as a key factor in a successful first phase of the work. We have aimed to contribute to the discussion on the ethics and practical aspects of working with student co-researchers on sensitive research topics and demonstrated the benefits of this strategy. We reflected on the challenges of balancing skills development, i.e., designing research tools and learning various analytic strategies with the relational and affective skills required to listen to difficult experiences and to build trust with students who do not find educational spaces to be benevolent and innocuous. As we move into working with larger groups of student co-researchers, this reflection offers us an important pause to think about how we can continue to manage the importance of time for discussion, support for managing difficult emotions and ensuring each team member feels their contribution is valued.

References

- Baumber, A., Kligyte, G., Bijl-Brouwer, M. and Pratt, S. (2020) 'Learning together: a transdisciplinary approach to student–staff partnerships in higher education'. *Higher Education Research & Development*, 39(3), 395-410, DOI: [10.1080/07294360.2019.1684454](https://doi.org/10.1080/07294360.2019.1684454)
- Bei, Z., Knowler, H. and Butt, J. (2021) 'How do we progress racial justice in education?'. *IPPR Progressive Review*, 28, 76-84. <https://doi.org/10.1111/newe.12242>
- Bishop, D.C, Crawford, K., Jenner, N., Liddle, N., Russell, E. and Woollard, M. (2012) 'Engaging students in quality processes' . *Enhancing Learning in the Social Sciences*, 4(3), 1-6, doi <https://doi.org/10.1112>
- Bovill, C., Cook-Sather, A., Felten, P., Millard, L and Moore Cherry, N. (2016) 'Addressing potential challenges in co-creating learning and teaching: Overcoming resistance, navigating institutional norms and ensuring inclusivity in student–staff partnerships' *Higher Education*, 71(2), 195–208.
- Bovill, C. and Woolmer, C. (2019) 'How conceptualisations of curriculum in higher education influence student-staff co-creation in and of the curriculum'. *Higher Education* 78, 407–422. <https://doi.org/10.1007/s10734-018-0349-8>
- Brezicha, K. F., & Leroux, A. J. (2022). 'Examining the association between feeling excluded at school and political trust in four Nordic countries.' *Education, Citizenship and Social Justice*, 0(0). <https://doi.org/10.1177/17461979221097362>
- Bussu, S., Lalani, M., Pattison, S., & Marshall, M. (2021) 'Engaging with care: ethical issues in Participatory Research'. *Qualitative Research*, 21(5), 667–685.
- Cebula, K., Macleod, G., Stone, S. & Chan, C. (2022) 'Student experiences of learning about potentially emotionally sensitive topics: trigger warnings are not the whole story,' *Journal of Further and Higher Education*, 46:8, 1120-1134, DOI: [10.1080/0309877X.2022.2055449](https://doi.org/10.1080/0309877X.2022.2055449)
- Clarke, V., Braun, V., Terry, G., Hayfield, N. (2015) 'Thematic Analysis'. In: Willig, C., Stainton-Rogers, W. (eds.) *Qualitative Research in Psychology* (2nd Edition), London: SAGE
- Cohen, L. (2017) 'Sensitive Educational Research' In: Cohen, L., Manion, L. and Morrison, K. (Eds) *Research Methods in Education* (8th Edition). Abingdon: Routledge

Reflective essays

Colbert, S. (2017) 'Like Trapdoors: A History of Post-traumatic Stress Disorder and the Trigger Warning.' In: Knox, E. J. M. (ed.), *Trigger Warnings: History, Theory, Context*, Lanham, Maryland: Rowman & Littlefield, 3–21.

Collins, A., Azmat, F. and Rentschler, R. (2019) 'Bringing everyone on the same journey: revisiting inclusion in higher education'. *Studies in Higher Education*, 44(8), 1475-1487 DOI: [10.1080/03075079.2018.1450852](https://doi.org/10.1080/03075079.2018.1450852)

Cook-Sather, A., Bovill, C., & Felten, P. (2014) *Engaging students as partners in learning and teaching: a guide for faculty*, San Francisco: Jossey Bass. ISBN: 9781118434581

Davis, C. and Parmenter, L. (2020) 'Student-staff partnerships at work: epistemic confidence, research-engaged teaching and vocational learning in the transition to higher education'. *Educational Action Research*, 29(2), 292-309
DOI: [10.1080/09650792.2020.1792958](https://doi.org/10.1080/09650792.2020.1792958)

Department for Education (DfE) (2022) *Permanent exclusions and suspensions in England*
Available at: <https://explore-education-statistics.service.gov.uk/find-statistics/permanent-and-fixed-period-exclusions-in-england> (Accessed 11 January 2023)

Done, E.J. & Knowler, H. (2020) 'Painful invisibilities: Roll management or 'off-rolling' and professional identity.' *British Education Research Journal* 46(3): 516-531.

Done, E.J., Knowler, H. and Armstrong, D. (2021) "'Grey" exclusions matter: mapping illegal exclusionary practices and the implications for children with disabilities in England and Australia'. *Journal of Research in Special Educational Needs*. <https://doi.org/10.1111/1471-3802.12539>

Engineering UK (2018) *Social mobility in engineering*. Available at: <https://www.engineeringuk.com/media/1762/social-mobility-in-engineering.pdf>. (Accessed 11 January 2023).

Ford, T., Parker, C., Salim, J., Goodman, R., Logan, S., & Henley, W. (2018) 'The relationship between exclusion from school and mental health: A secondary analysis of the British Child and Adolescent Mental Health Surveys 2004 and 2007.' *Psychological Medicine*, 48(4), 629-641. doi:10.1017/S003329171700215X

Fricke, M. (2007) *Epistemic Injustice: Power and the Ethics of Knowing*. Oxford: Oxford University Press. ISBN: 9780191706844

Reflective essays

Garrison, D.R., Anderson, T., Archer, W. (2010) 'The first decade of the community of inquiry framework: A retrospective'. *The Internet and Higher Education Journal*, 13(1-2), 5-9.

Gazeley, L., Marrable, T., Brown, C. and Boddy, J. (2015) 'Contextualising Inequalities in Rates of School Exclusion in English Schools: Beneath the 'Tip of the Ice-Berg''. *British Journal of Educational Studies*, 63:4, 487-504, DOI: [10.1080/00071005.2015.1070790](https://doi.org/10.1080/00071005.2015.1070790)

Gibbs, G. (1988) *Learning by Doing: A guide to teaching and learning methods*. Oxford: Oxford Brookes University. Available at: <https://shop.brookes.ac.uk/product-catalogue/oxford-centre-for-staff-learning-development/books-publications/ebooks/learning-by-doing-a-guide-to-teaching-and-learning-methods-by-graham-gibbs-ebook> (Accessed 11 January 2023). Gibbs reflective cycle available at <https://www.ed.ac.uk/reflection/reflectors-toolkit/reflecting-on-experience/gibbs-reflective-cycle> (accessed 27th March 2023)

Goodman J.F., & Cook B.I. (2019) 'Shaming school children: A violation of fundamental rights?'. *Theory and Research in Education*. 17(1), 62-81. doi:10.1177/1477878518817377

Gravett, K. & Ajjawi, R. (2022) 'Belonging as situated practice'. *Studies in Higher Education*, 47(7), 1386-1396, DOI: [10.1080/03075079.2021.1894118](https://doi.org/10.1080/03075079.2021.1894118)

Hemmings, C. (2012). 'Affective Solidarity: Feminist reflexivity and political transformation.' *Feminist Theory*, 13(2), 147–161. <https://doi.org/10.1177/1464700112442643>

Kinchin, I.M. (2021). 'Towards a Pedagogically Healthy University: The Essential Foundation for Excellence in Student-Staff Partnerships.' In: Heron, M., Barnett, L., Balloo, K. (eds) *Exploring Disciplinary Teaching Excellence in Higher Education*. Cham: Palgrave Macmillan. ISBN: 9783030691578

Knowler, H., Lazar, I., Cortese, D. and Dillon, J. (2019) 'To what extent can the experience of outdoor learning contexts prevent permanent school exclusion for older learners? A visual analysis.' Paper presented at 11th International Conference on Education and New Learning Technologies. 1st-3rd July 2019. Palma, Mallorca, Spain. Available at: <http://lib.uib.kz/edulearn19/files/papers/1018.pdf> (Accessed 11 January 2023)

Lonngren, J. and Van Poeck, K. (2021) 'Wicked problems: a mapping review of literature'. *International Journal of Sustainable Development & World Ecology*, 28(6), 481-502.

Lowe, P. (2015) 'Lessening Sensitivity: Student Experiences of Teaching and Learning Sensitive Issues'. *Teaching in Higher Education* 20(1), 119–129.

Reflective essays

Lowe, P. and Jones, H. (2010) 'Teaching and Learning Sensitive Topics'. *Enhancing Learning in the Social Sciences* 2(3), 1-7, DOI: [10.11120/elss.2010.02030001](https://doi.org/10.11120/elss.2010.02030001)

Miller, N. (2022) *Bridging the gap: what can we learn about social mobility?* Available at: <https://www.suttontrust.com/news-opinion/all-news-opinion/bridging-the-gap-what-can-we-learn-about-social-mobility> (Accessed 11 January 2023)

Pilcher, K. (2017) 'Politicising the 'personal': the resistant potential of creative pedagogies in teaching and learning 'sensitive' issues'. *Teaching in Higher Education*, 22(8), 975-990 DOI: [10.1080/13562517.2017.1332030](https://doi.org/10.1080/13562517.2017.1332030)

Reeve, J. and Jang, H. (2022). 'Agentic Engagement'. In: Reschly, A.L., Christenson, S.L. (eds.) *Handbook of Research on Student Engagement*, Cham: Springer. ISBN: 1461467918

Rich, J. and Fowler, S. (2021) *What does Engineering tell us about social mobility?* Available at: <https://www.hepi.ac.uk/2021/05/25/how-far-does-engineering-support-social-mobility/> (Accessed 11th January 2023)

Rohde, J., Musselman, L., Benedict, B., Verdin, D., Godwin, A., Kirn, A., Benson, L. and Potvin, G. (2019) 'Design Experiences, Engineering Identity, and Belongingness in Early Career Electrical and Computer Engineering Students'. *IEEE Transactions on Education*, 62 (3), 165-172. doi: [10.1109/TE.2019.2913356](https://doi.org/10.1109/TE.2019.2913356).

Rubin, M. (2012) 'Social class differences in social integration among students in higher education: A meta-analysis and recommendations for future research.' *Journal of Diversity in Higher Education*, 5, 22-38. DOI: [10.1037/a0026162](https://doi.org/10.1037/a0026162)

Salazar, C. (2022) 'Participatory action research with and for undocumented college students: Ethical challenges and methodological opportunities'. *Qualitative Research*, 22(3), 369–386. <https://doi.org/10.1177/1468794120985689>

Soan, S. (2006) 'Are the needs of children and young people with social, emotional and behavioural needs being served within a multi-agency framework?' *Support for Learning* 21: 210-215. <https://doi.org/10.1111/j.1467-9604.2006.00434.x>

Social Mobility Commission (2017) *Social Mobility, the Class Pay Gap and Intergenerational Worklessness: New Insights from the Labour Force survey*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/596945/The_class_pay_gap_and_intergenerational_worklessness.pdf (Accessed 11th January 2023)

Reflective essays

Stebbins, R. (2001) *Exploratory Research in the Social Sciences*. Thousand Oaks: Sage. ISBN: 9780761923992

Sutton, C. (2018) 'Mature Students and Social Isolation: being excluded or choosing to be alone?' Chapter 5 in Ellen Boeren & Nalita James (Eds.) *Being an Adult Learner in Austere Times: Exploring the Contexts of Higher, Further and Community Education* (pp 97 – 122). London. Palgrave Macmillan

UK Government (2019) *Timpson Review of School Exclusions*. Available at: <https://www.gov.uk/government/consultations/school-exclusions-review-call-for-evidence> (Accessed: 10th August 2022).