



## 'We need more conversations like this': The impacts of working with student pedagogic consultants in developing simulation-based pedagogies

|                                   |   |   |
|-----------------------------------|---|---|
| Kirstin Mulholland <sup>A</sup>   | A | Assistant Professor, Northumbria University, United Kingdom |
| David Nichol <sup>B</sup>         | B | Assistant Professor, Northumbria University, United Kingdom |
| Christopher Counihan <sup>C</sup> | C | Assistant Professor, Northumbria University, United Kingdom |
| Deborah Herridge <sup>D</sup>     | D | Assistant Professor, Northumbria University, United Kingdom |
| Arlene Anderson <sup>E</sup>      | E | Assistant Professor, Northumbria University, United Kingdom |
| Sophie Meller <sup>F</sup>        | F | Assistant Professor, Northumbria University, United Kingdom |
| Carl Luke <sup>G</sup>            | G | Assistant Professor, Northumbria University, United Kingdom |
| William Gray <sup>H</sup>         | H | Assistant Professor, Northumbria University, United Kingdom |

### Keywords

Pedagogic consultants;  
planning and implementation of simulation-based learning;  
professional learning;  
simulation-based learning;  
students as partners;  
teacher preparedness.

### Abstract

The growing global teacher recruitment and retention crisis has ensured that discussions regarding how best to promote preparedness for classroom practice are more important than ever, with significant implications for initial teacher education (ITE). Adopting a multi-stage collaborative autoethnographic inquiry approach, this research paper contributes to the emerging field of simulation-based pedagogies (SBP) in ITE, as well as the strong research base in other disciplines, by outlining the impacts of working with student pedagogic consultants (SPCs) upon staff professional understanding of the effective planning and implementation of SBP. Findings suggest that working closely with SPCs affirmed staff pedagogic choices in deploying SBP, indicating a shared understanding of the benefits of simulation, and provided valuable insider perspectives to enhance staff pedagogic understanding and suggest improvements to the design of simulation sessions. However, accounts also highlight challenges experienced in the pedagogic consultancy process itself, including logistical concerns such as the use of time; discussions around power dynamics; and tensions arising from epistemological differences between staff and students. The authors conclude by advocating the wider adoption of SBP in ITE and further exploring working in partnership with students as SPCs to inform and improve the design and implementation of such pedagogies.

### Correspondence

[kirstin.mulholland@northumbria.ac.uk](mailto:kirstin.mulholland@northumbria.ac.uk) <sup>A</sup>

### Article Info

Received 15 July 2023  
Received in revised form 6 October 2023  
Accepted 11 October 2023  
Available online 16 October 2023

DOI: <https://doi.org/10.37074/jalt.2023.6.S1.6>

## Introduction

Simulation-based pedagogies (SBP) remain infrequent and under-developed in the field of education, often limited to “research prototypes used in experimental settings” (Kaufman & Ireland 2019, para. 2). This article adds to the growing body of literature which adopts the position that, when educating future teachers in Higher Education contexts, SBP offer a means of developing knowledge, skills and attitudes within a ‘safe space’ (Ferry et al., 2004), enhancing feelings of preparedness and confidence for practice (McGarr, 2021). Nevertheless, to realise the potential for professional learning afforded by SBP in the relatively unfamiliar context of Initial Teacher Education (ITE), there is a need to carefully consider the planning and implementation of these pedagogies, questioning our underlying assumptions as educators to ensure that simulation-based provision meets the needs of the students it is intended to serve.

This article, therefore, explores the potential value of engaging with authentic student voice in supporting – and challenging – staff professional understanding of the design and implementation of effective SBP. Engaging with students in their role as ‘expert witnesses’ in their own educational experiences (Lodge, 2005, p. 129) enables access to insider perspectives that are often unavailable to those educators working with them. However, despite the possible advantages these interactions may afford, some sources maintain that they remain under-utilised in relation to curriculum design (Healey & Healey, 2018). This study aims to address this gap by offering a multi-stage collaborative autoethnographic inquiry (Devnew et al., 2017), detailing the experiences of nine academic staff working in partnership with a team of four undergraduate student-teachers in their role as ‘pedagogic consultants’.

In examining this issue using data collected via independent, reflective accounts, the research begins with two central questions. Firstly, how do staff perceive and experience working with students as pedagogic consultants (SPCs) to gain insight into student perspectives of SBP? Secondly, what are the implications of this for staff professional understanding of the effective planning and implementation of SBP? The article begins by outlining the potential contribution of SBP in ITE before discussing existing research around the importance of student voice and pedagogic consultancy for developing a professional understanding for educational contexts. It subsequently develops by sharing the theoretical framework underpinning the study, together with the research design, before presenting the findings. Finally, the study concludes by offering considerations regarding the potential role of student pedagogic consultancy and engaging with authentic student voices to further inform staff professional understanding of SBP.

## Simulation-based pedagogies in education

Internationally, the education sector is experiencing significant challenges in ensuring and maintaining an adequate teacher supply, with varying reported rates of attrition, including 28% within Europe (Federičová, 2021) and estimates of 13.5% in Australia (Kelly et al., 2019),

alongside accounts of increasing teacher shortages in the United States (Miller & Young, 2021; US Bureau of Labour Statistics 2022). These challenges are also replicated in England; currently, more than 30% of teachers leave the profession within five years of qualifying (DfE, 2023; Long & Danechi, 2021), with some evidence suggesting that the Covid-19 pandemic has further exacerbated this issue, with applications to ITE programmes experiencing historically low-levels of recruitment (McLean et al., 2023).

Whilst it is likely that multiple factors and nuances contribute to this current crisis (NFER, 2023), a number of previous studies suggest links between feelings of preparedness upon entry to the profession, effectiveness, and retention (Hulme & Wood, 2021; Livers et al., 2021; Mayer et al., 2015; Sims & Jerram, 2020). In England, this has corresponded with the increased emphasis on intensive placements evident in the Department for Education’s (2021) Market Review, combining taught content with opportunities for observation and practice to facilitate the rehearsal of techniques prior to implementation in school-based contexts. Similarly, guidance from the Education Endowment Foundation (2021) emphasises the importance of clear instruction, as well as opportunities for rehearsal and feedback, as part of a balanced approach to teacher professional development, which increases the likelihood of sustained and embedded changes to teacher behaviour.

In acknowledgement of these influences, ITE providers are increasingly seeking to complement existing provisions by exploring the use of SBP to bridge the perceived divide between theoretical and professional knowledge (McGarr et al., 2017; Mulholland et al., 2022). Although existing research regarding simulation in ITE is limited, there is a wealth of evidence suggesting the benefits of SBP in preparing pre-service professionals in other fields, such as social work (Meredith et al., 2021) and health (Platt et al., 2021). For example, several previous studies highlight the role of SBP in providing an authentic yet supportive learning environment within which students are safe to develop and rehearse vital professional skills and competencies (Kaufman & Ireland, 2019; Siddiqui et al., 2021; Walsh et al., 2017; Yu et al., 2021). Evidence also suggests that SBP is associated with increased feelings of confidence and preparedness for practice (Fischetti et al., 2022; McGarr, 2021), as well as improved learning outcomes resultant from the opportunities it affords for reflection, feedback and the critique of professional practice (Levin & Flavian, 2022; Motola et al., 2013).

However, despite these potential advantages, the literature also offers a note of caution. Some studies, for example, suggest that students may be hesitant to engage with role-play or fictionalised examples due to perceptions of inauthenticity or irrelevancy to the day-to-day realities of their professional practice (Meredith et al., 2021) or that the contextualisation of learning through SBP can increase extraneous cognitive load, thereby inhibiting learning (Fraser et al., 2015; Mulholland et al., 2022; Sun et al., 2017). Similarly, Nario-Redmond et al. (2017) propose that the expert-novice gap between facilitators within simulation scenarios can lead to feelings of disempowerment and marginalisation, as well as the perpetuation of stereotypes. For those educators

seeking to implement SBP positively and constructively into ITE provision, the authors, therefore, argue that there is a need to actively seek out student perspectives and lived experiences to tailor provision to better suit their needs and requirements.

### **Working with students as pedagogic consultants: the theoretical underpinnings**

To address these potential concerns, this article explores the impact of working with students to further develop and refine SBP. Student-staff collaboration can take various shapes and forms. However, for the purpose of this study, we adopted the definition of pedagogic consultancy proposed by Healey et al. (2014), which moves beyond superficial engagement with student voice to establish deeper and more sustained interactions seeking pedagogic advice and consultation. In examining this issue, this study draws upon the theory of critical pedagogy (Freire, 1970; Giroux, 2020), corresponding with the work of Gower (2017), suggesting that, through supporting student-teachers democratically to examine their experiences as teacher-educators, we gain greater insight into our own practices.

Whilst collaborations of this nature are relatively rare (Healey et al., 2014), the potential benefits for both students and staff are considerable. For staff, the opportunities afforded by student pedagogic consultancy allow insight into students' insider perspectives (Lodge, 2005) to inform and enhance pedagogic understanding, with positive implications for teaching quality and learning outcomes (Cook-Sather et al., 2014; Mercer-Mapstone et al., 2017). For students, student-staff collaborations are also associated with improvements in engagement, motivation, confidence, and self-efficacy (Cook-Sather, 2018; Hayward et al., 2017; Healey et al., 2014), and more frequent opportunities for metacognition (Mercer-Mapstone et al., 2017). Evidence also suggests that student-staff partnerships can result in greater understanding and appreciation of the other's experiences and perspectives (Dwyer, 2018; Healey et al., 2019; Matthews et al., 2019), leading to improved relationships (Healey et al., 2019; Matthews et al., 2019), and positively influencing underlying power dynamics (Dwyer, 2018; Healey et al., 2019; Mercer-Mapstone et al., 2019; Moore-Cherry et al., 2016).

Nevertheless, despite these potential benefits, some studies suggest that challenges can occur due to disparities in expectations surrounding the roles, responsibilities and purposes of partnership working, colouring participants' experiences and willingness to engage in the process (Healey et al., 2019). Similarly, some studies identify the potential obstacles posed by institutional procedures and systems which may limit capacity for change (Dwyer, 2018). Consequently, any attempt to establish authentic systems for pedagogic consultancy must consider both the systems within which the consultancy process takes place as well as the underlying assumptions of participants.

Our pedagogic consultancy process, therefore, assumed a dialogic approach, with students and staff working together to co-develop effective pedagogic practices rather than merely perpetuating what Freire (1970) called the "banking

concept of education". Through pedagogic consultancy, students became active participants who were partners in leading their own learning and setting the agendas rather than receiving and reproducing the pedagogy and practices already affirming the status quo. Thinking critically about our lived reality, our relationships, and our values, we hoped, would help reveal so much of what we know to be 'invisible' in teaching but crucial to its success (Giroux, 2020). In this study, student pedagogic consultants (SPCs), therefore, became critical agents through actively questioning teacher-educators' enacted suppositions about students' lived experiences and reflectively challenging the assumptions that legitimise our own practice as teacher-educators.

### **Methodology**

This study follows a multi-stage collaborative autoethnographic inquiry (Devnew et al., 2017), where nine experienced academics shared independent, reflective accounts of their experiences from working with SPCs to develop a shared understanding of simulation-based pedagogy. We framed our research within a relativist ontology, constructing meaning from our pooled personal reflections of professional conversations with SPCs. Our positionality is based within the philosophical grounds that reality can be multiple truths relative to specific events, experiences, places, and at any given time (Guba & Lincoln, 2005). In this way, universal 'truths' grant precedence to negotiated 'truths' facilitated through a transactional process in meaning creation.

As a group of academics interested in simulation-based pedagogies, we recognise that there is no one reality that can explain individualised interpretations. Instead, we see value in sharing our individual reflective experiences to create meta-accounts of meaning that are organised at the group level (Denzin, 2013). As a method, collaborative autoethnography (CAE) procedures mirrored our ontological and epistemological stances and were, therefore, an appropriate choice for the study. We built on autoethnographic traditions that typically locate 'self' through personal experiences, leading to a critical awareness of practices (Adams et al., 2014). Adopting these principles, we worked within a locus of polyvocality, where the 'whole' of our collective voices is represented more than the sum of its individualised 'parts'. All voices contribute and matter: our procedure of reflexive dialogue was not to reach a consensus but to include all aspects of our views.

The collaboration process under these conditions continues from start to finish, from the conception of research materials to their analysis and interpretation. It follows what Chang et al. (2013, p. 24) describe as a way "in which researchers work in community to collect their autobiographical materials and to analyse and interpret their data collectively to gain a meaningful understanding of sociocultural phenomena reflected in their autobiographical data". Collaborative autoethnography, therefore, broadens typical ethnographic traditions in that, for us in our study, were dynamic and multifaceted. We aimed to work with invested people (Ellis & Rawicki, 2013), in this case, our SPCs, who shared our passion for developing knowledge about simulation-based

## Procedure

In the first stage, having gained approval to work with human participants from our institution's Ethics Committee, we recruited four undergraduate SPCs to contribute to professional learning conversations about simulation-based learning activities they all previously took part in. Two academic team members facilitated the conversation, which lasted approximately one hour at the host University. We designed our project in line with BERA (2018), making particular use of opportunities to check in with participants before and after the conversations through constant debriefing. We provided opportunities for the SPCs to reflect on their simulation-based experiences by reminding them about previously completed ones. The conversations were driven by a series of open-ended questions to engage each of the SPCs to share insider knowledge (Ellis et al., 2011) of their experiences of participating in simulation-based activities and their insights of working alongside academics in developing them. Our goal was to interpret their meaning.

The academic team co-created the open-ended questions and probe statements used to guide the professional learning conversations to ask SPCs about their experiences of SBP. One of the distinct advantages of the collaborative approach was offering support, questioning, and requesting specific information to shape our inquiry. This protocol was embedded using Brookfield's (2017) four lenses for each stage of the study. We reflected on our own autobiographies in formulating and delivering SBP, which made for fruitful discussions. These discussions raised questions about programme design and its purpose for students. Moreover, it uncovered our paradigmatic assumptions of what we felt worked and did not work, thus providing a frame to consider SPCs' views as a point of enquiry in professional learning conversations.

From our collective discussions, the line of questioning and prompts targeted aspects of professional knowledge, praxis and simulation programme design. The professional learning conversation questions were validated for content validity by the academic team to ensure fidelity to our research objectives and to identify any ambiguities. Example questions included: 'Is there anything further you can identify from the programme, or your understanding of the role of a teacher, that simulated learning would have been of benefit to support your professional learning?' And 'Do you think there is a particular format that is more beneficial, or does it depend on the simulation?' Our open and flexible approach to framing these questions is a convergent step (Ngunjiri et al., 2010) that provided a safe and rigorous attempt to crystallise our collective experiences of simulation-based teaching and learning.

Following the professional learning conversations, the second stage involved individually listening back to recorded conversations. We made individual notes and used a memo-ing technique (Polit & Beck, 2006) to document our thoughts from initial conceptions to detailed abstractions. For this activity, we adapted Driscoll's (1994) reflective

framework to ask: 'What was the biggest implication for staff understanding of the planning and implementation of simulation-based learning sessions?' 'So what were your feelings at the time, and have they changed following the conversations?' And: 'Now, what might you do differently in the future?' In the next section, we outline the final stage that culminated in data analysis.

## Data analysis

Our study followed an inductive reflexive thematic analysis following Braun and Clarke's (2019) analytical strategy. Firstly, we became familiar with our pooled written reflections and took the opportunity to listen back to the recordings for a contextual understanding of the professional learning conversations. It provided an opportunity to get back in touch with the original data and make further refinements where required.

Next, we generated initial codes from our pooled reflective accounts, which provided another opportunity to discuss and share our interpretations ahead of drawing any conclusions. This reflexive process enabled us to develop a sense of 'internal dialogue' (Feucht, 2017, p. 235) that challenged our own experiences, emotions, and motives. In addition, it allowed us to test multiple assumptions to 'achieve rich interpretations of meaning, rather than attempting to achieve consensus of meaning' (Byrne, 2022, p. 1393). Finally, we generated several themes from the data; these are presented in full below.

## Findings

The following section explores the impacts of working with SPCs on staff understanding of SBP. Analysis of the reflective accounts identified themes relating to the benefits and challenges of working with SPCs and the use of SBP itself. These themes can be seen to operate concomitantly, aligning with Schön's (1987) model of reflection, demonstrating both reflection on action, examining staff experiences and perceptions after they occurred, and reflection for action, offering considerations for the future development of both SBP and collaboration with SPCs.

Within these two distinct yet inter-related domains, a number of sub-themes were evident:

- Developing SBP:
  - Affirmation, or the extent to which SPCs supported and confirmed staff assumptions regarding the potential benefits of SBP.
  - The role of personal epistemologies in prompting unease or tension due to conflicting pedagogic beliefs and assumptions.
  - Learner insight as a means of enhancing staff pedagogic understanding with positive implications for learning and teaching.

- Improvements to the design of SBP, including specific recommendations relating to the format and nature of tasks and simulation materials.
- Benefits and challenges of working with SPCs:
- Logistical challenges encountered, including time and capacity for engagement.
- Student-staff relationships and power dynamics, considering the extent to which interactions between staff and SPCs succeeded in providing challenge and critique.

Each of these findings will be discussed in turn below.

## Developing simulation-based pedagogies

### Affirmation

The initial decisions informing SBP design and implementation were drawn from the underpinning literature concerning both gaps in knowledge and theory, as well as findings regarding the potential benefits of SBP more widely (e.g. Fischetti et al., 2022; Levin & Flavian, 2022; McGarr, 2021; Motola et al., 2013; Siddiqui et al., 2021; Walsh et al., 2017). Staff accounts – reflecting *on* action (Schön, 1987) – revealed that working with SPCs provided feedback which acknowledged and affirmed these original choices:

When listening to the feedback, I feel proud of what we have achieved. SBP is developing knowledge, aiding student-teacher preparedness and developing their professional understanding.

This is clearly an effective pedagogic approach which is loved by students. They talk about SBP very positively and identify how the input has supported their development. They describe SBP as a safe space for developing, engaging, motivating, and valuable learning experiences.

These accounts reflect almost a sense of relief in the alignment between staff perceptions of the key advantages offered by SBP and those of SPCs, including enhanced feelings of preparedness for practice and the opportunity to develop key skills and practices within a safe and engaging learning environment. For academic staff, this confirmation is valuable in justifying changes to pedagogic practice which have already been made, as well as providing a further mandate for ongoing development (Zdravković et al., 2018).

In addition to broad reflections regarding students' experiences of simulation sessions, insights gained through engaging with SPCs highlighted the role of SBP in establishing a more secure professional identity:

There was acknowledgement of other people and their perspectives, and maybe that working as a teacher in school was going to be very different from being a student.

The ways in which students talked about the value of 'thinking like a teacher' and making 'in-the-moment decisions' particularly struck me. I expected that they would gain these experiences during placement. However, one pedagogic consultant said that she feels like you get a 'student-y' experience on placement, where perhaps you're shielded from more challenging situations – and you always have someone else who is ultimately responsible for the class. So SBP actually provides more of an opportunity to feel in the role of teacher, and responsible for decision-making.

These reflections indicate that academic staff were encouraged by the extent to which SBP enabled students to assume the role of teacher due to increased responsibility for autonomous decision-making, in contrast to the more scaffolded – or '*student-y*' – experiences gained during school-based placements. This resonates with the work of Sollars et al. (2021) in highlighting the potential value of SBP in strengthening pre-serving professionals' emerging professional identity through providing opportunities to assume the role of a teacher within authentic simulated scenarios and to reflect upon these experiences.

### The role of personal epistemologies

When engaging with SPCs, staff accounts suggest the potential for tension arising from the personal epistemologies held by both students and staff (Healey et al., 2019; Nichol et al., 2023; Pintrich, 2002). This occurred when feedback from SPCs conflicted with the pedagogic beliefs and assumptions of academic staff:

We've worked really hard on the SBP materials. It can also sometimes be tempting to dismiss students' perspectives because we know the rationale underpinning some of the choices we've made.

This reflection *on* action (Schön, 1987) expresses the emotional response which can be experienced when confronted with a perceived challenge to practice and the inclination to diminish or ignore feedback which conflicts with existing, deeply held beliefs and philosophical approaches. It is also important to acknowledge that staff responses to student feedback operate within the wider Higher Education (HE) context, whereby institutional pressures and accountability measures such as the National Student Survey and Teaching Excellence Framework can lead to the positioning of students as consumers (Woodall, 2014), and a consequent desire to yield to customer pressure (Cuthbert, 2010). This affords SBP the potential to offer both opportunities for students in terms of ensuring an engaging and purposeful learning experience which offers increased 'value' for students on professional programmes. However, caution is encouraged as, in departing from traditional didactic approaches to teaching and learning, there is risk in challenging underlying personal epistemologies and conceptions of the nature of learning itself (Curnow et al., 2019).

However, it is important to acknowledge that, within the current study, instances of contrast in the personal

epistemologies of academic staff and SPCs were relatively infrequent:

Listening to the pedagogic consultants, I was struck by just how much their views align with mine – and I think those of our larger staff team. Does this mean that pedagogic consultants aren't representative of the wider student cohort? Or just that we're broadly in agreement and that I'm worrying too much!

As this reflection indicates, the close correlation between the views of both academic staff and SPCs may prompt questions surrounding the extent to which SPCs are representative of the wider student body and the potential implications of this when seeking to gain insight into the broader student experience. This echoes the wider literature, which suggests that engagement in voluntary activities of this nature is associated with higher levels of academic attainment (Farsides & Woodfield, 2007).

The potential implications of the non-representative nature of SPCs are significant, curtailing the potential for insight into students' lived experiences more generally as well as the unpinning theoretical intentions of this study, which positions collaboration with students as partners as a means of affording honest and authentic insight into our pedagogic practice (Gower, 2017). Therefore, moving forward and reflecting *for action* (Schön, 1987), this raises questions regarding the extent to which pedagogic consultants can and should be recruited to enable engagement with a more representative student group.

### The role of student insights in developing SBP

Across the data, participant reflections demonstrated that engaging with the SPCs provided insight on the development of simulation-based pedagogies. These insights were acknowledged to be of great value to academic staff:

Students offered an inside voice to the session. They supported us, as staff, to see what it was like on the other side. This meant we could effectively reflect on each session.

Indeed, it is also important to note that some staff accounts suggest that the rich detail evident in the insights from the SPCs exceeded that of the staff themselves:

I think that the pedagogic consultants' insights into the structure of sessions, the importance of having authentic tasks to do, and of collaboration with peers from the outset of sessions so that they can consider a wide range of views were aspects of this work that I hadn't considered in as much depth as they seem to have done, so these are very useful to ensure that they are consistently included when designing any future sessions.

This demonstrates how working with SPCs afforded opportunities for reflection on action (Schön, 1987), whereby staff were able to triangulate their own experiences and perceptions of SBP with those of the students. However,

also evident is that collaboration with SPCs also prompted reflection *for action* (Schön, 1987) by creating opportunities to learn from students' insider perspectives to enhance staff pedagogic understanding (Mercer-Mapstone et al., 2017), with positive implications for learning and teaching.

You understand how SBP supports their development as a primary teacher. Without this focus group and consultation, we would not be aware of some barriers to learning which they highlight.

This provided a lens through which to access student perspectives and experiences of SBP, prompting awareness of further opportunities to develop and enhance future SBP design and delivery. As such, these accounts can be seen to align with those elsewhere in the literature in suggesting the potential value of creating opportunities to actively engage with students' insider perspectives (Lodge, 2005) in order to better-understand students' perceptions of their learning experiences (Cook-Sather et al., 2014; Daviduke, 2018) and enhance staff pedagogic understanding (Mercer-Mapstone et al., 2017).

### Improvements for the design of SBP

Accounts demonstrated reflection *for action* (Schön, 1987) prompted by engagement with SPCs, highlighting several aspects of SBP for further development and improvement. These include the need to clarify and clearly signpost links between theory and practice, considering the timing of simulation sessions across the academic year, particularly in relation to practice-based placements, and the use of non-idealised scenarios.

One of the most frequently cited benefits of SBP is the metaphorical bridge that these provide between theoretical and professional knowledge (McGarr et al., 2017; Mulholland et al., 2022). However, in the context of this study, working with SPCs indicated to staff that they had not been sufficiently explicit in clarifying and signposting links between theory and practice:

Pedagogic consultants' references to the 'subtle' links between theory and practice really stood out for me. I don't think we want these links to be subtle (or at least not always!). I worry that this may mean that you need a pretty decent knowledge of theory (like these strong students) to spot the connections and that this means that many other students will miss these! I think we may need to be more explicit about how SBP is connecting to prior learning, research and theory to help students make these connections more easily.

Reflecting *on action* (Schön, 1987), it was evident to staff that if the SPCs, all of whom had strong academic profiles, considered the references made by staff to theory as 'subtle' then there may be other students for whom these connections would remain unrecognised and unacknowledged. This indicates that, in the initial planning and implementation of SBP, staff assumptions regarding students' understanding of theory and our subsequent ability to connect this to a

simulated context were inaccurate, potentially resulting in missed opportunities to promote professional learning.

In response to this, staff accounts also demonstrate reflection *for action* (Schön, 1987) in calling for greater awareness of this issue and the need to more carefully consider how the relevant links between theory and practice can be signposted for students:

Students have provided some perspectives that I wouldn't have considered – we haven't made the links between theory and practice clear enough."

"Clearly, we need to link theory to practice more explicitly and acknowledge the imperfect nature of this.

This resonates with the work of Nestel and Bearman (2015), who emphasise the importance of ensuring a shared understanding of the nature of 'theory' between both staff and students, as well as explicit discussion regarding the point at which these theories should be acknowledged and enacted. For example, this could be achieved through providing pre- or mid-session tasks which signpost relevant theory or through incorporating pauses within the session to allow both staff and students to re-group to share their understanding of how theory is impacting upon practice and to support decisions moving forward.

In addition to reflections regarding the transparency of connections between theory and practice, engaging with SPCs also emphasised the need to align these more purposefully to taught content:

It was also interesting – and so sensible! – to consider students' reflections around the timings of different simulations, particularly so that these come before different placement experiences. At the moment, we're really just trialling SBP. However, as we're finding out how much these opportunities are valued by students, I wonder whether it is now the time to consider the timing and sequencing of different SBP opportunities more carefully to maximise their potential to complement taught content.

This reflection *on action* (Schön, 1987) echoes that made in relation to the connection between theory and practice and can be seen to correspond with the wider literature regarding the under-utilisation of students' perceptions and opinions in curriculum design (Healey & Healey, 2019).

In assuming full ownership and control, the staff team made decisions that did not necessarily reflect the preferences or learning needs of the students for whom the provision was intended. As this account demonstrates, in reflecting *for action* (Schön, 1987), collaboration with the SPCs highlights not only the importance of identifying the most appropriate points for the rehearsal and application of professional knowledge and competencies within a programme but also the potential value of actively seeking out students' views and perspectives to inform this. This would encompass not only *what* students find challenging to deal but also when is it that they begin to feel particularly vulnerable (Shanks,

2014) in those identified aspects of practice as novices in the expert environment in which they find themselves on their school-based placements.

A final improvement to the design of SBP prompted through engagement with SPCs is the use of non-idealised scenarios. These non-idealised situations – circumstances within which a greater number of factors required intervention or where appropriate support was unavailable – were cited by the SPCs as a potential means of enhancing the learning resultant from SBP. However, here it is interesting to note that SPC consideration of simulated scenarios of this nature contrasted with a careful decision made by the staff team:

This idea of learning through mistakes and the strong desire students seem to have for non-idealised situations. We have planned relatively straightforward scenarios because we were conscious of cognitive load – and of not scaring students with some of the very challenging and complex situations which can arise when they are still at a very early point in their training.

In reflecting *for action* (Schön, 1987), this adds to existing studies (Nicholet et al., 2023) in raising important questions relating to the distinction between providing the educational provision that students may *want* and that which they may *need*. This tension is encapsulated in the following account:

If we dismiss ideas too quickly, then we miss opportunities to develop our work. And it may not be that our approaches/choices are wrong. It may just be that we need to communicate the reasons for our choices more explicitly so that students understand them.

In this specific context – as the students considered within this study are also pre-service teachers, for whom education is both the vehicle by which learning is accomplished and its subject focus – we believe that this underscores the importance of clearly communicating the rationale for the pedagogic choices made. In this way, students may also gain an increased understanding of the rationale underpinning designed teaching and learning sessions, thereby equipping students with professional knowledge to inform both their own future teaching practice and their capacity to act as metacognitive role models to the pupils with whom they work (Wall & Hall, 2016).

## Working in collaboration with SPCs

Whilst recognising the benefits of working with SPCs evident both within this study and the wider literature (Healey et al., 2014; Nichol et al., 2023), it is important to acknowledge that this was not without compromise. Practical challenges, including logistical issues, were experienced across relationships, and the power dynamics inherent to the position of those engaged as either students or staff also influenced both willingness and capacity to engage in the pedagogic consultancy process. It threatens what Healey et al. (2014) describe as establishing deeper, sustained connections with students' active voices in seeking

## Logistical challenges

In reflecting *on action* (Schön, 1987), staff accounts highlighted a range of logistical concerns whilst working in partnership with students, the most common being the paucity of time in very busy schedules to meet and work directly with SPCs. For example, challenges experienced in attempting to schedule meetings when both staff and SPCs were available to attend left staff feeling a little discontented with elements of the process:

I think that mainly I feel mildly frustrated. I see so much value in working with the pedagogic consultants, but I just don't think that any of us – students or staff – have as much time as we'd like to really make the most of the opportunities for learning that working in partnership could offer."

I do still maintain that the opportunity should be there for discussion, but we've not had everyone together to do that, which is a shame.

Furthermore, staff accounts suggest that there was a particular awareness of SPCs dual role as both students and consultants and were conscious of the potential of this additional commitment in over-loading students, hampering their studies or placements:

Having the time/capacity to invest in this as much as I really want to. Everyone is so busy, and we are really conscious that our pedagogic consultants have assignments and placements that need to be their first priority.

For staff and students, initial teacher education is a labour-intensive programme, and perhaps this reality may just need to be accepted (Carter, 2015; Perry et al., 2019). However, despite this, in reflecting *for action* (Schön, 1987), staff suggested possible approaches to make more efficient use of their time moving forwards:

I'll keep thinking how we could keep informal conduits of communication open...I think it would be incredibly valuable - and perhaps more frequent communication would also help relationships to become easier as we become more familiar with each other.

I wonder if, rather than working for an hour here and there, it would be more beneficial to block work (e.g. during school/university holidays) so that we could work together for a sustained period of time. Would this help to develop effective working relationships more quickly? Would it help us to gain deeper and richer insights and collaborations?

Would building in more face-to-face meetings facilitate the development of these effective working relationships? What about establishing working relationships over a longer time span – 2 years?

Interestingly, these reflections centre around the importance of building and strengthening relationships rather than the logistical concerns themselves. The lack of time was not deemed significant in terms of task completion, as this was not highlighted, but instead, accounts emphasise the need to foster positive relationships between staff and pedagogic consultants to enhance the consultancy process. According to Snijders et al. (2022), relationships form a key part of effective student-staff partnerships, therefore, ensuring sufficient time to build these relationships should be an important consideration in the planning and preparation for working with SPCs.

## Student-staff relationships and power dynamics

Further to these considerations regarding the nature of student-staff relationships, staff accounts also raise questions regarding the ways in which this may have impacted upon the nature of the feedback shared. It was anticipated that SPCs would challenge the pedagogic approaches deployed by academic staff. However, this was not something that fully materialised:

Student roles were to be honest and constructive, staff to be open and non-judgemental. The students were articulate and insightful at times although not offering solutions – which suppose is the staff's job.

I had hoped there would be some *Damascene moment* when I would have my views challenged in a constructive and enlightening way, but that hasn't happened... yet.

In reflecting *on action* (Schön, 1987), staff can be seen to consider the possible reasons for this, including the potential role of power dynamics in influencing interactions:

all of the right emotions are there, all of the desire to genuinely work together, but we can't ignore the different roles and that power relationships do exist.

I'm also conscious that there are power dynamics at play. We are responsible for teaching (and assessing!) the pedagogic consultants. Surely, this must mean that they feel like they can't always be as honest with us as they'd like to be. I feel like we haven't spent enough time face to face, working in this capacity, to establish the working relationships (hopefully on a slightly more equal footing) that I'd like to have. I wonder if an away day or two at the beginning of establishing a partnership could help to facilitate this.

From this, we recognise that staff may not have had their desired *Damascene moment* as, operating within an academic environment, students - even when assuming the role of SPC - may feel constrained by power relationships that encourage silence on the students' part (Patrick, 2013).

In considering this issue, it is important to revisit the theoretical underpinnings of this study: that, in collaborating with SPCs, we would be able to enact a form of critical

pedagogy (Freire, 1970), emphasising the social nature of learning and an honest reflection of the power dynamics between students and staff so that learning is collaborative rather than imposed. On reflection, the very processes of recruiting and appointing SPCs undermined this intention by reinforcing the traditional hierarchical relationships between staff and students. Through the application process, SPCs were interviewed by the staff who would be working with them if they were formally employed. From the outset, this can be seen to establish the roles and associated power dynamics of employer and employee, subject to employment systems which required that staff also assumed responsibility for approving time sheets for hours worked, further maintaining this imbalance.

This aligns with the work of those such as Dwyer (2018) in underscoring the potential obstacles presented by institutional procedures and systems which may restrict the capacity for change (Dwyer, 2018). Any restructuring of this power dynamic would not be something which would occur naturally. Both staff and Higher Education Institutions (HEIs) would need to proactively take steps to redress this in order to encourage more open and perhaps challenging communication with SPCs. However, as Freire argued, one of the roles of an educator is to “unveil opportunities for hope no matter what the obstacles may be” (1994, p. 9). Collectively, we believe that the potential value of collaboration with SPCs is significant and, reflecting *for action* (Schön, 1987), we must now acknowledge our own roles in this scenario and consider future avenues of working to better support SPCs to critique and question the power structures of which we were a part.

## Conclusions

The purpose of this paper was twofold: considering both staff perceptions and experiences of working with SPCs to gain insight into student perspectives of SBP, as well as the implications of the consultancy process for staff professional understanding of the effective planning and implementation of SBP. As authors, we believe that the benefits of collaboration with SPCs to inform the planning and implementation of SBP largely outweigh the challenges. Working alongside SPCs provided opportunities to question underlying assumptions regarding the pedagogic choices underpinning SBP, providing valuable insider perspectives which enhanced staff pedagogic understanding and prompted further consideration of the design and development of the simulated sessions. The use of the reflective models ensured the staff understood more deeply their role in student engagement, helping to overcome challenges that were previously unrecognised.

Drawing on critical pedagogy theory (Freire, 1970), the pedagogic consultancy process was enhanced through the traditions that examined and challenged the power structures and inequalities in our HE environment. Critical pedagogy, as a philosophy of education and social movement, encouraged critical thinking whilst challenging the typical nuances within staff and student relationships. We believe that our findings provide a possible framework for implementing SBP and conclude by advocating both the

wider adoption of SBP in ITE as well as the further exploration of working in partnership with students as SPCs to inform and improve the design and implementation of such pedagogies. However, to realise the true potential of student pedagogic consultancy, careful consideration must be given to the time constraints within which authentic collaboration and consultation operate, as well as the underlying systems and procedures which may succeed in perpetuating, rather than challenging, the hierarchical power structures inherent to traditional student-staff interactions.

## References

- Adams, T. E., Jones, S. H., & Ellis, C. (2014). *Autoethnography*. Oxford University Press.
- British Educational Research Association (BERA) (2018). *Ethical guidelines for educational research* (4th ed.). London, UK: British Educational Research Association. <https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Brookfield, S. (2017). *Becoming a critically reflective teacher*. Jossey-Bass.
- Byrne, D. (2022). A worked example of Braun and Clarke’s approach to reflexive thematic analysis. *Quality and Quantity*, 56, 1391–1412. <https://doi.org/10.1007/s11135-021-01182-y>
- Carter, A. (2015). *Carter review of initial teacher training (ITT)*. Department for Education.
- Chang, H., Ngunjiri, F., & Hernandez, K. A. C. (2016). *Collaborative autoethnography*. Routledge.
- Cook-Sather, A. (2018). Developing “students as learners and teachers”: Lessons from ten years of pedagogical partnership that strives to foster inclusive and responsive practice. *The Journal of Educational Innovation, Partnership and Change*, 4(1), 1–7.
- Cook-Sather, A., Bovill, C., & Felten, P. (2014). *Engaging students as partners in teaching & learning: A guide for faculty*. Jossey-Bass.
- Curnow, J., Davis, A., & Asher, L. (2019). Politicization in process: Developing political concepts, practices, epistemologies, and identities through activist engagement. *American Educational Research Journal*, 56(3), 716–52. <https://doi.org/10.3102/0002831218804496>
- Cuthbert, R. (2010). Students as customers? *Higher Education Review*, 42(3), 3–25.
- Daviduke, N. (2018). Growing into pedagogical partnerships over time and across disciplines: My experience as a non-

- STEM student consultant in STEM courses. *International Journal for Students as Partners*, 2(2), 151-156. <https://doi.org/10.15173/ij sap.v2i2.3443>
- Department for Education. (2021). *Initial teacher training market review report*. <https://www.gov.uk/government/publications/initial-teacher-training-itt-market-review-report>
- Denzin, N. K. (2013). *Interpretive autoethnography*. Thousand Oaks, SAGE.
- Department for Education. (2023). *School workforce in England*. <https://explore-education-statistics.service.gov.uk/find-statistics/school-workforce-in-england>
- Devnew, L. E., Austin, A. B., Le Ber, M. J., LaValley, J. B., & Elbert, C. D. (2017). Learning from our multi-stage collaborative autoethnography. *The Qualitative Report*, 22(10), 2772-2784. <https://doi.org/10.46743/2160-3715/2017.2555>
- Driscoll, J. (1994). Reflective practice for practise – a framework of structured reflection for clinical areas. *Senior Nurse*, 14(1), 47–50.
- Dwyer, A. (2018). Toward the formation of genuine partnership spaces. *International Journal for Students as Partners*, 2(1), 11-15. <https://doi.org/10.15173/ij sap.v2i1.3503>
- Education Endowment Foundation. (2021). *Effective professional development: Guidance report*. <https://educationendowmentfoundation.org.uk/education-evidence/guidance-reports/effective-professional-development>
- Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: An overview. *Historical Social Research/Historische Sozialforschung*, 36(4), 273–290. <https://www.jstor.org/stable/23032294>
- Ellis C. & Rawicki J. (2013). Collaborative witnessing of survival during the holocaust: An exemplar of relational autoethnography. *Qualitative Inquiry*, 19, 366-380. <https://doi.org/10.1177/1077800413479562>
- Farsides, T., & Woodfield, R. (2010). Individual and gender differences in good and first-class undergraduate degree performance. *British Journal of Psychology*, 98, 467–483. <https://doi.org/10.1348/000712606X150246>
- Federičová, M. (2021). Teacher turnover: What can we learn from Europe? *European Journal of Education*, 56(1), 102-116. <https://doi.org/10.1111/ejed.12429>
- Ferry, B., Kervin, L., Cambourne, B., Turbill, J., Puglisi, S., Jonassen D. & Hedberg, J. (2004). Online classroom simulation: The 'next wave' for pre-service teacher education? In R. Atkinson, C. McBeath, D. Jonas-Dwyer & R. Phillips (Eds), *Beyond the comfort zone: Proceedings of the 21st Conference of Australian Society for Computers in Learning in Tertiary Education (ASCILITE)* (pp. 294-302). <http://www.ascilite.org.au/conferences/perth04/procs/ferry.html>
- Feucht, F.C., Lunn Brownlee, J., & Schraw, G. (2017). Moving beyond reflection: Reflexivity and epistemic cognition in teaching and teacher education. *Educational Psychologist*, 52(4), 234-241. <https://doi.org/10.1080/00461520.2017.1350180>
- Fischetti, J., Ledger, S., Lynch, D., & Donnelly, D. (2022). Practice before practicum: Simulation in initial teacher education. *The Teacher Educator*, 57(2), 155-174. <https://doi.org/10.1080/08878730.2021.1973167>
- Fraser, K. L., Ayres, P., & Sweller, J. (2015). Cognitive load theory for the design of medical simulations. *Simulation in Healthcare*, 10(5), 295-307. <https://doi.org/10.1097/sih.0000000000000097>
- Freire, P. (1970). *Pedagogy of the oppressed*. Penguin.
- Freire, P. (1994). *Pedagogy of hope*. Continuum.
- Giroux, H. A. (2020). *On critical pedagogy*. Bloomsbury Academic.
- Gower, C. (2017). *An exploration of the use of bio-pedagogical narratives and video stimulated reflection in the pedagogy of initial teacher education*. [Doctoral thesis, Brunel University]. ETHOS. <https://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.824279>
- Guba E. E., & Lincoln Y. S. (2005). Paradigmatic controversies, contradictions, and emerging confluences. In N. Denzin & Y. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed., pp. 191-216). Thousand Oaks, Sage.
- Hayward, L., Ventura, S., Schuldt, H., & Donlan, P. (2018). Student pedagogical teams: Students as course consultants engaged in process of teaching and learning. *College Teaching*, 66(1), 37-47. <https://doi.org/10.1080/87567555.2017.1405904>
- Healey, M., Flint, A., & Harrington, K. (2014). Engagement through partnership: Students as partners in learning and teaching in higher education. *The Higher Education Academy*. <https://www.advance-he.ac.uk/knowledge-hub/engagement-through-partnership-students-partners-learning-and-teaching-higher>
- Healey, M., & Healey, R. (2018). It depends: Exploring the context-dependent nature of students as partners practices and policies. *International Journal for Students as Partners*, 2(1), 1–10. <https://doi.org/10.15173/ij sap.v2i1.3472>
- Healey, R. L., Lerczak, A., Welsh, K., & France, D. (2019). By any other name? The impacts of differing assumptions, expectations and misconceptions about student-staff 'partnerships'. *International Journal for Students as Partners*, 3(1), 106-122. <https://doi.org/10.15173/ij sap.v3i1.3550>
- Hulme, M., & Wood, J. (2022). The importance of starting well: the influence of early career support on job satisfaction and career intentions in teaching. *Journal of Further and Higher Education*, 46(4), 504-521. <https://doi.org/10.1080/0309877X.2021.1985981>

- Kaufman, D., & Ireland, A. (2019). Simulation as a strategy in teacher education. *Oxford Research Encyclopedia of Education*. <https://doi.org/10.1093/acrefore/9780190264093.013.478>
- Kelly, N., Cespedes, M., Clarà, M., & Danaher, P. A. (2019). Early career teachers' intentions to leave the profession: The complex relationships among preservice education, early career support, and job satisfaction. *Australian Journal of Teacher Education*, 44(3). <https://doi.org/10.14221/ajte.2018v44n3.6>
- Levin, O., & Flavian, H. (2022). Simulation-based learning in the context of peer learning from the perspective of preservice teachers: A case study. *European Journal of Teacher Education*, 45(3), 373-394. <https://doi.org/10.1080/02619768.2020.1827391>
- Livers, S. D., Zhang, S., Davis, T. R., Bolyard, C. S., Daley, S. H., & Sydnor, J. (2021). Examining teacher preparation programs' influence on elementary teacher candidates' sense of preparedness. *Teacher Education Quarterly*, 48(3), 29-52. <https://www.jstor.org/stable/27094741>
- Lodge, C. (2005). From hearing voices to engaging in dialogue: Problematising student participation in school improvement. *Journal of Educational Change*, 6(2), 125-146. <https://link.springer.com/article/10.1007/s10833-005-1299-3>
- Long, R., & Danechi, S. (2022). *Teacher recruitment and retention in England*. <https://researchbriefings.files.parliament.uk/documents/CBP-7222/CBP-7222.pdf>
- Matthews, K. E., Dvorakova, S. L., Mercer-Mapstone, L., Acai, A., Cook-Sather, A., Felten, P., Healey, M., Healey, R. L., & Marquis, E. (2019). Enhancing outcomes and reducing inhibitors to the engagement of students and academics in learning and teaching partnerships: Implications for academic development support. *International Journal for Academic Development*, 24(3), 246-259. <https://doi.org/10.1080/1360144X.2018.1545233>
- Mayer, D., Allard, A., Bates, R., Dixon, M., Doecke, B., Kline, J., Kostogriz, A., Moss, J., Rowan, L., Walker-Gibb, B., White, S., & Hodder, P. (2015). *Studying the effectiveness of teacher education: Final report*. <https://dro.deakin.edu.au/ndownloader/files/37161460/1>
- McGarr, O. (2021). The use of virtual simulations in teacher education to develop pre-service teachers' behaviour and classroom management skills: implications for reflective practice. *Journal of Education for Teaching*, 47(2), 274-286. <https://doi.org/10.1080/02607476.2020.1733398>
- McGarr, O., O'Grady, E., & Guilfoyle, L. (2017). Exploring the theory-practice gap in initial teacher education: Moving beyond questions of relevance to issues of power and authority. *Journal of Education for Teaching*, 43(1), 48-60. <https://doi.org/10.1080/02607476.2017.1256040>
- McLean, D., Worth, J., & Faulkner-Ellis, H. (2023). *Teacher labour market in England annual report*. [https://www.nfer.ac.uk/media/5286/teacher\\_labour\\_market\\_in\\_england\\_annual\\_report\\_2023.pdf](https://www.nfer.ac.uk/media/5286/teacher_labour_market_in_england_annual_report_2023.pdf)
- Mercer-Mapstone, L., Dvorakova, S. L., Matthews, K. E., Abbot, S., Cheng, B., Felten, P., Knorr, K., Marquis, E., Shammas, R., & Swaim, K. (2017). A systematic literature review of students as partners in higher education. *International Journal for Students as Partners*, 1(1), 1-23. <https://doi.org/10.15173/ijsap.v1i1.3119>
- Meredith, C., Heslop, P., & Dodds, C. (2021). Simulation: Social work education in a third place'. *Social Work Education*, 42(6), 917-934. <https://doi.org/10.1080/02615479.2021.1991908>
- Miller, J. M., & Young, P. (2021). Person-organization fit and first-year teacher retention in the United States. *Teaching and Teacher Education*, 97, 103226. <https://doi.org/10.1016/j.tate.2020.103226>
- Moore-Cherry, N., Healey, R. L., Nicholson, T., & Andrews, W. (2016). Inclusive partnership: Enhancing student engagement in geography. *Journal of Geography in Higher Education*, 40(1), 84-103. <https://doi.org/10.1080/03098265.2015.1066316>
- Motola, I., Devine, L. A., Chung, H. S., Sullivan, J. E., & Issenberg, S. B. (2013). Simulation in healthcare education: a best evidence practical guide. *AMEE Guide No. 82, Medical Teacher*, 35(10), 1511-1530. <https://doi.org/10.3109/0142159X.2013.818632>
- Mulholland, K., Luke, C., Meller, S., Nichol, D., Anderson, A., Herridge, D., & Gray, W. (2022). 'Exploring the use of simulation in a primary ITE context'. *Impact: Journal of the Chartered College of Teaching*, 16, 60-62.
- Nario-Redmond, M. R., Gospodinov, D., & Cobb, A. (2017). Crip for a day: The unintended negative consequences of disability simulations. *Rehabilitation Psychology*, 62(3), 324-333. <https://psycnet.apa.org/doi/10.1037/rep0000127>
- National Foundation for Educational Research. (NFER) (2023). Short supply: Addressing the post-pandemic teacher supply challenge in England. [https://www.nfer.ac.uk/media/5210/addressing\\_the\\_post\\_pandemic\\_teacher\\_supply\\_challenge.pdf](https://www.nfer.ac.uk/media/5210/addressing_the_post_pandemic_teacher_supply_challenge.pdf)
- Nestel, D., & Bearman, M. (2015.) Theory and simulation-based education: Definitions, worldviews and applications. *Clinical Simulation in Nursing*, 11(8), 349-354. <https://doi.org/10.1016/j.ecns.2015.05.013>
- Ngunjiri, F. W., Hernandez, K. A. C., & Chang, H. (2010). Living autoethnography: Connecting life and research. *Journal of Research Practice*, 6(1) 1-17.
- Nichol, D., Mulholland, K., Anderson, A., Taylor, S., & Davies, J. (2023). "'How was it for you?' The impacts of student-staff partnerships in developing online teaching and learning', *Journal of Further and Higher Education*, 1-12. <https://doi.org/10.1080/0309877X.2023.2241393>
- Patrick, R. (2013). 'Don't rock the boat': Conflicting

- Mentor and pre-service teacher narratives of professional experience. *The Australian Educational Researcher*, 40(2), 207–226. <https://link.springer.com/article/10.1007/s13384-013-0086-z>
- Perry, E., Owen, D., Booth, J., & Bower, K. (2019). *The curriculum for initial teacher education: Literature review*. <https://shura.shu.ac.uk/24770/8/Literature%20Review%20of%20Initial%20Teacher%20Education%20Curriculum%20-%20final.pdf>
- Pintrich, P. (2002). Future challenges and directions for theory. In B. Hofer & P. Pintrich (Eds.), *Personal epistemology: The psychological beliefs about knowledge and knowing* (pp. 389–414). Erlbaum.
- Platt, A., McMeekin, P., & Prescott-Clements, L. (2021). Effects of the Simulation using Team Deliberate Practice (Sim-TDP) model on the performance of undergraduate nursing students. *BMJ Simulation and Technology Enhanced Learning*, 7(2), 66–74. <https://doi.org/10.1136/bmjstel-2019-000520>
- Polit, D. F., & Beck, C. T. (2006) *Essentials of nursing research: Methods, appraisal, and utilisation* (6th ed). Lippincott Williams & Wilkins.
- Schön, D. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. Jossey-Bass.
- Shanks, R. (2014). A study of learners' situational vulnerability: New teachers in Scotland. *Education in the North*, 21, 2–20. <https://www.abdn.ac.uk/education/research/eitn/journal/12/>
- Siddiqui, Z., O'Halloran, M., & Hamdorf, J. (2021). Using simulation to learn surgical skills in oral surgery: What do students think? *Academic Letters*, 3677, 1–7.
- Sims, S., & Jerrim, J. (2020). *TALIS 2018: Teacher working conditions, turnover and attrition*. <https://files.eric.ed.gov/fulltext/ED604489.pdf>
- Snijders, Wijnia, L., Dekker, H. J. J., Rikers, R. M. J. P., & Loyens, S. M. M. (2022). What is in a student-faculty relationship?: A template analysis of students' positive and negative critical incidents with faculty and staff in higher education. *European Journal of Psychology of Education*, 37(4), 1115–1139. <https://link.springer.com/article/10.1007/s10212-021-00549-x>
- Sollars, E. D., & Xenakis, N. (2021). Simulation-based continuing education in health care social work: A case study of clinical training innovation. *Clinical Social Work Journal*, 49(2), 162–71. <https://doi.org/10.1007/s10615-021-00806-y>
- Sun, N. Z., & P. A., and Snell, L. (2017). Optimizing the design of high-fidelity simulation-based training activities using cognitive load theory – lessons learned from a real-life experience. *Journal of Simulation*, 11(2), 151–158. <https://doi.org/10.1057/s41273-016-0001-5>
- US Bureau of Labor Statistics. (2022). *Employment, hours, and earnings from the current employment statistics survey (national)*. <https://data.bls.gov/timeseries/CES9093161101>
- Wall, K., & Hall, E. (2016). Teachers as metacognitive role models. *European Journal of Teacher Education*, 39(4), 403–418. <https://doi.org/10.1080/02619768.2016.1212834>
- Walsh, C. M, Garg, A., Ng, S. L., Goyal, F., & Grover, S. C. (2017). Residents' perceptions of simulation as a clinical learning approach. *Canadian Medical Education Journal*, 8(1), 76–87. <https://pubmed.ncbi.nlm.nih.gov/28344719>
- Woodall, T., Hiller, A., & Resnick, S. (2014). Making sense of higher education: Students as consumers and the value of the university experience. *Studies in Higher Education*, 39(1), 48–67.
- Yu, M., Yang, M., Ku, B., & Mann, J. S. (2021). Effects of virtual reality simulation program regarding high-risk neonatal infection control on nursing students. *Asian Nursing Research*, 15(3), 189–96. <https://doi.org/10.1016/j.anr.2021.03.002>
- Zdravković, Marko, Serdinšek, T., Sobočan, M., Bevc, S., Hojs, R., & Krajnc, I. (2018). Students as partners: Our experience of setting up and working in a student engagement friendly framework. *Medical Teacher*, 40(6), 589–94. <https://doi.org/10.1080/0142159x.2018.1444743>