

Teaching in Higher Education

Critical Perspectives

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/cthe20>

Beliefs and engagement in an institution-wide pedagogic shift

Virgínia Teixeira Antunes, Alejandro Armellini & Robert Howe

To cite this article: Virgínia Teixeira Antunes, Alejandro Armellini & Robert Howe (2021): Beliefs and engagement in an institution-wide pedagogic shift, Teaching in Higher Education, DOI: [10.1080/13562517.2021.1881773](https://doi.org/10.1080/13562517.2021.1881773)

To link to this article: <https://doi.org/10.1080/13562517.2021.1881773>



© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 11 Feb 2021.



Submit your article to this journal [↗](#)



Article views: 433



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

Beliefs and engagement in an institution-wide pedagogic shift

Virgínia Teixeira Antunes ^a, Alejandro Armellini ^b and Robert Howe ^{a,c}

^aInstitute of Learning and Teaching, University of Northampton, Northampton, UK; ^bUniversity of Portsmouth, Portsmouth, UK; ^cLibrary and Learning Services, University of Northampton, UK

ABSTRACT

This study addresses the attitudes of academic staff towards a large-scale pedagogic shift to Active Blended Learning (ABL). Beliefs about the shift and how it is translated into practice are explored. Four main categories are derived: ‘Active Innovators’ who believe change is positive and apply it to their academic practice; ‘Lagging Innovators’ who hold positive beliefs but fail to fully implement it; ‘Sceptical but obliging’ who hold negative beliefs but whose practices are consistent with the new approach; and ‘Sceptical and resistant’ who hold negative beliefs about ABL and actively resist implementing it in their practice. This article suggests that institutions aiming to promote large-scale sustainable change, may approach the process through two routes: (1) a pragmatic route, focused on promoting change in practice (i.e. practice generates subsequent changes to beliefs); and (2) an epistemic route, aimed at promoting changes to beliefs (i.e. beliefs change first, practices follow).

ARTICLE HISTORY

Received 15 July 2020
Accepted 17 January 2021

KEYWORDS

Active blended learning; institutional change; beliefs; teaching practices; digital transformation

Introduction

This article focuses on a Higher Education Institution in the United Kingdom with a teaching and employability focus. As part of the institutional strategy, a ‘unique Learning and Teaching model’ (University of Northampton 2017) was developed by the institution: Active Blended Learning (ABL). ABL was conceptualised and deployed to counter the university’s extensive, yet not always effective use of the lectures as a primary mode of teaching in many subject areas (Schmidt et al. 2010, 2015). ABL was further enabled by the development of a purpose-built, digitally-rich campus without lecture theatres, which cemented the institution’s commitment to student-centred teaching in small groups. The new campus opened in September 2018.

An important aspect of large-scale transformation is the engagement of those involved in the process, which can be defined as agency (Biesta, Priestley, and Robinson 2015). The extent and quality of this engagement is influenced by diverse factors. Often educators resist changes to teaching methods (Partridge, Ponting, and McCay 2011) which impact on their academic identity (Clegg 2008). The use of technology in HE is still

CONTACT Alejandro Armellini  alejandroarmellini@gmail.com

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

often a divisive issue (Johnson et al. 2012; Scherer and Siddiq 2015). Movement towards new forms of delivery and technology, along with an overly managerial form of implementation (White, Carvalho, and Riordan 2011) has the power to displace the academic expert (Hanson 2009). These challenges, as well as maintaining digital capability standards, time pressures and increasing accountability (Zukas and Malcolm 2019) all impact on agency and therefore academic engagement.

Guskey (2002) suggests that there are three key areas relevant to assess pedagogic change: teaching practices, beliefs and attitudes, and student outcomes. This article focuses on the first two areas. The implementation of this institution-wide pedagogic change is recent and it is therefore premature to evaluate student outcomes. The study focused on two research questions: (1) how are teaching practices designed and implemented within an ABL framework, and (2) what are the attitudes and beliefs of tutors about the implementation of ABL. The study was conducted between 2018 and 2019. In-depth qualitative data was collected through interviews with staff who underwent the pedagogic shift to ABL. Findings revolve around tutors' current beliefs and teaching practices within this institutional context of change. Factors involved in the adoption of these beliefs and practices are explored in the discussion section, using Emirbayer and Mische's (1998) model of agency. The model provides a basis to analyse the role that past experiences and expectations of future outcomes can play in the development of current beliefs and practices.

Active blended learning within the institutional context

At this institution Active Blended Learning (ABL) was defined as:

[...] a pedagogical approach that combines sense-making activities with focused interactions (with content, peers and tutors) in appropriate learning settings – in and outside the classroom. ABL focuses on engaging students in knowledge construction, reflection and critique, on the development of learner autonomy and of course, on the achievement of learning outcomes. (University of Northampton 2020)

The active learning element of ABL intends to counter the sector's over reliance on lecturing (e.g. Schmidt et al. 2010, 2015), which is seen as insufficient to promote deeper learning and soft skills (Entwistle 2009; Karagiannopoulou and Entwistle 2013; Karagiannopoulou and Milienos 2015; Marton and Saljo 1976). Active learning engages students (Zepke and Leach 2010) whose exploration and discovery are key to effective learning (Carlile and Jordan 2005). ABL engages students in collaborative strategies (Palmer, Lomer, and Bashliyska 2017; Prince 2004) and learning experiences supported by sense-making tasks and real-life examples (Mikalayeva 2016). These experiences promote social skills (Adams Becker et al. 2017), critical thinking (Shin et al. 2014) and problem-solving (Hake 1998).

As a student-centred approach to learning and teaching, ABL combines the active and blended elements. It aims to promote deep levels of understanding in digitally rich environments and is consistent with contemporary workplace expectations and requirements (Ornellas, Falkner, and Stalbrandt 2019).

Traditional views of blended learning (BL) focus on a mix or continuum between face-to-face and online learning (Garrison and Vaughan 2008). A key distinction between

ABL and traditional conceptualisations of BL is ABL's explicit emphasis on sense-making, by integrating activities conducted synchronously and asynchronously, in and outside the classroom. Tutors are thus encouraged to plan their teaching in a holistic, integrated manner, rather than as a 'dual track' approach, where in-class and online elements can run in parallel but not necessarily build on or add value to each other. This conceptualisation of ABL aligns with the institution's focus on employability.

The institutional pedagogic shift to ABL implied the redesign of all programmes and modules, a complete assessment review and the provision of staff development aligned with the principles of ABL.

Pedagogic change

Change in large organisations is often met by strong resistance (e.g. Dubois et al. 2014; Garrison and Kanuka 2004). Higher Education educators tend to resist change to teaching methods (Partridge, Ponting, and McCay 2011). While most professions are taking advantage of technological developments to improve practice (Ertmer and Ottenbreit-Leftwich 2010), the inclusion of technology to enhance teaching in HE is still a challenge (Johnson et al. 2012; Scherer and Siddiq 2015). Despite significant evidence that points to the benefits of blended learning in relation to student achievement (e.g. Boyle et al. 2003; López-Pérez, Pérez-López, and Rodríguez-Ariza 2011; Potter 2015) and student engagement (Dringus and Seagull 2013; Halverson et al. 2014; Kaleta, Skibba, and Joosten 2007; Reynard 2007), many educators still need to develop ways to integrate technology in a purposeful way in their teaching practices (Martin 2018). These attitudes towards technology integration illustrate the key impact of beliefs in practice (Deng et al. 2014; Mama and Hennessy 2013; Tondeur et al. 2016). A constructivist view of learning and teaching tends to be more open to integration of technology (Overbay et al. 2010) and educators with a student-centred approach tend to use more varied and purposeful technological tools (e.g. Andrew 2007; Ertmer and Ottenbreit-Leftwich 2010; Hermans et al. 2008; Judson 2006; Roehrig, Kruse, and Kern 2007).

Many organisational change models and frameworks have been developed over the years. Lewin's model (1947) states that change occurs in beliefs first. Changes to practice will follow. In contrast, Guskey (1986) considers that changes to practice, leading to change in student outcomes, precede changes to beliefs. This article focuses on tutors' practices and beliefs and how these influence individuals' decisions on engagement with subsequent pedagogic change, i.e. their agency (Biesta, Priestley, and Robinson 2015). According to Emirbayer and Mische's (1998) model, agency is a 'process of social engagement, informed by the past, oriented toward the future and 'acted out' in the present' (963). Past experiences, which the authors define as the *iterational* dimension, and expectations of future outcomes, which the authors define as the *projective* dimension, influence the way tutors evaluate their current context of change, labelled as *practical-evaluative* dimension (Figure 1). How tutors perceive and interpret their experiences and resources in the current change process is key to agency. Agency, which in the context of this study concerns tutors' decisions on engagement with the pedagogic change, results from this interdependent process (Biesta, Priestley, and Robinson 2015).

Emirbayer and Mische's multidimensional model (1998) recognises the complexity of the process through which beliefs develop and changes to practice occur. Prior teaching

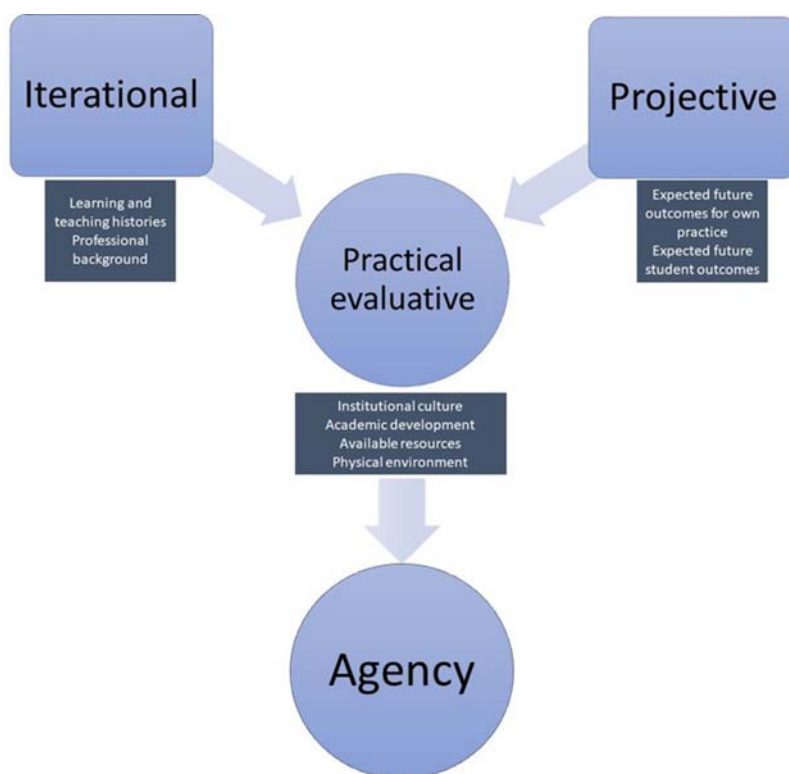


Figure 1. Adaptation of the 'Triadic chordal structure of Agency' (Emirbayer and Mische 1998).

experiences influence current practices and beliefs. Expectations of future impact (e.g. on student outcomes) also shape current practices. Educators' beliefs will be influenced by expectations of impact on these outcomes (e.g. Guskey 1986, 2002, 2020), both in the short-term (e.g. satisfaction and grades), and in the long-term (e.g. employability and soft skills). Emirbayer and Mische's model (1998) provides a framework to understand how institution-wide transformation can occur through both beliefs that influence practice and through practice that shapes beliefs.

Method

The study focused on two main research questions:

- (1) How are teaching practices designed and implemented within an ABL framework?
- (2) What are the tutors' attitudes and beliefs towards the institution-wide implementation of ABL?

Semi-structured interviews were carried out with 10 academics, collecting extensive in-depth qualitative data. A summary of their background, teaching experience and faculty affiliation (Faculty of Health, Education and Society, FHES or Faculty of Business and Law, FBL) is presented in Table 1.

The interviews addressed a range of topics, including:

Table 1. Participants' experience, faculty affiliation and background.

Pseudonym	Years of teaching experience	Faculty	Background
Miles	10–15	FHES	Further Education
Helen	5–10	FBL	Professional
Karen	20+	FBL	Academia
Susannah	5–10	FBL	Professional
Annabelle	10–15	FBL	Further Education
Faye	10–15	FHES	Professional
Caroline	5–10	FHES	Academia
Sarah	20+	FHES	Academia
Giles	10–15	FBL	Professional
Marianne	10–15	FHES	Academia

- (1) past and current views on own and others' teaching practices at the institution;
- (2) own understanding of ABL;
- (3) staff perception of students' satisfaction with current teaching practices;
- (4) how ABL has impacted on own practices and on the practices of others;
- (5) staff perception of student outcomes following the implementation of ABL;
- (6) the wider impact of ABL in terms of institutional reputation and credibility.

The number of participants was purposefully limited to allow for deeper analysis of data and provide space and time for participants to have in-depth discussions with the interviewer. Tutors were invited to take part in the study via institutional forums and email. Participants' quotes are presented using pseudonyms.

Thematic analysis was conducted in NVivo by the primary researcher. The analysis was discussed with the two other researchers to identify potential inconsistencies. Thematic data analysis is a suitable methodology to analyse rich, in-depth data from diverse participants (Maguire and Delahunt 2017). In the context of the heterogeneity of staff at the University, who have a wide range of teaching and professional backgrounds and deploy a variety of approaches to teaching, this methodology seemed appropriate.

A bottom-up approach to thematic analysis (Braun and Clarke 2006) was adopted to allow data to guide the analysis instead of constraining it into pre-set themes. No preconceptions or initial categorisations were used for coding. The dataset was subsequently narrowed down to highlight the most prevalent themes, which were then analysed within two broad dimensions: the beliefs and practices of academic staff. The findings section outlines the core dimensions deriving from the data analysis.

Findings

This section presents the findings under the two broad dimensions of beliefs and teaching practices. Anonymised participants' quotes are used to illustrate and support each theme.

Beliefs

This section presents the findings on tutors' beliefs under three areas: (1) ABL as an approach to learning and teaching; (2) students and expected impact of ABL on student outcomes and (3) teaching practices.

ABL as an approach to learning and teaching

Most participants perceive ABL as an effective pedagogy providing an enhanced student experience:

It does work. It is good ethos [...] getting the students to do things beforehand and [...] you know, consolidating and so on [...] (Faye)

It is also seen by some as having a positive impact on own teaching practices, as Marianne suggests:

For me, it's enhanced my practice. It's made me think. (Marianne)

Not only is ABL thought of as an opportunity to reflect, but it is linked to enhanced relationships with students due to small-group teaching:

ABL is work intensive, because it needs to be because it's about interaction. It's about proper engagement. (Marianne)

Karen, on the other hand, sees ABL as an imposition from the institution on her teaching practice. In her opinion, the decision to change was made without taking tutors into account:

This was imposed upon us. We were told 'this is the model that you are using'. There was no discussion with members of staff who actually teach. (Karen)

As a result of this sense of imposition, Karen actively rejects ABL as an approach. She makes it clear that the communications surrounding this shift led to a sense of personal insult in which she felt that she was being told that her practice needed improvement. However, Karen does not reject the principles of ABL, even if she disagrees with the way in which ABL was presented and communicated to staff. She notes that the blended element is the most novel in this pedagogic approach:

So none of this is new. The new bit is the blended bit and being required to deliver not everything face-to-face. (Karen)

Resistance to engage in pedagogic change in the context of this research was shown in two ways. One was characterised by a clear refusal to change teaching practice in line with the new ABL pedagogic framework. The second way involved a negative discourse surrounding ABL, clear in Giles' view of ABL as an unnecessary, transient pedagogical complexity that will not benefit the institution.

This means very little to me, it's not something that I think about consciously or at any real level. (Giles)

I don't see it taking us in the right direction, I don't see it being around in five years' time. (Giles)

Annabelle and Faye focus on the flexibility of ABL as a core positive aspect:

It's allowing the students to definitely have easy access to the materials in a structured way [...] So to me, it's a very flexible approach, but it's also structured. (Annabelle)

Most tutors value the active learning element above any other:

So, in the workshops, I try and do lots of physically active things and get people moving around the room. (Susannah)

Susannah and Caroline, among others, present a deeper understanding of ABL that seems to be the result of a strong process of reflection. Caroline, for example, notes that the blended element goes beyond ‘online vs offline’:

More for me it’s that kind of the blended between online, offline, but also in class between them and between us, so the interactive elements. (Caroline)

Helen, however, while positive about ABL, shows gaps in her understanding of the process, asking for clarification throughout the interview:

Perhaps you can define what ‘sense-making activities’ are for me. (Helen)

Marianne focuses her definition of ABL on the interactivity factor:

[...] active blended learning is about all of us engaging in it [...] It’s a knowledge exchange. It’s not knowledge delivery. (Marianne)

The core concept of ABL and its most prominent elements are perceived differently by tutors, particularly in relation to the blended element of ABL. Communication and support offered by the university influenced tutors’ beliefs about ABL. The extent to which these beliefs may impact on the student experience is outlined in the next section.

Students and expected impact of ABL on student outcomes

A number of tutors perceive ABL as student-centred, with a focus on being interactive:

So, if you keep communication open with the students, you can make adjustments as you’re moving along, and that’s part of their happiness. (Marianne)

The value of developing positive closer relationships and enhancing communication to further engage students is acknowledged by most interviewees:

I speak to them more and I don’t just talk for two hours. (Susannah)

Marianne highlights the importance of the relational aspect to promote engagement:

I’ve had some good success rates with that [online discussion forums] in terms of attendance and engagement. I know my colleagues haven’t, but I think, again, that comes down to teaching style and approachability. (Marianne)

The acknowledgement that HE is a sector that has become increasingly marketized casts concerns on whether ABL can be understood to provide a lesser quality service. There is a perception of less contact time and support, which can be judged as delivering lower ‘value for money’ for students:

[...] one of their perceptions with ABL can be that ABL is a way for us lecturers to all just sort of relax and not do anything and, you know, ‘I’m paying for my education and I expect to be taught,’ [...] I want my money’s worth. (Faye)

This type of perception may be influenced not necessarily by ABL as a pedagogic approach but by the quality of each tutor’s implementation of ABL principles in practice.

On the other hand, it also raises the importance of students' understanding of ABL as part of their learning and teaching experiences.

While generally positive about the principles of ABL, Sarah presents a more hesitant view about its implementation, particularly in what concerns students understanding the pedagogic approach. Communication with students (current and prospective) is key to prepare them for a successful ABL experience and to enable them to understand its value:

I think work needs to be done to educate students as to what's going on and to say explicitly it's not just dumping something on the internet [...] (Sarah)

The lack of student engagement is a core concern, as identified and reported in prior institutional research (e.g. Palmer, Lomer, and Bashliyska 2017; Teixeira Antunes, Armellini, and Howe *forthcoming*). Tutors recognise this. Miles, for example, expresses his frustration at his attempts to engage students:

[...] a lot of them don't engage, even though you link it to learning, you link it to vocational experience, you try a lot. [...] I'm at my wits end of trying to find out what to do to get them to engage. (Miles)

Student engagement in online activities is a key worry for some, as is the impact of non-engagement on those who did engage:

[...] you try and do things outside the classroom, not everybody does it, so then those who have done the activities who come to the session [...] they find it less purposeful [...] (Sarah)

Prior research (Palmer, Lomer, and Bashliyska 2017), suggests that meaningful tasks that foster such interactions in and outside the classroom are key. Tutors, however, note that reasons for non-engagement are often complex and not necessarily linked to the activity:

[Students] have mental health problems, they have financial problems, they have childcare issues, they work and sometimes can't get time off work because their work patterns change. (Karen)

While it is clear that tutors make varied attempts to engage their students, most are aware that the issue with engagement is a matter of concern across the sector (e.g. Masika and Jones 2016; Thomas 2012):

[...] every other university has this problem about student engagement. We're not the only ones who struggle. (Karen)

Some tutors view students' backgrounds and earlier educational experiences as a key barrier to engagement with ABL:

I don't think it's as black and white as BTEC [Business and Technology Education council] students aren't happy here at the university, but it does take a while for them to realise it's not going to be as easy as BTEC, that they're going to have to take responsibility. (Annabelle)

Susannah notes how ABL practices help students develop soft and social skills, which help with employability:

[...] with this model now, you can kind of move people around so they're always talking to different people, and that definitely helps with employability and learning that everybody's got something to bring to the team. (Susannah)

If a tutor recognises the potential of a pedagogic approach to enhance student outcomes, or if they see these outcomes being achieved by colleagues whose practices reflect the new approach, the will to engage with that (new) pedagogic stance is likely to grow.

I think more for me, it's kind of learning more from colleagues about things that they're doing that are going well and then kind of copying them. (Caroline)

When the effectiveness of others' practices is not evident, resistance to change becomes obvious:

No one's been able to show me the case where on a large module with students similar to mine with the challenges that mine bring that they've successfully used ABL to deliver outcomes as good as mine. (Giles)

These findings suggest that while most tutors consider that ABL facilitates student-centred learning and teaching experiences, there are still some issues in relation to how translating ABL into practice may impact student engagement.

Teaching practices

The blended element of ABL can lead tutors to a lack of self-confidence in their ability to implement this approach. Karen, for example, clearly shows a sense of low self-efficacy in digital skills, which is associated with what she sees as her poor understanding of technology and goes on to link this low level of digital literacy to age:

You can't do that in a Collaborate [room] because they don't understand the technology and I don't understand technology. (Karen)

[...] some of the younger ones find this easier. They understand the technology better because, apparently, we're supposed to make use of all this technology. Well, [...] I find that more difficult. (Karen)

Susannah's early perceptions of ABL focused on the use of technology in teaching, but academic development opportunities changed her views. Caroline's understanding is that technology must be used in an integrated and purposeful way within a pedagogical framework:

[...] there was so much emphasis on these e-activities. I went to this training on what to do in a classroom and that changed completely how I started planning my sessions. (Susannah)

[...] any kind of activity, anything that's interactive, never want to add things just for the sake of it. Like, ooh, we're at a new campus so we have to make things techy. (Caroline)

Helen suggests that access to digital resources makes lecturing less relevant.

[...] years ago, that was the only interaction you'd have with that knowledge, or you would sit in the library and read about it, now we have so many different sources available to us using the internet that they don't need to have that one-hour lecture [...] (Helen)

However, there is no consensus that lecturing is an outdated practice. Karen focuses on presenting content and actively voices support for lecturing, acknowledging she still does it to a point.

I think the vast majority of us still do some form of lecture, because we have to, because of the nature of the work that we do, the nature of the topics that we're covering, the requirement to deliver material that is correct. (Karen)

Giles also values and still delivers lectures, which he describes as valuable practice, corroborated by its continued use across the HE sector. The quality of the lecturer, in his view, is more significant than the method.

[...] in my view the problem with the lecture is not in the lecture itself, in that we have a number of poor lecturers, who are not skilled, not capable of managing large classes in the way that students want them managed. (Giles)

These findings suggest that self-confidence in digital skills can have a strong impact on the integration of technology in teaching practices. A traditional view of learning and teaching experiences, anchored in lecturing, is evident in some tutors, while for others ABL is seen as an opportunity to implement more active and innovative practices.

Practices

This section presents the findings on tutors' practice under two main areas: (1) active learning practices and (2) blended learning practices.

Active practices

For several interviewees, including Miles, activities that link theory and practice are essential to ensure understanding. Annabelle, for example, engages students in activities to link theory and practice, with a strong focus on scaffolding.

[...] making sense of it is putting it into practice, as in doing practical activities or, again, making sense of it using [...] a client scenario. (Miles)

So a lot of the early activities would be quite heavily scaffolded, maybe like worksheets where they fill in various aspects and then building up their confidence so they fill in more of it themselves. Eventually it's a blank sheet [...] (Annabelle)

Most tutors report active approaches, with Susannah reporting her approach to active learning includes physical activity:

I don't like them just to sit in their seats. They never ever sit in their seats and listen to me for two hours. That never happens (laughs). I always get them doing things. (Susannah)

Bonwell and Eison (1991) define active learning as activities that involve 'students in doing things and thinking about the things they are doing' (19). The reflective element of ABL is important to how tutors plan and facilitate sessions:

So they have a session, they go away and do stuff and reflect and write a blog reflection and we give them feedback. (Caroline)

To promote active learning with an embedded reflective element, discussions, case studies and other student-led activities are often used. In some cases, these activities are aimed at sharing and building knowledge:

So I'll give the groups something that they need to go and teach the other members of the class. Again, they'd kind of continue that online, using a Padlet to help them get their ideas, then they come back in and they have to teach new groups. (Susannah)

Blended practices

Most tutors use technology to enhance their practice, although variations in scope, complexity and purposefulness are evident. Some view technology as an opportunity to overcome common barriers to student engagement, with some relying on specific artefacts, such as asynchronous workbooks.

Like they don't like reading (laughs), so I might do things like TED-Ed. You can use TED-Ed education where you can ask them questions as they're watching it. (Susannah)

And then they do the workbooks either in groups or on their own or however they prefer to do them. (Faye)

Prior research (Lomer and Palmer [forthcoming](#); Palmer, Lomer, and Bashliyska 2017) notes that to improve engagement, blended activities should be meaningful, interactive and well-integrated with face-to-face provision. The key issue with ABL in terms of barriers to practice concerns pre-session tasks. Some tutors acknowledge the potential value of pre-session tasks:

The pre-session exposure to content is about what you give them before class to think about what you're actually going to be doing in class, to introduce them slowly to maybe a complex idea or an idea that is possibly above their study level up until that point [...] I find, if they're coming to class and they haven't got a knowledge base, then they don't want to talk. (Marianne)

Giles, on the other hand, does not make use of pre-session tasks as he feels doing so would negatively impact his students' attendance and satisfaction as they would see these tasks as an imposition:

[...][pre-session tasks] would impact my attendance, engagement, student satisfaction metrics. Because there would be poor engagement. (Giles)

To manage the possible lack of engagement with pre-session tasks, some tutors present them as added value while making sure that their sessions are meaningful for all, including those who have not completed their pre-session tasks:

[...] But if they haven't done it [pre-session tasks], that discussion is rich enough for them also to get something out of it. (Susan)[...]

These findings raise relevant issues in respect of tutors' attitudes and beliefs towards ABL and the way this pedagogic approach translates into practice.

The following discussion, presented in line with Emirbayer and Mische's (1998) model, considers how past experiences and expectations of future outcomes can influence current beliefs and teaching practices.

Discussion

Emirbayer and Mische's (1998) model of agency is a valuable framework to understand individuals' decisions on their level of engagement with change. Teaching is not just a

responsibility of academic staff, but an institutional responsibility (Biggs 2014). Findings show that staff-to-staff interaction as well as institutional communication are significant factors to consider.

In line with Emirbayer and Mische's (1998) *iterational* dimension (Figure 1), this article argues that past experiences, such as tutors' own learning and teaching histories and professional backgrounds, influence their beliefs, attitudes and practices in the context of a large-scale institutional shift to ABL.

The expected impact of large-scale institutional change on practice and on student outcomes, referred to as the *projective* dimension by Emirbayer and Mische (1998), further influences beliefs and attitudes. Both the *iterational* (past) and *projective* (future) dimensions affect how tutors evaluate the context of the proposed change, termed the *practical-evaluative* (current) dimension (Emirbayer and Mische 1998). Figure 2 shows how Emirbayer and Mische's (1998) model of agency can help understand and situate the findings from this study.

To gain a deeper understanding of the tutors' stance in respect of their beliefs about the institutional shift to ABL and their learning and teaching practices, the three dimensions shown in Figure 2 are further discussed in the following sections.

Iterational dimension (past)

Pedagogical beliefs are shaped by personal experience, from one's experiences as a student to the multiple professional experiences (Keys 2007; Prestridge 2012; Richardson 2003). These beliefs may be difficult to change (Teo, Huang, and Hoi 2017). The influences from the past, which Emirbayer and Mische (1998) refer to as *iterational dimension*, consider aspects such as personal skills, prior knowledge, professional and personal beliefs and overall values (Biesta, Priestley, and Robinson 2015). A person's own prior experiences as a student are a determining factor to agency in this context (Biesta, Priestley, and Robinson 2015). For example, some participants perceive themselves as facilitators of learning (Miles, Susannah, Caroline, Annabelle, Faye and Marianne). Others hold a teacher-centred view (Helen, Giles, Karen and Sarah) and see

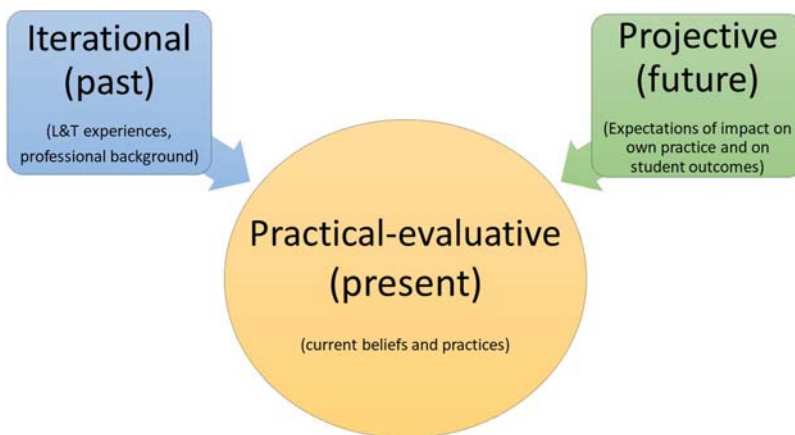


Figure 2. An adaptation of Emirbayer and Mische's (1998) model of agency.

themselves as leaders of the learning and teaching process. These beliefs then influence tutors' current practices, showing the interdependent relationship between past and present. For example, Helen reports regular use of technology in her sessions, but Giles, Karen and Sarah do not. This distinction is in line with views that tutors with a teacher-centred view tend to not value technology in learning and teaching (Tondeur et al. 2016).

Tutors' professional backgrounds are a key feature to understand current beliefs and practices. Miles and Annabelle, for example, have a strong background in further education, so their perception of active learning as common practice facilitates their engagement with ABL and highlights their agency in this change process. While beliefs that are core to and embedded in one's teaching are hard to change (Ertmer 2005), beliefs developed more recently are more open to change (Fives and Gill 2015). Helen, Caroline and Susannah, who are less experienced, express self-confidence in their digital skills, and are at ease with the blended aspect of ABL. On the other hand, Karen, who is the most experienced tutor, is clear about her limited digital skills. The amount of teaching experience may influence the ability to adjust to change, as illustrated in Sarah's view that she is 'set in her ways'.

Projective dimension (future)

This dimension addresses tutors' expectations of future impact of change and how these expectations help shape their beliefs and engagement. Findings suggest that the first step of this decision to engage is understanding the need for change, in line with Lewin's (1947) unfreezing stage. When the need for change is recognised and understood, tutors consider the characteristics of what is being proposed. The change proposed influenced tutors' conceptualisation of teaching, as well as how they implemented those principles in practice.

Lewin's model (1947) considers that change occurs primarily in beliefs. On the other hand, Guskey (1986) considers that changes to practice and perception of student outcomes take precedence. This article suggests that both routes may be valid to engage with institutional change. Findings suggest that some participants initially held negative beliefs about ABL, which was linked to how the pedagogic shift was communicated institutionally. As these tutors started implementing it in practice, for example by introducing blended practices, their beliefs changed. Other tutors embraced the pedagogic principles of ABL from the start and consequently adjusted their teaching practice. [Figure 3](#) illustrates the two routes suggested by our data in the context of this institution-wide pedagogic shift.

The epistemic route focuses on the value of ABL as an approach to learning and teaching. The pragmatic route emphasises the benefits for tutors' own practice and students' experiences. In the next step, tutors consider the feasibility of the change by identifying available resources. The availability of resources is key to promoting innovation in practice such as integrating blended learning (Partridge, Ponting, and McCay 2011). The epistemic route concentrates on institutional support and academic development opportunities. The pragmatic route focuses on resources such as the quality of the infrastructure, for example the Wi-Fi (Roblin et al. 2018). The outcomes step considers the potential impact of the proposed change. If those involved in the change process hold

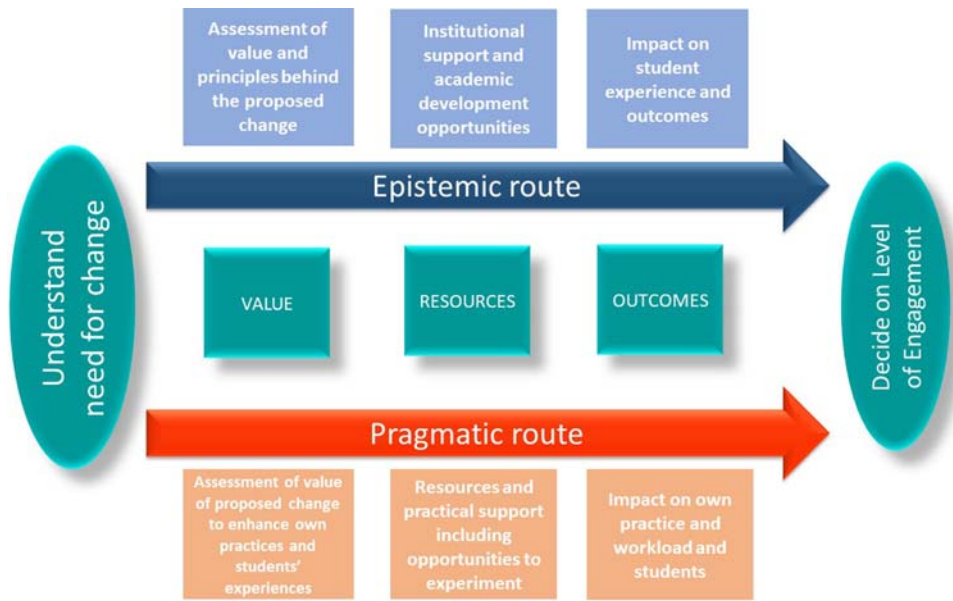


Figure 3. Tutors' decision process for engagement with change.

negative beliefs about its potential impact, effectiveness will be affected (Coccia 2018). The expected impact on student outcomes often determines tutors' willingness to engage with change (e.g. Guskey 1986, 1986, 2002, 2020). Findings corroborate this concern and the potential impact on the student experience. The epistemic route highlights the expectations of impact on the student experience and outcomes, including short term factors, such as attendance levels and long term ones, such as employability skills. The pragmatic route may involve a 'cost-benefit' analysis by tutors, which considers the expected potential impact of change on their own practice and on student outcomes (Figure 4). Engagement with change will grow if the benefits outweigh the cost and concerns associated with previous or alternative practices (Yardley et al. 2016). The data suggests that tutors in this study thought carefully about the benefit of shifting to ABL, particularly in relation to their prior practice. Following this reflective process, tutors reached decisions on their level of engagement with the proposed change.

This article suggests that both the epistemic and pragmatic routes may be adopted and promoted at an institutional level. At the institution where this study was conducted, pedagogic transformation was promoted primarily through the pragmatic route, with a focus on change to teaching practices.

Practical-evaluative dimension (present)

When involved in a pedagogical shift such as the university-wide implementation of ABL, staff may reflect upon the institutional principles for change and develop positive or negative beliefs about them. Some of the participants perceive the institutional culture as promoting innovation. For others, particularly Karen, it is mostly felt as a restrictive environment where ABL was an imposition.

Staff expectations of impact of the shift on student outcomes			
		Negative	Positive
Staff expectations of impact of the shift on own practice	Positive	Only staff focused on own development will engage despite potential negative impact on student outcomes	In-depth engagement
	Negative	Surface engagement (if required by the institution) or non-engagement	Staff focused on student outcomes will engage despite possible negative impact on own practice

Figure 4. Staff engagement with change based on expectations of impact.

A key issue was institutional communication: messages about ABL were conveyed in a top-down manner and were understood very differently by tutors. While ABL as a term is well embedded in organisational culture, its understanding seems dominated by the blended element. This emphasis reinforces misunderstandings such as the fear of a possible institutional move to fully online learning and the worry about a reduction in student contact time. Beliefs about students' capabilities and skills can be significant factors for tutors to feel whether engaging in change is worthwhile. The implementation of ABL can also be hindered by what tutors' perceive as students' poor digital skills (Faye, Sarah and Marianne) or their p for face-to-face teaching only (Sarah and Marianne). An inclination for passive learning and a dislike for challenging academic work (Giles) are also seen as possible factors, as is the lack of time to fully engage in ABL work (Susannah, Caroline and Marianne). Students' limited understanding of ABL was also mentioned as a barrier (Faye, Caroline and Sarah).

On the basis of beliefs and practices in relation to ABL, staff display four main approaches to pedagogic change (Figure 5).

Active innovators are tutors who are open to discussions about the principles behind a change process and can develop positive beliefs and practices. They tend to engage in professional development and adjust to change with ease. This category is consistent with the views presented by Miles, Helen, Susannah, Caroline and Marianne. These tutors recognise the value of ABL as an approach and deploy practices that are consistent with its principles.

Other tutors may take time to translate beliefs into practices. These *lagging innovators* have the potential to engage with change, are willing to embrace new perspectives on their practice but may require more time to adjust. Annabelle, Faye and Sarah are in this category. The first two, although mostly positive about ABL, report practices that are not always consistent with the approach.

Others will engage in change to comply with requirements, but may not embrace the rationale for the change. These *Sceptical but obliging* individuals will partly change their practices to meet the minimum requirements. That is the limit of their engagement. From the data presented in this article, only Karen fits into this category. Her vision

		Consistency of practice with the principles of ABL	
		<i>Inconsistent</i>	<i>Consistent</i>
Beliefs on ABL as a pedagogic approach	<i>Effective</i>	Lagging Innovators	Active Innovators
	<i>Ineffective</i>	Sceptical and resistant	Sceptical but obliging

Figure 5. Approaches to pedagogic change based on staff beliefs and practices.

of ABL is influenced mostly by the process through which ABL was implemented and communicated to staff.

The final category, *Sceptical and resistant*, includes tutors who feel that the rationale for change is inconsistent with their own views. They maintain practices that are not aligned to those promoted by the institution, but are consistent with their own beliefs. They seem unwilling to change at all. Giles is the prime example of this category.

Conclusion

Findings indicate that teaching practices are heterogenous and their level of consistency with the principles of ABL is variable. Key aspects that tutors feel make their practice more effective are also varied. For example, not all tutors feel that the integration of technology in learning and teaching benefits practice. All tutors, however, stress the importance of the relationship with the students to promote positive outcomes.

Beliefs on ABL are also diverse. Most participants suggest that ABL has the potential to be effective and promotes a student-centred approach to learning and teaching experiences. Others feel less positively about it and either adopt a ‘wait and see’ position or reject the approach altogether.

Change can be promoted at an institutional level and embedded through two main routes: (1) the pragmatic route, which enables and encourages change in practice, for example through the provision of a wide range of professional development opportunities; and (2) the epistemic route, which stimulates and supports change in beliefs, for example through embedding the principles and rationale for change in the organisational language and culture. Either route can be effective in promoting staff engagement with institution-wide change although further research is required to identify the advantages and optimal context for each approach.

This research identified four tutor groups: ‘Active Innovators’ believe in the proposed change and implement it in their practice; ‘Lagging Innovators’ believe in the proposed change but are still adjusting their practice; ‘Sceptical but obliging’ hold negative beliefs about the change but their practices are consistent with what is being proposed; and ‘Sceptical and resistant’, who not only hold negative beliefs about the change, but also actively avoid incorporating it into their practice.

This research informed a new, more accessible definition of ABL than the one used previously (University of Northampton 2017), to ensure it is clearly understood by different target audiences:

Active Blended Learning means our students learn through activities which develop their subject knowledge and confidence in applying professional skills. In Active Blended Learning, students discuss ideas, experiment, work in teams and receive tutor feedback. (University of Northampton 2020)

Limitations

This article provides a static view of a specific period during the change process. To understand the process of change in full, a longitudinal approach needs to be taken in future studies. The study focused on a limited number of participants to allow for a richer and more detailed qualitative analysis. This small sample, however, may not be representative of the entire staff population. Further, only tutors from two of the three faculties in the institution took part in the study. Beliefs and practices identified throughout the study are self-reported by the staff interviewed.

Recommendations

While the current article focuses on a unique institutional context, its findings point to recommendations that may inform other institutions where large-scale change, particularly of a pedagogic nature, may be implemented. Firstly, the need and purpose of the proposed change should be communicated effectively, with discourse adjusted to ensure engagement, understanding and buy-in at all levels.

Change can be initiated by promoting change in beliefs or practices. To promote change by first impacting *beliefs*, organisations may engage in strategies such as consultation, showing organisational openness to questioning and debate.

To promote change by first addressing *practices*, organisations can develop academic professional development opportunities focused on course design and approaches to teaching, encouraging the development of new skills and digital capabilities. Organisations can also encourage practice sharing, including unsuccessful experiments, and peer support. The dissemination and promotion of lessons learned, in conjunction with the provision of time, space and agency to experiment with new approaches, contribute to the generation of staff buy-in and commitment to institutional change.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Virgínia Teixeira Antunes  <http://orcid.org/0000-0002-4413-0574>

Alejandro Armellini  <http://orcid.org/0000-0001-9147-3214>

Robert Howe  <http://orcid.org/0000-0002-1344-5530>

References

- Adams Becker, S., M. Cummins, A. Davis, A. Freeman, C. Hall Giesinger, and V. Ananthanarayanan. 2017. *NMC Horizon Report: 2017 Higher Education Edition*. Austin: The New Media Consortium. <http://cdn.nmc.org/media/2017-nmc-horizon-report-he-EN.pdf>.
- Andrew, L. 2007. "Comparison of Teacher Educators' Instructional Methods with the Constructivist Ideal." *The Teacher Educator* 42 (3): 157–184. doi:10.1080/08878730709555401.
- Biesta, G., M. Priestley, and S. Robinson. 2015. "The Role of Beliefs in Teacher Agency." *Teachers and Teaching* 21 (6): 624–640. doi:10.1080/13540602.2015.1044325.
- Biggs, J. 2014. "Constructive Alignment in University Teaching." *HERDSA Review of Higher Education* 1: 5–22. doi:10.1007/BF00138871.
- Bonwell, C. C., and J. A. Eison. 1991. *Active Learning; Creating Excitement in the Classroom*. ASHE-ERIC Higher Education Report No. 1. Washington, D.C.: The George Washington University, School of Education and Human Development. <https://files.eric.ed.gov/fulltext/ED336049.pdf>.
- Boyle, T., C. Bradley, P. Chalk, R. Jones, and P. Pickard. 2003. "Using Blended Learning to Improve Student Success Rates in Learning to Program." *Journal of Educational Media* 28 (2–3): 165–178. doi:10.1080/1358165032000153160.
- Braun, V., and V. Clarke. 2014. "What Can Thematic Analysis Offer Health and Wellbeing Researchers?" *International Journal of Qualitative Studies on Health and Well-Being* 9: 26152. doi:10.3402/qhw.v9.26152.
- Carlile, O., and A. Jordan. 2005. "It Works in Practice But Will it Work in Theory? The Theoretical Underpinnings of Pedagogy." In *Emerging Issues in the Practice of University Learning and Teaching* (pp. 11–26), edited by S. Moore, G. O'Neill, and B. McMullin. Dublin: AISHE.
- Clegg, S. 2008. "Academic Identities Under Threat?" *British Educational Research Journal* 34 (3): 329–345. doi:10.1080/01411920701532269.
- Coccia, M. 2018. "An Introduction to the Theories of Institutional Change." *Journal of Economics Library* 5 (4): 337–344. doi:10.1453/jel.v5i4.1788.
- Deng, F., C. S. Chai, C.-C. Tsai, and M.-H. Lee. 2014. "The Relationships Among Chinese Practicing Teachers' Epistemic Beliefs, Pedagogical Beliefs and Their Beliefs About the Use of ICT." *Educational Technology and Society* 17 (2): 245–256. <https://www.jstor.org/stable/10.2307/jeductechsoci.17.2.245>.
- Dringus, L. P., and A. B. Seagull. 2015. "A Five-Year Study of Sustaining Blended Learning Initiatives to Enhance Academic Engagement in Computer and Information Sciences Campus Courses." In *Blended Learning: Research Perspectives. Vol. 2*, edited by A. G. Picciano, C. D. Dziuban, and C. R. Graham, 122–140. New York: Routledge.
- Dubois, C. A., K. Bentein, J. B. Mansour, F. Gilbert, and J. L. Bedard. 2014. "Why Some Employees Adopt or Resist Reorganization of Work Practices in Health Care: Associations Between Perceived Loss of Resources, Burnout, and Attitudes to Change." *International Journal of Environmental Research and Public Health* 11 (1): 187–201. doi:10.3390/ijerph110100187.
- Emirbayer, M., and A. Mische. 1998. "What is Agency?" *American Journal of Sociology* 103 (4): 962–1023. doi:10.1086/231294.
- Entwistle, N. J. 2009. *Teaching for Understanding at University: Deep Approaches and Distinctive Ways of Thinking*. Basingstoke: Palgrave Macmillan.
- Ertmer, Peggy A. 2005. "Teacher pedagogical beliefs: The final frontier in our quest for technology integration?" *Educational Technology Research and Development* 53 (4): 25–39. doi:10.1007/BF02504683.
- Ertmer, P. A., and A. T. Ottenbreit-Leftwich. 2010. "Teacher Technology Change: How Knowledge, Beliefs, and Culture Intersect." *Journal of Research on Technology in Education* 42: 255–284. doi:10.1080/15391523.2010.10782551.
- Fives, H., and M. G. Gill. 2015. *International Handbook of Research on Teachers' Beliefs*. New York: Routledge, Taylor and Francis.

- Garrison, D. R., and H. Kanuka. 2004. "Blended Learning: Uncovering its Transformative Potential in Higher Education." *Internet and Higher Education* 7: 95–105. doi:10.1016/j.iheduc.2004.02.001.
- Garrison, D. R., and N. Vaughan. 2008. *Blended Learning in Higher Education: Framework, Principles, and Guidelines*. San Francisco: Jossey-Bass.
- Guskey, T. R. 1986. "Staff Development and the Process of Teacher Change." *Educational Researcher* 15: 5–12. doi:10.3102/0013189X0150050054.
- Guskey, T. R. 2002. "Professional Development and Teacher Change." *Teachers and Teaching* 8: 381–391. doi:10.1080/135406002100000512.
- Guskey, T. R. 2020. "Flip the Script on Change: Experience Shapes Teachers' Attitudes and Beliefs." *The Learning Professional* 41 (2): 18–22. <https://learningforward.org/wp-content/uploads/2020/04/flip-the-script-on-change.pdf>.
- Hake, R. R. 1998. "Interactive-Engagement Versus Traditional Methods: A Six-Thousand-Student Survey of Mechanics Test Data for Introductory Physics Courses." *American Journal of Physics* 66: 64–74. doi:10.1119/1.18809.
- Halverson, L. R., C. R. Graham, K. J. Spring, J. S. Drysdale, and C. R. Henrie. 2014. "A Thematic Analysis of the Most Highly Cited Scholarship in the First Decade of Blended Learning Research." *The Internet and Higher Education* 20: 20–34. doi:10.1016/j.iheduc.2013.09.004.
- Hanson, J. 2009. "Displaced But Not Replaced: The Impact of e-Learning on Academic Identities in Higher Education." *Teaching in Higher Education* 14 (5): 553–564. doi:10.1080/13562510903186774.
- Hermans, R., J. Tondeur, J. van Braak, and M. Valcke. 2008. "The Impact of Primary School Teachers' Educational Beliefs on the Classroom Use of Computers." *Computers and Education* 51: 1499–1509. doi:10.1016/j.compedu.2008.02.001.
- Johnson, T., M. A. Wisniewski, G. Kuhlemeyer, G. Isaacs, and J. Krzykowski. 2012. "Technology Adoption in Higher Education: Overcoming Anxiety Through Faculty Bootcamp." *Journal of Asynchronous Learning Networks* 16 (2): 63–72. doi:10.24059/olj.v16i2.240.
- Judson, E. 2006. "How Teachers Integrate Technology and Their Beliefs About Learning: is There a Connection?" *Journal of Technology and Teacher Education* 14: 581–597. <https://www.learntechlib.org/primary/p/6046/>.
- Kaleta, R., K. Skibba, and T. Joosten. 2007. "Discovering, Designing and Delivering Hybrid Courses." In *Blended Learning: Research Perspectives*, edited by A. Picciano, and C. Dziuban, 111–143. Needham: Sloan Center for Online Education (SCOLE).
- Karagiannopoulou, E., and N. J. Entwistle. 2013. "Influences on Personal Understanding: Intentions, Approaches to Learning, Perceptions of Assessment, and a 'Meeting of Minds'." *Psychology Teaching Review* 19 (2): 80–96. doi:10.3389/fpsyg.2019.00444.
- Karagiannopoulou, E., and F. Milienos. 2015. "Testing Two Path Models to Explore Relations Between Experiences of the Teaching-Learning Environment, Approaches to Learning and Academic Achievement." *Educational Psychology* 35: 26–52. doi:10.1080/01443410.2014.895800.
- Keys, P. 2007. "A Knowledge Filter Model for Observing and Facilitating Change in Teachers' Beliefs." *Journal of Educational Change* 8 (1): 41–60. doi:10.1007/s10833-006-9007-5.
- Lewin, K. 1947. "Frontiers in Group Dynamics." *Human Relations* 1: 5–41. doi:10.1177/001872674700100103.
- Lomer, S., and E. Palmer. *Forthcoming*. "It is a Lazy Way of Teaching: Overcoming Student Opposition to Active Blended Learning". Manuscript submitted for publication.
- López-Pérez, M. V., M. C. Pérez-López, and L. Rodríguez-Ariza. 2011. "Blended Learning in Higher Education: Students' Perceptions and Their Relation to Outcomes." *Computers and Education* 56 (3): 818–826. doi:10.1016/j.compedu.2010.10.023.
- Maguire, M., and B. Delahunt. 2017. "Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars." *AISHE-J* 8 (3): 3351–33514. <https://ojs.aishe.org/index.php/aishe-j/article/view/335>.

- Mama, M., and S. Hennessy. 2013. "Developing a Typology of Teacher Beliefs and Practices Concerning Classroom use of ICT." *Computers and Education* 68: 380–387. doi:10.1016/j.compedu.2013.05.022.
- Martin, B. 2018. "Faculty Technology Beliefs and Practices in Teacher Preparation Through a TPaCK Lens." *Education and Information Technologies* 23: 1775–1788. doi:10.1007/s10639-017-9680-4.
- Marton, F., and R. Saljo. 1976. "On Qualitative Differences in Learning II: Outcome as a Function of the Learner's Conception of the Task." *British Journal of Educational Psychology* 46: 115–127. doi:10.1111/j.2044-8279.1976.tb02304.x.
- Masika, R., and J. Jones. 2016. "Building Student Belonging and Engagement: Insights Into Higher Education Students' Experiences of Participating and Learning Together." *Teaching in Higher Education* 21 (2): 138–150. doi:10.1080/13562517.2015.1122585.
- Mikalayeva, L. 2016. "Motivation, Ownership, and the Role of the Instructor in Active Learning." *International Studies Perspectives* 17 (2): 214–229. doi:10.1093/isp/ekv001.
- Ornellas, O., K. Falkner, and E. Stalbrandt. 2019. "Enhancing Graduates' Employability Skills Through Authentic Learning Approaches." *Higher Education, Skills and Work-Based Learning* 9 (1): 107–120. doi:10.1108/heswbl-04-2018-0049.
- Overbay, A., A. Patterson, E. Vasu, and L. Grable. 2010. "Constructivism and Technology Use: Findings from the Impacting Leadership Project." *Educational Media International* 47 (2): 103–120. doi:10.1080/09523987.2010.492675.
- Palmer, E., S. Lomer, and I. Bashlyiska. 2017. *Overcoming Barriers to Student Engagement with Active Blended Learning*. Interim Report. University of Northampton. www.northampton.ac.uk/ilt/wp-content/uploads/sites/2/2017/10/Student-Engagement-with-ABL-Interim-Report-v3-October-2017.pdf.
- Partridge, H., D. Ponting, and M. McCay. 2011. *Good Practice Report: Blended Learning*. Australian Learning and Teaching Council. <http://eprints.qut.edu.au/47566/1/47566.pdf>.
- Potter, J. 2015. "Applying a Hybrid Model: Can it Enhance Student Learning Outcomes?" *Journal of Instructional Pedagogies* 17: 1–11.
- Prestridge, S. 2012. "The Beliefs Behind the Teacher That Influences Their ICT Practices." *Computers and Education* 58: 449–458. doi:10.1016/j.compedu.2011.08.028.
- Prince, M. 2004. "Does Active Learning Work? A Review of the Research." *Journal of Engineering Education* 93 (3): 223–231. doi:10.1002/j.2168-9830.2004.tb00809.x.
- Reynard, R. 2007. *Hybrid Learning: Maximizing Student Engagement*. Campus Technology. <https://campustechnology.com/articles/2007/05/hybrid-learning-maximizing-student-engagement.aspx>.
- Richardson, V. 2003. "Pre-Service Teachers' Beliefs." In *Teacher Beliefs and Classroom Performance: The Impact of Teacher Education* (pp. 1-22), edited by J. Rath and A. McAninch. Greenwich: Information Age Publishing.
- Roblin, N. P., J. Tondeur, J. Voogt, B. Bruggeman, G. Mathieu, and J. van Braak. 2018. "Practical Considerations Informing Teachers' Technology Integration Decisions: The Case of Tablet PCs." *Technology, Pedagogy and Education* 27 (2): 165–181. doi:10.1080/1475939X.2017.1414714.
- Roehrig, G. H., R. A. Kruse, and A. Kern. 2007. "Teacher and School Characteristics and Their Influence on Curriculum Implementation." *Journal of Research in Science Teaching* 44: 883–907.
- Scherer, R., and F. Siddiq. 2015. "Revisiting Teachers' Computer Self-Efficacy: A Differentiated View on Gender Differences." *Computers in Human Behavior* 53: 48–57. doi:10.1016/j.chb.2015.06.038.
- Schmidt, H. G., J. Cohen-Schotanus, H. T. Van der Molen, T. A. W. Splinter, J. Bulte, R. Holdrinet, and H. J. M. van Rossum. 2010. "Learning More by Being Taught Less: A 'Time-for-Self-Study' Theory Explaining Curricular Effects on Graduation Rate and Study Duration." *Higher Education* 60 (3): 287–300. doi:10.1007/s10734-009-9300-3.
- Schmidt, H. G., S. L. Wagener, G. A. Smeets, L. M. Keemink, and H. T. van der Molen. 2015. "On the Use and Misuse of Lectures in Higher Education." *Health Professions Education* 1 (1): 12–18. doi:10.1016/j.hpe.2015.11.010.

- Shin, H., S. Sok, K. S. Hyun, and M. J. Kim. 2014. "Competency and an Active Learning Program in Undergraduate Nursing Education." *Journal of Advanced Nursing* 71 (3): 591–598. doi:10.1111/jan.12564.
- Teixeira Antunes, V., A. Armellini, and R. Howe. **Forthcoming**. "Academic Staff Perspectives on an Institution-Wide Shift to Active Blended Learning". Manuscript submitted for publication.
- Teo, T., F. Huang, and C. K. W. Hoi. 2017. "Explicating the Influences That Explain Intention to Use Technology Among English Teachers in China." *Interactive Learning Environments* 4820: 1–16. doi:10.1080/10494820.2017.1341940.
- Thomas, L. 2012. *Building Student Engagement and Belonging in Higher Education at a Time of Change: Final Report from the What Works? Student Retention and Success Programme*. London: Paul Hamlyn Foundation, Higher Education Funding Council for England, The Higher Education Academy and Action on Access. https://www.heacademy.ac.uk/sites/default/files/resources/What_works_final_report.pdf.
- Tondeur, J., J. van Braak, P. A. Ertmer, and A. Ottenbreit-Leftwich. 2016. "Understanding the Relationship Between Teachers' Pedagogical Beliefs and Technology use in Education: A Systematic Review of Qualitative Evidence." *Educational Technology Research and Development* 65 (3): 555–575. doi:10.1007/s11423-016-9481-2.
- University of Northampton – Institute of Learning and Teaching in Higher Education. 2017. "Defining Active Blended Learning." www.northampton.ac.uk/ilt/current-projects/defining-abl/.
- University of Northampton – Institute of Learning and Teaching in Higher Education. 2020. "Defining Active Blended Learning." www.northampton.ac.uk/ilt/current-projects/defining-abl/.
- White, K., T. Carvalho, and S. Riordan. 2011. "Gender, Power and Managerialism in Universities." *Journal of Higher Education Policy and Management* 33 (2): 179–188. doi:10.1080/1360080X.2011.559631.
- Yardley, L., B. J. Spring, H. Riper, and L. G. Morrison. 2016. "Understanding and Promoting Effective Engagement With Digital Behavior Change Interventions." *American Journal of Preventive Medicine* 51 (5): 833–842. doi:10.1016/j.amepre.2016.06.015.
- Zepke, N., and L. Leach. 2010. "Improving Student Engagement: Ten Proposals for Action." *Active Learning in Higher Education* 11 (3): 167–177. doi:10.1177/1469787410379680.
- Zukas, M., and J. Malcolm. 2019. "Reassembling Academic Work." *Studies in Continuing Education* 41 (3): 259–276. doi:10.1080/0158037X.2018.1482861.