

THEME 2: BUILDING FRAMEWORKS IN DISTANCE EDUCATION RESEARCH

The contributions in this section provide a rich variety of perspectives on frameworks in distance education research. The research-practice gap in distance education is elucidated, while student support services is contextualised, and practice through practitioner enquiry is considered.

Chapter 5:

Building Theory into Practice

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Introduction

The idea of open flexible learning, which may take the form of distance education, is not a new phenomenon. Anderson and Simpson (2012) cite the examples of preachers and Greeks who practised it before the advent of the printing press and gave rise to distance delivery. Distance education by its very nature can offer everyone, irrespective of their background, demography, and gender, to mention but a few, an equal opportunity to education depending on how openly it is applied.

According to Cleveland-Innes and Garrison (2010: 13), 'the history of distance education has seen a preoccupation with geographical constraints along with technologies to neutralise distance and increase access'. From its print-based, correspondence beginnings to radio and television, the telelearning model that makes synchronous learning possible, and further generations that have emerged from new technologies, the mode has indeed come quite a long way (Moore and Kearsley 1996; Taylor 2001; Anderson and Simpson 2012; Abdrahim 2018). The term *generations* brings to the fore the changing landscape of technologies employed in distance education provision. Although being previously taken on reluctantly in some instances, the recent COVID-19 pandemic with its negative impact on education worldwide, which Pregowska et al. (2021) describe as 'brutal', has generated more interest in the field. In addition, 'the field of distance education has been a significant change agent in the digital transformation of higher education' (Bozkurt and Zawacki-Richter 2021: 19) and will be playing a big role in the education for all agenda (Zawacki-Richter and Naidu 2016). There is ample evidence that if well-designed and well-taught, distance education works well (Simonson 2019).

According to Anderson and Simpson (2012, 2019), the field of distance education has a rich heritage of scholarly work that serves as a foundation for new developments in the field, although the research on teaching and learning at a distance is not necessarily always significantly different from

other educational fields. As the mode's history moves through diverse generational frameworks, a term first mooted by Nipper (1989), research into the mode has gathered momentum. Anderson and Simpson (2012) assert that sound scholarship serves as a basis for 'sensible and defensible decisions' and the promotion of further work from young scholars, who need to be encouraged. Literature shows research has the potential to improve policy and practice, if rightly applied (Comber et al. 2018; Datnow et al. 2002; Higgins et al. 2022). It also shows that research into practice can be used to generate new or improved theory (Eden and Ackerman 2018; Hofmann 2020). As well, seasoned practitioners in the field have challenged upcoming scholars to articulate and question their own underpinning assumptions and build on them as they impact the future of the field (Anderson and Simpson 2012). However, despite the growth in the area of research, our concern as the authors of this chapter is the extent to which practitioners in the field apply research findings to their practice and conversely the extent to which they research their practice to generate new or improved theory. To maximise the potential of distance education, it is not only important for institutions to do the right things, but they also need to begin to do things differently (Dolence and Norris 1995).

In this chapter, the authors take a look at the field of research in distance education, the impact of research on practice over the years, and proffer suggestions on how practitioners in the field can improve on using research to improve practice and build practice into theory. To probe this phenomenon, we have borrowed from Gibson's affordance theory which states that the form of the objects surrounding us shape the perception of what it is possible to do with them (Gibson 1979).

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The research journey of distance education

In the last decade, distance education has brought a massive change to the field of teaching and learning (Simonson 2012), the literature of the field has matured, and the related research has improved. Historically, distance education-focused research began during the first generation when there were no journals dedicated to the mode (Anderson and Simpson 2012). According to Srivastava et al. (2020: 264), the *Distance Education* journal published by the Open and Distance Learning Association of Australia (ODLAA) was the first to publish '...research specifically in the field of distance education'. With many current dedicated journals (Mays n.d.), research in the field has grown by leaps and bounds. It is gratifying that quite a number of journals are now linked to the mode with practitioners being given an opportunity to share their experience of the field (Anderson and Simpson 2012). Nonetheless, there remains a dearth of dedicated distance education journals

in some contexts, for instance in India (Srivastava et al. 2020).

Referring to the earlier comments of James Finn (1953), Campbell and Stanley (1963), and Richard Clark (1983, 2012)—previous education leaders—Simonson (2019: 32) asserts: ‘Each of these scholars had a message of critical importance to distance education—scientific inquiry, conducted with rigorous attention to correct procedures, is the key to success of our field. Research and theory are at the foundation of credibility and quality.’ Srivastava et al. (2020) also echoed the same sentiment emphasising that for any system to flourish and retain reviewing and maintaining its quality and standard is key. Equally important is ‘to ensure the efficacy and effectiveness of the system’ (Srivastava et al. 2020: 264). In addition, Bozkurt and Zawacki-Richter (2021) assert that scholarship is needed to predict the future, especially given the unabated changes taking place in the landscape.

Holmberg (1987, cited in Simonson 2019: 32), earlier identified the following as the structure for distance education research:

- philosophy and theory of distance education
- distance students and their milieu, conditions, and study motivations
- subject matter presentation
- communication and interaction between students and their supporting organisation (tutors, counsellors, administrators, other students)
- administration and organisation
- economics, systems (comparative distance education, typologies, evaluation, etc.)
- history of distance education

Other scholars (Berge and Mrozowski 2001; Lee et al. 2004; Zawacki-Richter 2009; Bozkurt et al. 2015) have also identified a similar structure albeit with some differences in these categories, since the distance education field keeps changing, especially with newer technologies springing up. According to Bozkurt and Zawacki-Richter (2021: 19), the mode mirrors and takes on the socio-cultural, demographic, political, and technological domain changes taking place in its environment. Therefore, the authors identified three main threads of distance education research, which are: ‘(a) issues related to open education; (b) the design, support, and quality assurance of online DE; and (c) the implementation and use of educational technology, media, and digital tools’ (Bozkurt and Zawacki-Richter 2021: 19). Gone were the days when distance education research was criticised for its lack of rigour and mostly descriptive nature (Perraton 2000). Nonetheless, scholars have drawn

attention to the need to broaden the scope of its research to cover school learners, especially with the advent of COVID-19 that has changed the general landscape of education, psychological and social characteristics of the learner, the implications of the mode for institutions, and the role of different media on learning outcomes (Simonson 2019; Bozkurt and Zawacki-Richter 2021).

Our concern

Although the field of distance education research has grown over the years, the challenges remain the low proportion of research focused on the mode (in many contexts in relation to the populace it serves), lack of strong institutional policy on research, lack of collaboration among institutions, and a low number of publications. Srivastava et al. (2020) cited the example of India in this instance. Above all, the authors emphasise the often-missing link between research outcomes and practice in its totality, which 'needs to be systematic, professional and action based' (Srivastava et al. 2020: 281).

84 Bozkurt and Zawacki-Richter (2021) are examples of the scholars who have called for role definition, envisioning the future, and the preparation of a research agenda for the future. We, the authors of this chapter, assert that one of the major tasks ahead of distance education practitioners is to start working towards how research can begin to impact both our practice and our theoretical understandings even more than before. This is our focus in this chapter.

The research-practice gap

The research-practice gap, also known as the theory-practice gap, is nothing new because it has pervaded literature for years (Bansal et al. 2012). Although it is gladdening that research in the field of distance education has grown and is still growing with a brighter future, research without action does not impact practice (Boser and McDaniels 2018). Hutchings (1990: 1) also echoed the same sentiment decades earlier when he asserted that 'what's at stake is the capacity to perform, to put what one knows into practice'. Anderson and Simpson (2012) lament the lack of real dedication to act on research findings that will improve the quality of teaching and better student experience. Although rigour that leads to excellence in research is good, Ortega (2005, cited in Mehrani 2014) posits that the benefit of research should not only be based on this; it is in the long run its

prospective value to resolving social and educational problems that should be of importance. Therefore, practitioners in the field need to adopt the evidence-based practice approach, which connects research and practice and leads to better decision making with improved practice (Brown, Schildkamp, and Hubers 2017; Diery et al 2020).

According to Diery et al. (2020), there is a need for more research on finding out to what extent practitioners engage with empirical evidence, the extent to which they apply such evidence to practice, what their perceptions are on this important issue, and what the personal factors influencing their perceptions are. The paucity according to the authors also includes the tangible advantages of evidence-based practice in teaching.

Nonetheless, despite its benefits, the scholars, citing several authors, cautioned that evidence-based research practice is not devoid of its own challenges. Among these, according to the authors, are mixed-methods research approaches that sometimes make it difficult to determine the most pertinent evidence and the inability to provide empirical evidence for every single decision in teaching contexts. Therefore, evidence from research should be used as a guide, not as an inhibitor to the instant decision-making needed so often in teaching-learning practice. Research can, however, be useful to guide reflection that improves future practice. Other key things to consider according to the authors are what makes up evidence, how and when evidence should be used, and the relationship between the evidence and individual proficiency (Diery et al. 2020).

What are the challenges?

Despite its value, some of the reasons for inaction among practitioners include the instinctive resistance to change, lack of funding, poor or non-existent reward systems for evidence-based research, a disconnect between research and practice, and because there is no direct path from evidence to making decisions (Boser and McDaniels 2018). Other challenges are a lack of skills to acquire and apply knowledge from practice (Wrenn and Wrenn 2009); poor time management, absence of institutional support/incentive, lack of time, and heavy workloads (Allison and Carey 2007, cited in Mehrani 2014); and sometimes the lack of a clear link between curriculum content and workplace need (Schultz and Hatch 2005). In addition, Shaharabani and Yarden (2019) identified the persistent use of traditional transmission methods of teaching at higher education institutions, despite research evidence for the constructivist approach. Karaman and Kurşun (2014: 353–354) also identified 'organisational and structural constraints, challenges in conducting experimental

studies because of the nature of distance education students that allows them to study at their own pace; challenges in valid and reliable data collection; heterogeneous sampling; various dependency of distance education (e.g. a platform); lack of consistent terminology; and lack of theoretical framework’.

Affordances theory in the space of the theory-practice gap in distance education and implications for practice

Affordances theory emanated from James Gibson in the 1970s (Gibson 1977). He states that, ‘The affordances of the environment are what it offers the animal, what it provides or furnishes... It implies the complementarity of the animal and the environment’ (Gibson 1979: 127). According to Sarkis (2021), the theory has its roots ‘in cognitive psychology and philosophy as part of perception theory and valences’. Although the theory is very popular in relation to the use of technology and its design, in this chapter the authors focus on the complementarity between an affordance (in this case, what practitioners could do with their research) and researchers (who are the producers of research).

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Although Norman, who later expanded on the term, focuses on the perception of the animal with the potential of leading to action (Norman 1999; McGrenere and Ho 2000; Blewett and Hugo 2016), one could regard both as complementary because the animal can only act on what it perceives (as useful to it) in its environment. Hutchby (2000: 444) indicates that ‘affordances are functional and relational aspects, which frame, while not determining, the possibilities for agentic action in relation to an object’. Consequently, ‘affordances neither belong to the environment nor the individual, but rather to the relationship between individuals and their perceptions of environments’ (Parchoma 2014: 361). Based on these assertions, Evans et al. (2017: 39) strongly aver that an ‘affordance is neither the object nor a feature of the object’—while it only invites behaviours (with a range of variability), it is not the outcome itself.

Sarkis (2021) also uses the same idea while referring to management—he indicates that research studies, findings, and outputs are entities that afford scientific interrogation and innovation that should lead to managers doing their jobs better. The latter part speaks to the application of knowledge. Therefore, the author asserts that inquirers ‘as entities could see research as an object of scientific investigation’ (Sarkis 2021: 6) and it is hoped that new knowledge will range from managers’ experience from practice to proof-based research for application. Although the

practical use to which a researcher puts a research finding differs from individual to individual as indicated by Evans et al. (2017), one still expects researchers to appropriate their findings to their practice, which the authors assert will depend on the 'attributes and abilities of users' (Evans et al. 2017: 36), among other factors.

According to Young and Cleveland (2022), people's abilities to sense and subsequently use affordances are believed to relate to both their physical and mental capacities. However, authors suggest there is a strong link between intention and perception for action to take place (Heft 1989; Young and Cleveland 2022). Heft (1989: 12) defines intention as 'possibilities that are only instantiated in a particular form in interaction with situational factors'. According to Heft (1989: 10), 'which particular affordances are utilised in a given environmental setting will depend on intentional processes of the perceiver'. Hence, Pozzi, Pigni, and Vitari (2014: 6) differentiated between 'affordance perception', 'affordance actualisation', and 'affordance effect', which invariably implies that practitioners can only see the effect of actualised affordance. There should be a deliberate 'search for the affordances of the environment' and an 'active behaviour' 'controlled by perceiving those affordances' (Gibson, 1974: 387-388). Institutions and individual practitioners thus need to be purposeful in their intention and perception.

Further describing 'the causal relations between affordance and the perceiver', Heft (1989: 10) indicates that these are 'ontinuous, reciprocal, and cumulative... in order to provide an historical basis for subsequent perceptual development and environmental discovery'. This leads to quality which is built over time as an individual continuously engages with his environment. According to Dewey (1896, cited in Heft 1989: 15), 'the perceived meaning of an environmental object emerges from a continuous, transactional interchange between the individual and the environment'. It is well-understood in the field of distance education that institutions need to pay attention to the quality of their programmes (Aluko 2021). Anderson and Simpson (2012) argue that although enthusiasm is key to enhance the field of distance education, without understanding this will lead to things not being done particularly well, which is the essence of professional development. In addition to this is the fact that training is needed to awaken the perception of latent affordances (Gibson 1969).

The implication of this for bridging the gap between research and practice is that distance education researchers would need to first perceive what value their research findings could add to their practice in order to intentionally act on them.

However, scholars such as Rietveld and Kiverstein (2014) added that individuals' abilities might be relative to received tutoring and sociocultural practices experience. This brings to the fore

the necessity of training programmes being offered by distance education institutions for their staff members if they would like to see the gap between research and practice being bridged. Professional development of staff will hone their skills to maximise the affordances in their vicinity (Young and Cleveland 2022). According to the authors, this will eventually lead to staff's communal ability, thus becoming a 'form of life', which is the 'norm of practice' (Rietveld and Kiverstein 2014: 340). Thus, this becomes an institutional culture because 'much of the functional meaning in our perceptual experience is... culturally-derived' (Heft 1989: 17). New staff members joining the institution will also imbibe this culture. In these ways it becomes possible to build a 'wisdom community' (Gunawardena 2020) which draws on the rich diversity of staff and other stakeholders to build shared understandings. Institutions need to create the ambience for bridging the gap between research and practice to aid understanding because the institution's inaction can make an affordance perceptible by staff hidden (Young and Cleveland 2022). In addition, Gaver (1991, cited in Zhao et al. 2020) indicates that affordances are sometimes opaque and are sometimes not sensed correctly by users. Practitioners need to be taught how to find 'a balance between the level of generality to enable theoretical linkage, and the level of specificity to make theory useful' (Laksov 2019: 373). Argyris (2003) and Hoffman (2004, cited in Schultz and Hatch 2005: 337) earlier lamented that, unfortunately 'existing institutional systems and professional expectations often generate more restrictions than incentives to create... relevant or actionable knowledge'.

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Lastly, factors that are connected to the institutional context include the need to reduce the workload of staff members and to introduce a reward system that links research with practice. Borrowing a leaf from Diery et al. (2020), we advocate that institutions should encourage researchers to use their research findings because it is a way for them to become role models in the field and underwrite the growth and spread of research-based knowledge, thus bridging the gap between the two. Also to be considered is what research to undertake and when and how to close the feedback loop to improve on practice.

Given that the development of a new distance education programme, its content, and its support and assessment strategy are all very time-consuming, it seems appropriate to begin by undertaking some research into the needs of learners and employers, what already exists, and the profile of the learners (increasingly addressing their technology profile and their readiness for more independent learning) (Fidalgo et al. 2020; Hamaluba 2022; McGunagle and Zizka 2020; Seaman et al. 2018).

During the design and development of the curriculum, an action research type engagement in which the various components of the programme including the technologies chosen to mediate the learning are tested, evaluated, and improved could help to ensure the highest possible quality

of what is offered (Anderson and Rivera Vargas 2020; Salmon et al. 2020).

During the implementation of the programme, mechanisms are needed to monitor, evaluate, improve, and make ethical use of the data and learning analytics increasingly available (Mays et al. 2021; Prinsloo 2020).

At the end of a course offering, there is need to evaluate the efficiency and effectiveness of the offering, including getting feedback from the learners themselves and to ensure closure of the feedback loop into improved practice (Allela et al. 2020; First et al. 2017; Harrison 2019; He et al. 2020; Siddiqui 2021). This will logically include some longitudinal studies which follow up on graduates and other stakeholders to see how well they were prepared for the learning, teaching, and work roles they subsequently assumed (Herodotou et al. 2020; Muir et al. 2019).

It is also possible to use the information from several iterations of a course offering or several course offerings offered over a period to develop or improve the theory of practice (Bozkurt 2019; Mitra 2020; Naidu 2022). This may now also involve distance education providers needing to reinvent themselves, again (Teixeira et al. 2019).

Conclusion

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In this chapter, the authors have briefly traced the history of distance education and its research, focused on our concern: the research-practice gap in the field and what the challenges are. We have also used affordances theory to tease out some of the implications of this concern for practice. The use of the theory affords us the opportunity to shift attention to human activities that could inhibit or encourage bridging the gap between research and practice. Anderson and Simpson (2012) have requested young practitioners in the field to carve out their own heritage in order to add their voice and value to the field. As practitioners we opt to stress the importance of bridging the gap between research and practice in the field, which we believe will add value to much research going on in the field with the potential of expanding due to distance education becoming a 'go-to-mode'. Anderson and Simpson (2012) earlier rightly stressed that in the end 'it is the combination of the human, the technological and the organisational that works. The mix, and attention to balance of those three elements, must remain at the forefront of our vision' (section 4.6) as distance education practitioners.

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