Online learning as a form of distance education: Linking formation learning in theology to the theories of distance education

Distance education (DE) has a long and complex history. It accounts for more than one-third of all higher education students in the world and, because of its very nature, has produced some of the top graduates worldwide who were unable to study fulltime and on-campus for various reasons. One of the most prestigious graduates of the DE system was the former state president of South Africa, the late Nelson Mandela. Online learning is a form of DE and fast becoming the preferred method of instruction and delivery. Critiques of online learning, and of DE itself, will argue that, because of the separation of the teacher and the student, only academic skills can be taught and learnt using this medium. The so-called ‘softer skills’ – those that focus on the development of the person – are best taught in a face-to-face, traditional environment. This article focuses on a review of DE theories and models. A particular emphasis is placed on online learning theories, and how the teaching of formational learning skills can be successfully incorporated into this educational setting. The article draws from a range of studies that have been conducted, based on conceptual and empirical research evidence from various authors. Drawing from Garrison, Anderson and Archer’s Community of Inquiry framework for online education, it presents key elements that relate to the formational (spiritual) training of theology students. The article examines research that both supports and cautions against online learning for formative development. It concludes by suggesting a blended model of both face-to-face and online learning, where meaningful interactions between the learner and teacher take place, is desirable. The article highlights the important role that DE (and specifically online education) can play in developing the human component of education.

Keywords: Distance education; Online learning; Formation; Theological education; Community of inquiry.

Introduction

The theme of this special edition of HTS centres on the Online Educated Human (OEH), and poses the question whether the use of online technology can be used to either teach or supplement basic content delivery.

Many studies have been conducted showing the importance and success of teaching the hard science subjects, such as physics, mathematics and other content-heavy courses, in an online environment. One only has to look at the proliferation of massive open online courses (MOOCs) that are available, and even with their low throughput rate, it still educates more learners than face-to-face teaching. We need, however, to distinguish between online courses that are machine taught – in other words, there is no teaching presence at all and those where the teacher does indeed mediate and communicate directly with the learners. Very few studies have focused on the teaching of the humanities subjects, particularly ethics, morality and spirituality.

Hoffman (2010) asserts that the humanities will indeed be affected by the migration of courses from a face-to-face lecture hall to an online environment. This will include the field of theology and, in particular, the training of clergy and lay people in the church.

Writing in The Conversation, Byrne (2012) challenges that MOOCs should be able to provide easy assessment practices for subjects where there is a simple right or wrong answer. The challenge will come from subjects such as philosophy, the social sciences and politics, to name but a few.
According to Holmberg (1974), there are two basic elements essential in defining DE. Firstly, he describes the separation of the teacher and the learner, which is fundamental to all forms of DE, whether it is online, print-based or even media-based. He further asserts the importance of the structuring of the learning material in a way suited to the separation of the teacher and the student, and highlights the fact that DE is offered through an accredited institution and not through self-study or other means.

Holmberg (1995:47) placed the learner in the centre of the education process when he stated, ‘A basic general assumption is that real learning is primarily an individual activity and is attained only through an internalizing process’. In what is generally referred to as ‘guided didactic conversation’, Holmberg emphasised the importance of the relationship between the teacher and the learner, suggesting that the learner is not solely responsible for his or her learning and that the contribution of the teacher is as important.

Wedemeyer (1981) also emphasised the importance of learner independence in the process and put forward strategies that included anytime and anywhere learning (asynchronous). In addition, Wedemeyer placed emphasis on the fact that learners need to take responsibility for their own learning. This ties in with the various theories of self-directedness. Knowles (1975) stated that self-directed learning takes place where the learners, themselves, take accountability for their own learning process, goal setting and resource management. Mezirow (1985:17) asserts ‘no concept is more central to what adult education is all about then self-directed learning’.

Moore (1973) argued that DE comprises a cluster of various instructional methods, with the emphasis on the fact that teaching normally takes place apart from the actual learning. Teaching would therefore be facilitated by the use of print, electronic or other media, rather than through direct face-to-face contact with the learners. He does not exclude the possibilities of two-way communication, but rather suggests that it might be done in an asynchronous manner. Flink (1978) expounds on this by stating, ‘Distance Education is a learning system where the teaching behaviours are separate from the learning behaviours’.

Following on from Wademeyer’s assertions that the learner is central to the learning process, Moore (1983) introduced the concept of a ‘transactional distance’ that exists in DE. Transactional distance refers not only to the geographical distance between the learners and the teacher, but also includes a communication and psychological gap and provides a platform for misunderstandings between the teacher and the learner. Distance education is therefore the all-encompassing term for the provision of education where there is a geographical and cognitive separation of the learner and teacher.

Figure 2 provides a measurement of the effects of dialogue and structure in the educational process. It illustrates that as one increases, so the other decreases. Therefore, a more

### Terminologies

**Distance education**

As an introduction to this article, the concept of DE is discussed, highlighting the various different terminologies that are banded around. There are many similarities but also subtle differences, and these need to be understood to fully appreciate this field of study. So what exactly is distance learning? In its simplest form, DE refers to teaching and learning that takes places where there is a physical and geographical separation between the teacher and the student in both time and place. Keegan (1996) describes DE as a process whereby the learners are taught and learn while separated from the teacher.

### Methodology

To address the question of formational teaching in theology education through online courses, the author first addressed the academic field of Distance Education (DE) and offered an analysis of the most important DE theories. This was done to contextualise formational theological training within the DE environment and create a better understanding in the field of DE. Thereafter, a review of literature on formational teaching in a DE environment was undertaken and analysed within the DE theoretical framework. This article is therefore a contribution to the academic field of Distance Education (DE) and offered an analysis of the most important DE theories. This was done to contextualise formational theological training within the DE environment and create a better understanding in the field of DE.
structured course requires less dialogue and, conversely, the more the dialogue, the less the required structure of the course. Moore and Kearsley (1996) states that it is the physical distance that determines the communication gap, which can lead to misunderstandings between the learner and the teacher.

However, one of the advantages of DE is that it encourages a platform for asynchronous learning to take place. This has the benefit of including all learners in the program at a time that suits them best. Ascough (2002) suggests a further benefit – he states that many of the more introverted learners are often hesitant to join in live discussions and sometimes have difficulty mustering up the courage to speak up in a group situation. This is particularly relevant in courses where self-introspection and spirituality are key features, and very often are intensely personal.

Other DE theorists have discussed structural and institutional aspects of DE. Peters (1983) expanded the above theories and definitions to include an element of industrialisation, particularly in the production of high-quality teaching materials for teaching a large number of students. His conceptualisation of DE as a form of massification of the education system forms the basis of the model used in many large DE institutions still today, particularly in developing countries. According to Daniel (1996), a DE university with a student population of over 100 000 at degree level can be referred to as a mega university. Table 1 shows a summary of the top 10 mega universities in the world.

From Table 1 it can be seen that all of the top 10 mega universities hail from developing countries, where DE serves an important role in bringing Higher Education (HE) to a large number of students who would otherwise not have access. These figures are taken from the United Nations Human Development Report (2016). One of the measuring devices used to determine whether a country can be classified as a developing county is the Human Development Index (HDI), which was developed by the United Nations. This index quantifies life expectancy, education and income into a standardised number between 0 and 1, and most developing countries have an HDI of below 0.8. To put this into context, there are around 1.1 million HE students in South Africa in 2016 (South African Department of Higher Education and Training 2017) of which just over one-third are studying through the distance mode of learning.

Distance education can therefore be seen as an educational process whereby the learner and the teacher are separated not only geographically, but also cognitively. Various technologies are used to provide the tools to narrow this distance. Historically, teaching took place using paper and pen – the correspondence mode. The first DE teaching university was opened in 1946 in South Africa – the University of South Africa (Unisa) and today still functions primarily as a correspondence-based university. Taylor (2001) presented the use of different media in DE through what he termed the ‘5 generations’ of DE.

### 5 generations of distance education delivery

Table 2 is a summary of the different generations of delivery of DE over the years, starting with a single correspondence mode to a fully online delivery mode.

All generations of DE delivery are still in place today. However, online education is fast becoming the most widely employed (Lee & Nguyen 2007). This has led to the concept of e-learning, which is often mistakenly used interchangeably with the term DE. E-learning is simply the use of electronic media to facilitate the delivery of DE teaching, and corresponds to the fifth generation according to Figure 2. E-learning focuses on the juncture between teaching, education and the use of electronic media (Friesen 2009). Guri-Rosenblit (2005) states that e-learning is the use of electronic media for a variety of learning purposes that range from add-on functions to the full substitution of traditional delivery by online encounters.
The generations of delivery do not need to be looked at rigidly, and in many courses and institutions, a combination of generations is used. This is referred to as blended learning. In DE, blended learning refers to a delivery method that includes both traditional correspondence and online learning. This blended model is used by many traditional DE universities (e.g. Unisa, Indira Ghandi Open University [IGNOU]). This is where the courses are available in both a correspondence mode and online, and the learner has the choice of which mode they would prefer to use.

Blended models are not to be confused with the hybrid model of education, which includes elements of both face-to-face and distance learning. In recent years, many traditional face-to-face institutions have included a distance learning element to their teaching models. In most cases, the model of delivery for the distance element is through online teaching that employs the best characteristics of online learning together with face-to-face instruction (Martyn 2003).

The iron triangle John Daniels

According to Sir John Daniels, the former head of the Commonwealth of Learning, DE can be represented through the analogy of an iron triangle (Daniel 2013).

The iron triangle links the notions of access, quality and costs. Lane (2014) posits that the use of technology in DE presents the possibility of widening access to HE, while at the same time lowering the costs without compromising the outcomes. Figure 3 shows the basic triangle, as presented by Daniel (2013), with the three factors all being of equal length. The assumption is that as one of the sides of the triangle increases, the others will diminish. Taking into account scalability, there is little room to increase student numbers without incurring additional costs. Daniel and Uvalic-Trumbic (2013) assert that e-learning, because it is not constrained by physical limitations, is able to change the triangle and can provide quality education for a far greater number of students and, at the same time, reduce the associated costs. This triangle can then be optimised, as shown in Figure 4.

The Community of Inquiry framework for online education

This model for teaching and learning in an online environment was put forward by Garrison, Anderson and Archer (2000) and draws on the earlier works of Dewey (1938). They state that when the three presences of social, cognitive and teacher presence intersect, then a collaborative, constructive learning experience occurs (Figure 5).
Social presence occurs when the learners are able to project their own characteristics into the group and present themselves as real people. Garrison (2009) suggests that social presence can be defined as ‘the ability of participants to identify with the community, communicate purposefully in a trusting environment and develop inter-personal relationships’. Prestera and Moller (2001) and Hutchinson (2007) place importance on the online instructor, teacher or facilitator. They emphasise the significance of clear instructions and facilitation in the learning process. Anderson et al. (2001) see the teaching presence as the design and facilitation of both the cognitive and social presences to promote meaningful learning.

The role of the distance educator

The role of the discussion forum is central to the Community of Inquiry framework as it is in this space where the presences intersect and promote a collaborative, and not an independent learning environment (Swan & Ice 2010).

There is thus a need to identify how the roles of distance educators are changing in line with the move towards online education. Roberts and Bezuidenhout (2017), through a systematic literature review, identified 10 roles that have emerged as being key to distance educators. These roles include subject specialist, researcher, mentor, student support, technology expert, instructional designer, facilitator, management and administration and being a team player. Roberts (2018b) carried out an empirical study where teaching staff at Unisa were asked to rank the importance of each of these roles currently, and also projected 5 years into the future. The results indicated that the roles of the distance educator as a technology expert and online instructional designer escalated in importance between current and future roles. Although the role of a subject specialist remained top of the list, technology moved from number 7 to number 2, and instructional designer progressed from number 9 to number 5.

Delamarter and Brunner (2005) advance the importance of the roles of distance educators further by stating that maintaining an online teaching presence throughout the course (refer to the Community of Inquiry framework), and facilitating student engagement, remains important. Without the sustained involvement of the facilitator/teacher, learners could well lose interest in the course. All of this places additional time pressure onto the teachers, and that aspect needs to be addressed when developing a course. Savery (2005) confirms this by stating that without meaningful dialogue on a regular basis, it is difficult to establish trust, comfort, meaningful interaction and personal growth in an online setting.

Thus far, the discussion has centred on the academic field of DE and some of the relevant theories that support the current discourse in DE. We have looked at the basic tenets around DE, the main one being the separation of the learner and teacher, not only geographically, but also cognitively (Moore 1983). Also addressed was Taylor’s (2001) classification of 5 generations of delivery of DE. The fifth generation indicates that learning and teaching will be carried out fully online. This has given rise to the term ODeL (Open Distance and electronic Learning), which places the emphasis on the use of electronic media for teaching and learning.

The ‘Iron Triangle’, as put forward by Daniel (2013), addresses the economics of DE and, in particular, the relationships between access, quality and costs. Daniel and Uvalic-Trumbic (2013) suggest that to address an increasing number of students, without compromising outcomes and growing costs, the use of technology needs to be heightened.

These theories all lead to the increasing importance of online courses and teaching. In their Community of Inquiry framework, Garrison et al. (2000) emphasise the importance of the intersection of social, cognitive and teaching presence to promote a meaningful learning experience.

The online educated human

The question that needs to be addressed is whether teaching in an online environment is possible when more than just content needs to be delivered. Can ethics, morals and spirituality be taught online – can we produce an OEH?

In the next section, the aspect formational development of the OEH will be investigated, with regard to the teaching of theology and, in particular, formation development in theology students. Formational teaching is a concept used to describe the character development and the process that a person follows to grow spiritually in a Christian religious context. Hockridge (2013) describes spiritual formation as the development of character and spiritual maturity.

Willard (2002:22) quotes that formation is a ‘Spirit-driven process of forming the inner world of the human self in such a way that it becomes like the inner being of Christ himself’. This can be achieved through various educational and nurturing activities. White (2006) suggests that although technology and Jesus seem to be incompatible, through the use of creative ways, spiritual formation can be nurtured in a DE environment. He suggests that greater attention should be paid to the affective and relational components of online instruction.

There are many who suggest that formation training can only be carried out in face-to-face environment. The concern whether formation can occur in DE is well described in the literature (Cannell 1999; Palka 2004; Patterson 1996; Ravoi, Baker & Cox 2008, Willard 2002). Many of these critics assert that learner-to-learner and learner-to-teacher interaction cannot be attained in an online environment. This is linked to the Community of Inquiry framework that was discussed earlier, where the importance of social, cognitive and teaching presence is essential for a collaborative, constructivist learning experience (Garrison et al. 2000).
Lowe and Lowe (2010) state that profound disagreements exist in theology circles around the delivery of theological education in a distance setting. An example is the article by Ravoi et al. (2008) in which they assert that on-campus training is vital for formation and cannot be delivered via a distance mode. Drawing on research carried out at a theological seminary in Russia; Egorov and Melanina (2017) state that face-to-face interaction is essential.

Another critic of online theological education is Kelsey (2002). He questioned whether the disembodied nature of online education is inconsistent with a pedagogy based on Christian anthropology. Contrarily, Cannell (1999) stated that traditional face-to-face teaching does not necessarily guarantee a spiritual community any more than DE does.

Gresham (2006) counters this by saying that the concept of the ‘divine pedagogy’, that is, the manner in which God teaches the human race:

- provides a model of adaptation to students, cooperation in a learning community, active student participation and use of multiple media for teaching, that can provide a theological justification and guide to online learning. (p. 26)

From a biblical perspective, one can draw from the example of the Apostle Paul. His letters show how spiritual formation was achieved even when there was a geographical distance between him and his followers. Timothy 3: 16–17 indicates that correspondence from Paul to his early believers was directed by the Holy Spirit and that Christians were able to grow spiritually through reading those letters. Severs (1993) confirms this by saying that the geographical distance between the Apostle Paul and his many churches did not inhibit his ability to form them spiritually even though they were not in a face-to-face situation. Paul’s letters or correspondence bridged this physical distance.

Lowe and Lowe (2010) position formation in Christian education within Bronfenbrenner’s Ecology of Human Development Theory. This model views formation in the ecosystem that can be situated in physical, spiritual or cyberspace environment. Bronfenbrenner (1979:127) contended that ‘development never takes place in a vacuum; it is always embedded and expressed through behaviour and it is embedded in a particular environmental context’. Lowe and Lowe (2010) provide evidence to suggest that spiritual formation of learners is possible in an online DE setting. They suggest that Christians, who study together in a DE environment, have a common bond that actually transcends physical time and space. They contend that the Holy Spirit transcends the barriers of time and space. This is supported by Hess (2000), who put forward the notion that online education does not lead to a disembodied form of education.

Russel, as early as 1999, in a review of 355 studies, found that there were no significant differences in the method of course delivery (face-to-face vs. technology enhanced). Twigg (2007) supported Russel’s assertion that educators need to focus more on effective learning rather than the technology used to deliver that teaching.

There have only been a handful of empirical studies undertaken on formational issues in distance or online theological education (Graham 2002; Heinemann 2006; Hockridge 2013; Lynch & Pattison 2005; Naidoo 2012; Nichols 2011, 2015, 2016; Palka 2004; Reissner 1999). Some of these articles show evidence from empirical studies that indicate that DE is a suitable mode of delivery for theology studies and, in particular, formation. In this regard, the articles by Palka (2004), Hockridge (2013) and Nichols (2011, 2015, 2016) will now be discussed where they present evidence and insights into theological training via DE.

In a study conducted by Palka (2004), he provided results that showed that 56% of students surveyed at Concordia Seminary in St. Louis, the United States, indicated that their spiritual development occurred outside of the seminary. This study showed that external church communities play a much bigger role in formation than the actual classroom setting.

Hockridge (2013) investigated distance and online education in the Australian theological education sector.

In her study, she used a questionnaire and interviews to explore theological educators’ understandings of formation and the educational practices that can be used to develop student formation. The results of this study indicate that theological educators in Australia have concerns centred on communal–relational and ministry–pastoral facts of formation. Hockridge (2013) suggests that these concerns are not necessarily centred on the debate between face-to-face versus DE, but rather that formational learning is complex, regardless of the mode of delivery.

In his 2011 article, Nichols (2011) makes a distinction between the concepts of akademeia and ecclesia in theological education. His hypothesis is that akademeia (the academic content knowledge) is well suited to online DE, and that ecclesia (church community and spiritual growth) is better suited to face-to-face teaching.

Using a quantitative survey questionnaire that applied the Christian Spiritual Participation Profile (CSPP), Nichols (2015) compared the spirituality characteristics of both on-campus and DE students at Laidlaw College, New Zealand. The same course is offered both on-campus and in a distance format. He found that there were no statistically significant differences in formational maturity or spiritual growth between the on-campus and distance students. In fact, he suggests that formation learning might be enhanced through a distance format. The reason for this is that spiritual growth is often provided through the students’ own local church fellowship and their own life experiences, and not only by the educational institution. In addition, in many cases, the students in DE often already possess a high level of spiritual maturity.
Expanding on this study, Nichols (2016) carried out in-depth interviews with a selection of the students who participated in the survey to investigate their actual formational experiences. One of the important findings from this study confirms that church fellowship provides an important context for formational learning as indicated in his 2015 article. Nichols (2016) explains that on-campus learners are more likely to be separated from their home fellowship groups as they have moved away from home to the city where the campus is situated. This results in fewer opportunities for spiritual growth. This is in contrast to the DE students, who usually remain in their hometowns and study while continuing their normal lives. These students maintain their existing fellowship circle that leads to continued spiritual growth of formation. Naidoo (2012), who states that many DE students are embedded in their own local communities, supports this notion. Leaving students in their own environment and spiritual community provides them with a level of theological training (Delamarter & Brunner 2005).

These sentiments about using online learning as a tool for theology training have been echoed by Burnham (2018). In his thanksgiving address at the Windermere Centre for spiritual and theological training, Burnham suggests that it is time for the church to start using new resources and technological tools for theological training. He states that ‘There’s now a different educational and training world out there and though the Church has dipped its toes in the water – it’s time we took the plunge’. He states further that the use of online resources, online discussions and debates, webinars and online seminars is already happening and the church theological training needs to continue this trend.

Hege (2011) suggested several strategies for maintaining the relationship between technology and pedagogy, based on his experience of teaching theology courses at a seminary. These include the maintenance of a safe and vibrant virtual community through sustained online engagement with the learners by the instructor.

Naidoo (2012) sums up all of the debates by stating that community can, indeed, occur in an online context. However, she suggests that this might occur best in a blended environment where there is a balance between face-to-face and online communication:

As online education grows in popularity across the spectrum of institutions of higher education, it is incumbent upon those who are called to teach in such settings to recognise the possibilities and potential pitfalls inherent in such a model of education in order to provide the best possible learning experience for students in our digital age. (Hege 2011:19)

Conclusion

The question being asked in this article is whether it is possible to teach theological formation in an online DE environment. The methodology for addressing this was through a systematic literature review of both online DE and formational teaching via online methodologies. Firstly, an examination of relevant theories and frameworks from the field of DE was presented. Drawing on the Community of Inquiry framework of Garrison et al. (2000), the aspects of social, cognitive and teaching presence were then observed in the context of formational learning in the field of theology. Currently, there is still much debate on this topic. In this article, the literature from the two proponents and the antagonists of online theological education has been examined. Although many studies carried out in recent years indicate that there is no statistically significant differences between face-to-face and online teaching and learning, I would argue that the ideal model still seems to be a blended, hybrid approach such as the one put forward by Egorov and Melanina (2017). They propose a mix of content-rich information delivered through online learning, which is scalable, instructor-mediated communication directly with the students, and formational learning carried out within the church community.

What is needed now is for theological training providers to develop courses based on the hybrid model. This can be done by placing the content-rich courses into an online platform for large numbers of students, and an online facilitator-mediated course when the student numbers are more manageable. Formation learning can be achieved through face-to-face contact with the learners, enhanced by their involvement in their own fellowship communities and church.

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I declare that I am the sole author of this research article.

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Ethical consideration

This article followed all ethical standards for carrying out research without direct contact with human or animal subjects.
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