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# The Good, the Bad, and the Ugly of Distance Learning in Higher Education

Vimbi Petrus Mahlangu

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## Abstract

The chapter deals with opportunities and challenges of distance learning in higher education. One challenge comes from the changing perceptions of what learning is all about. The second challenge comes from new learning opportunities that technology now affords. Constructivism, interpretivism, and computing technology, separately and often together, have redesigned the conception of the challenges and opportunities of learning, and brought about new learning possibilities for almost all teaching and learning situations, including traditional classroom teaching, distance learning, and self-learning. Computer-supported learning environments could have good problems that will stimulate students to explore and reflect on their knowledge construction. Students who cannot afford higher education are discouraged from seeking or completing a degree. Distance learning-based programs could increase access for students to higher education, whereas open and distance-learning programs may be difficult to implement in the laboratory sciences, but they have real potential to maximize the use of technology.

**Keywords:** constructivism, interpretivism, computing technology, distance learning, self-learning, computer-supported learning

## 1. Introduction

The chapter will be dealing with challenges and opportunities of distance learning in higher education. The author has worked closely with students on distance learning for many years and became interested on how students deal with the challenges compared with the opportunities provided by distance learning. The major objective of this chapter is to investigate the opportunities and challenges of distance learning. In recent years, there has been an increasing interest in distance learning in higher education. In this chapter, the term information

communication technology (ICT) will be used and will include communication devises like radio, television, cellular phones, computers, and satellite system [1]. Again, all forms of learning/teaching through ICT will be referred to as e-learning. In distance learning, ICTs can be used in preparing and presenting lectures.

ICT is a tool that can be used in distance learning for addressing challenges in teaching and learning, a change agent, and a central force in economic competitiveness. Yusuf [2] view ICT as a change agent, when it catalyzes various other changes in the content, methods, and general quality of teaching and learning, thereby ensuring constructivist inquiry-oriented students. As a central force in economic competitiveness, it deals with economic and social shifts that have technology skills critical to future employment of today's distance students.

Previous studies have reported that students may use various technologies for e-learning in their chosen settings, while some of the assigned technologies may sometimes be neglected in favor of their own mobile technologies. Whereas technologies-in-practices are seen to be changeable over time as students' knowledge, experiences, contexts, and technology itself might undergo changes through human action [3]. Although extensive research has been carried out on open distance learning, no single study exists which deals about the good, the bad and the ugly of distance learning in higher education. The chapter is divided into seven parts. The first part deals with introduction; the second part deals with method; the third part deals with the good of distance learning in higher education; the fourth part deals with opportunities of distance learning; the fifth part deals with the bad and the ugly of distance learning in higher education; the sixth part deals with challenges facing distance learning; and the seventh part will be the conclusion.

## 2. Method

An overview of literature review was used as a method in compiling the chapter because it promotes an understanding of the focus area and the criticisms that have been made on the topic [4]. It helps in finding research gaps, bringing scattered pieces of information together, and refining the research topic to an understandable level [5]. In this chapter, constructivism should be understood as a continuum with diverse and overlapping views of "reality," "knowledge," "teaching," and "learning." Constructivism as a theory of knowing assumes that there is no fixed body of truths from the real world that are found by scholars and consequently transmitted to learners [6]. The information need to be interpreted to make sense of what the scholars have found.

### 2.1. The good of distance learning in higher education

Traditionally, the chapter argues that studying part time while continuing to work can assist students to apply their learning directly to their professional environment [7]. To be able to integrate mobile technology effectively into learning practices will depend on aspects that are related to humans (students and instructors), design (content and technologies), and institutions (policies and strategies) [3]. There are, however, other possible explanations that online

instruction can provide to higher education distinctive opportunities. Online instruction can direct learners through a framework that can also lead to the desired outcomes in a manner that it can encourage best practices [8].

In the twenty-first century, technological learning is expected to include digital literacies, collaboration, complex communication, and systems-thinking skills, among others. In order to be in line with online learning, higher education institutions are expected to offer courses and platforms that support the use of multidimensional abilities and skills and the use of media and technology as supportive systems in higher education [9]. In general, there are three formats that ought to be followed in delivering courses, namely distance learning (DL), face-to-face (F2F), and hybrid (H) learning. There are seven principles for good practice that can be used in distance learning for higher education. These principles for good practice can be divided into the following, namely: encourages student-faculty contact; encourages cooperation among students; encourages active learning; gives prompt feedback; emphasizes time on task; communicates high expectations; and respects diverse talents and ways of learning [8]. These guidelines represent a philosophy of quality distance-learning education that can be widely used for both face-to-face courses and online learning.

Distance learning can benefit universities because it can bring an element of flexibility in the learning process by the use of technologies, and interdisciplinary approaches to teaching and learning. The use of technologies and interdisciplinary approaches are key factors in distance education in higher education. The advantage of technology in distance learning is that students can watch lectures before coming to class and engage in more interactive activities in the class. They can also collaborate with other students and rely on the instructor as a facilitator rather than a lecturer. It also allows for a consistent delivery of content, because online videos can be prerecorded and shared with the rest of the class online [10] as in [9] and in [11]. e-Learning has the possibility to support learning processes, collaboration, flexibility, and the distribution of education and training, as well as evaluation of content and skill in distance learning. A key issue to the successful use of e-learning and blended learning is the combination of educational competence with contextual understanding into a strategy, of how to use digital educational methods [12]. For example, in Finland, previously, the open universities were more often used by young matriculated students who had not gained a study place at a "proper" university; but nowadays, students are more often adults in professional positions who want to enhance their qualifications, skills, and competences via e-learning by enrolling in web-based courses. Another example, in Greece, distance learning offers students the opportunity to combine family life and work with education. ICT-based distance education is good because it is flexible.

e-Learning, despite its virtual nature, its provision, if it is to be perceived as being of quality, it ought to ensure that it neither ignores the physical (i.e., the appearance of learning resources, personnel, and communication materials), or temporal student needs (i.e., a willingness to help learners and provide prompt service) [13]. It is good for the elimination of face-to-face training and development costs both in monetary terms as well as in terms of productivity loss, as learners spend time away from their daily activities and jobs in order to participate in the face-to-face training sessions. e-Learning courses are available 24/7, location independent, and provide effective and efficient training means for learners in geographically dispersed areas and across time zones [11].

## 2.2. Opportunities of distance learning in higher education

This section is dealing with the opportunities of distance learning in higher education. Opportunities to undertake continuing professional development through distance-learning education remain limited. Distance learning via e-learning can be able to offer a solution, providing opportunities for distance-learning students to further their education while applying new knowledge and skills directly to their practice [7]. e-Learning is a relatively new phenomenon and relates to the use of electronic media for a variety of learning purposes that range from add-on functions in conventional lecture rooms to full substitution for the face-to-face meetings by online encounters [14]. Some students may require digital literacies to participate successfully in everyday life increasingly mediated by technologies. To offer relevant learning experiences in distance learning, lecturers need to develop new skills and knowledge about technologies. Importantly, they should rethink their pedagogies and move beyond using technology as a "fancy typewriter" and a presentation tool. It can be a challenge for lecturers and they may need appropriate professional training [15].

Therefore, distance is not a defining characteristic of e-learning. If students' ICT competencies can be improved and their attitude to online learning influenced to be more positive, distance education in higher education can be used as a tool to increase the range of students who can be involved in distance education [16]. It is presumed that some postgraduate students may prefer online courses owing to their distinctive advantages, such as lower tuition fees, adjustable speed of study, and greater cultural diversity [17]. It is believed that learning at a distance mode in higher education can be as effective as a traditional face-to-face mode learning. Distance learning students can be able to care for their families and incorporate instruction on online courses and this can afford them the opportunity to work while they are raising their family and pursuing their full-time jobs. Distance learning can also benefits students because of flexibility about when and where they can engage in their learning [18].

ICTs can create opportunities for distance-learning institutions to provide distance-learning platforms, which can make it possible for many students situated far from the centers of learning to educate themselves. e-Learning is very important in recent years because it can enable e-learning opportunities that have not been previously available to distance-learning students. Moreover, the use of e-learning systems can provide great opportunities for learning for individual students globally, such as helping in educating and providing training opportunities on different topics from focused educational programs to general hobbies [19].

Generally, it is believed that e-learning was designed for purposeful and disciplined students, because there is no direct contact with the lecturer, which may increase the demand for them to work independently. Distance learning in higher education can teach students skills and competencies of developing professional skills such as the skill of self-study, the ability to plan and organize, time management skills, the ability to solve problems, to take responsibility, to work under pressure, and to be creative and initiative [20]. Understanding that distance learning gives everybody an opportunity to develop these social qualities, which are undoubtedly necessary for modern professionals, e-learning is key for students' success in distance learning. Education of adults appears to be burdensome for the family budget and therefore inadmissible for some families.

Distance learning is one of the most financially affordable and viable forms of education. Adult students generally have many responsibilities connected with their responsibilities due to time and other constraints in their personal life [21]. These responsibilities significantly reduce their opportunity to study both in a foreign country and in another city. Distance education allows them to mitigate these challenges. Distant students suffer to a much lesser extent from cultural, psychological, social, and economic difficulties connected with learning in a distant mode because the pursuit of knowledge is undertaken for its own sake, rather than as an obligation [21].

Distance learning institutions can apply technologies to allow human interactions through the web and promote a self-regulated learning process. Using technology in distance learning can help in crossing boundaries of space and time for lifelong learning. Distance learning can enable flexible/customized ways of education for every learner despite constraints [10]. In online and blended education environment, the types of interactions may include asynchronous online forums, synchronous textual and audio/video chatting, email, and phone conversations, which can afford students the opportunity to share brief profiles, including a photo [22]. e-Learning can also provide unique prospects for building a sense of community engagement among online students in distance learning. Online technology must be able to increase opportunities for students to access higher education, increase retention rates, and increase learning quality, and to result in good outcomes for students. e-Learning in distance higher education has the potential to make different support material available, interaction possibilities, response to the challenges posed by the globalized world, flexibility, reduction in travel costs, and environmental impact [23].

Individuals that have good soft skills, along with technical knowledge, will always be preferred candidates when prospective employers are looking at candidates to employ. It is possible to teach and practice soft skills through an e-learning program [10]. The structure of distance learning can give adult learners the maximum possible control over the time and "pace" of their education. Distance learning is one of the most financially affordable forms of education. Another advantage that can be associated with distance learning in higher education is academic mobility. Distance learning institutions must know that adult students can have many responsibilities connected with their work or families [24]. Therefore, the provision of distance education must be able to allow them to fulfill their responsibilities with ease.

## 2.3. The bad and the ugly of distance learning in higher education

This section argues that technology can have challenges with connectivity and the use of ICT can be a challenge for some distance-learning students. There is an increasing concern that some students in distance learning are being disadvantaged because of various challenges. It is a widely held view that the pressure for making distance-learning universities more accountable is a worldwide phenomenon, and academics and these institutions around the world are expected in responding to this mounting pressure. In addition, the mounting pressure can develop a complex and thoughtful set of theory-based models that can be tested empirically and used as part of a formative evaluation of distance learning [25].

Students may drop out in higher education because of those employers who may prevent them from studying, such as forcing them to work overtime, and students having no time for study. In such cases, the students' own motivation is not sufficient to prevent them from

dropping out [21]. There are different barriers that can hinder students' access and success in higher education—for example, situational and social barriers. Situational barriers are those barriers that can hinder students' access to higher education, because these learners may drop out because they are unable to cover the costs of their training. Being a busy worker and a student at the same time, some students may not be permitted to join a course, or an employer may not let them learn for higher degrees, and develop their competences. Family responsibilities may also prevent adult learners from actively participating in higher education [21]. The use of modern communications technology in distance learning can easily attract a younger generation than traditional forms of training [21]. Social barriers and administrative barriers can be a challenge for students. This can be a challenge especially if students do not know the best method to communicate with lecturers or what their progress is in a course or module [26].

Education research shows the importance of the community education sector to employment outcomes, given that so many distance-education students come from disadvantaged backgrounds and use technology to access education [27]. New technologies combined with the changing transnational education landscape can give rise to new partnership types and models, creating innovative opportunities in the market, and inevitably more competition.

New technology and online provision can create a market for content providers. This means that the dimensions and scope of international education provision can be transformed with the emergence of new education providers such as publishers, content aggregators and distributors, and professional bodies who can contribute to the diversification of transnational education [28]. e-Learning systems are becoming critical platforms for distance-learning institutions and for general lifelong learning by students [19]. e-Learning is becoming more important in recent years because it can enable e-learning opportunities that have not been previously available to distance-learning students. Moreover, the use of e-learning systems can provide great benefits for individuals worldwide, especially in helping to educate and provide training on different topics from focused educational programs, to general hobbies [19].

## 2.4. Challenges facing distance learning in higher education

The main purpose of this section is to develop an understanding of the challenges facing distance learning in higher education. The higher education landscape is undergoing significant change because of technological innovations. In addition, the use of various educational technologies has advanced significantly over the past few decades. It is now a common practice to find technology-enhanced learning in many higher learning institutions all over the world [29]. The high cost of information and communication infrastructure, and the dearth of technical expertise are another challenges in distance learning [1].

There are major challenges that are experienced by distance-learning higher education institutions [1], namely:

1. The lack of appropriate business models and educational models, making the study material or open contents developed difficult to follow, and as a result, reducing the enthusiasm of learners in their respective studies;

**2.** The lack of any clear quality assurance mechanism, which may result in unclear standards and by consequence, poor quality of distance education; and

**3.** The lack of support from the relevant governing bodies, which may be exhibiting poor participation, brought about by a lack of appropriate human and infrastructure capacity.

Workers with ICT skills are not adequate in South Africa according to the 2011 Joburg (Johannesburg) Centre for Software Engineering (JCSE) Skills Survey, which found that there was a need for 20,000–30,000 ICT-skilled workers amounting to 10–15% of the total ICT work-force. A reason for the lack of skilled ICT personnel is that universities are not graduating enough numbers of graduates with the right levels of technical skills to enable, grow, and competitively position businesses in the African markets [30]. e-Learning is needed in distance learning because it can be inferred that a tremendously large amount of workload is involved in the overall working of an open distance-learning environments, and therefore, it is very difficult to work manually and by referring to school files only [1].

Technology can be used as a tool and it must be utilized only to remove the barriers and challenges present in the distance-learning settings. ICT can provide opportunities to complement on the job training and continuing education for students in a convenient and flexible manner. Use of ICTs in distance education requires major shift in the way content is designed and delivered. New technologies should not be imposed without enabling lecturers and students to understand these fundamental shifts [31]. Given the busy professional life of distance-learning students, with inherent challenges in having to take time off work and to be away from their home commitments, it will not be easy for them to attend taught courses that require them to be away from workplace and home [32]. In this instance, computing technology will be an ideal solution to deal with the challenges of distance learning. ICT often reduces face-to-face interaction among students, which is one reason for the high dropout rates in distance education [33]. In distance-learning marginalized students, for example, the impaired and the economically disadvantaged ones may be further excluded from educational practices when ICT is used. Some students may not afford the use of technology if it is not free or subsidized. These students are also often unable to use the ICT due to institutional failures to comply with legal and technical requirements for impaired students. There is a growing concern that distance learning is compromising the quality of education partly because one of the key challenges is lack of appropriate interaction practices [6]. This is particularly true for international distance students, who encounter, among other issues, culture-dependent social interaction differences in virtual learning environments, which may discourage them from succeeding in or even completing their online courses.

Distance learning institutions generally may face a wide range of strategic, operational, and financial risks from both internal and external sources, which may prevent them from achieving their objectives. Conflicts can also arise in an open distance-learning environment, because there is significant complexity in their structure and the pattern of governance [11]. Governors in distance-learning environments are expected to infuse e-learning in their policies so that lecturers can be supported by policy in using ICT. The lack of appropriate infrastructure for enabling the use of ICT for distance learning in higher education can be a serious challenge. Again, the cost efficiency of an ICT is another aspect that is important that determines its

growth. Language, technology, and culture (knowledge, beliefs, arts, morals, laws, customs, and any other capability and habit acquired by a human being as a member of the society) can easily obstruct the assimilation of ICTs by many distance-learning institutions [34].

Technology is rapidly changing, making it difficult for distance-learning institutions and students to keep pace. With the increasing diversity of the student population, it is vital to identify practices that can better equip students to utilize technology in ways that will promote learning, development, and success for all students [35]. In some distance-learning institutions, technologies used to deliver distance-education programs are typically one way (noninteractive) [36]. The growth of any communication technology and its applicability for distance learning depends largely on the degree to which policy-makers may recognize the importance of ICTs in promoting a knowledge-based society [34]. For example, those countries that have paid relatively little attention to ICT are lagging behind in the field of spreading distance learning using the latest technology. The low awareness of educational technology integration in distance learning can be a barrier to the integration of it in higher education. There are different factors that may limit the use of technology in distance higher education. Some of the limiting factors to the integration of educational technology in distance learning are electricity and power distribution [29].

There are some institutional challenges that can affect distance learning in higher education institutions. Some of these challenges that must be noted in higher education pertaining may be related to the following issues, namely: (a) quality assurance plans are often too broad and not favorable to distance-learning settings; (b) lecturers tend to have a "passive resistance" to getting involved; (c) some lecturers that facilitate distance-learning programs have not been provided enough special training on the delivery of open and distance-learning practices; (d) time restraints for lecturers appear to be a challenge that ought to be overcome along with the development of a common institutional approach to distance learning; (e) shortage of tools and technologies that enable scalability; (f) lack of financial sustainability models; (g) lack of committed and qualified cadre of quality assurors and experts with the relevant distance-learning qualifications [4].

There are different barriers to distance learning in higher education that is unique to each and every country. For example, in Finland, there are challenges that are related to: (a) costs (there is a challenge of the high cost involved in network connections); (b) lack of feedback and support (students do not get enough personal support); (c) lack of face-to-face meetings; (d) isolation; (e) insufficiency in self-directed learning; (f) family and work responsibilities; (g) difficulties in network connections; (h) change in one's life situation; (i) difficulties with technology; (j) lack of support from employer, and (k) lack of education [21].

Also, in Germany, the perceived challenges to distance learning are related to the following: namely: (a) costs; (b) lack of feedback and support; (c) lack of face-to-face meetings; (d) isolation; (e) lack of adjusted programs, and (f) lack of formal regulations [21].

On the other hand, in Greece, distance learning has the following challenges, namely: (a) difficulties with technology; (b) negative image of distance-education programs; (c) negative learning experiences; and (d) absence of a system for recognition of prior learning and work experiences [21].

On the contrary, in Hungary, distance learning is influenced by (a) cost factors; (b) difficulties with technology; (c) lack of relevant course content; (d) negative learning experiences; (e) insufficient self-directed learning skills, and (f) negative image of distance-education programs [21]. Lastly, in the United Kingdom, distance learning is expected to deal with the following challenges, namely: (a) costs (compared to increased higher education fees—otherwise seen as general advantage); (b) doubt about return on investment; difficulties with technologies; (c) family and work responsibilities; (d) lack of support from employer; and (e) disability [21]. The use of technology can also constitute a barrier in distance learning.

Technical challenge is one of the most important challenges facing the adoption of e-learning in some distance-education institutions. For example, a study conducted at Open University of Tanzania found low level of Internet connectivity and insufficient number of computers were factors influencing the adoption of e-learning in distance learning [37]. Regardless of similarity in African countries, there is also some diversity in infrastructure and technology adopted in terms of availability and accessibility. It was found that low technology level was not a barrier to adopt e-learning especially in African countries such as Kenya, Uganda, and South Africa [37].

Access to computers is another challenge especially the availability of computers for lecturers as instructors and to students during working hours. For example, in developing countries, most of the students and instructors will not acquire their own computer. Difficulty in access to computer will negatively affect the acceptance of technology. It has been reported that unequal access to online learning can lead to inequality among the socioeconomic groups within a society [37].

Some lecturers as instructors in higher education may have a language barrier because of the lack of knowledge, experience, and training in using technology to design online courses, and even unable to use the technology available in distance learning [37]. The rapid growth in the web application requires security for identity management [37]. Therefore, to prevent your web and information available from the foreign attack, an antivirus program must be used. The attitude of a lecturer as an instructor toward e-learning can be a barrier depending on the culture and technological knowledge of the lecturers and students [37]. For example, if an instructor sticks to traditional education instead of using e-learning due to culture or the lack of awareness about e-learning, it can minimize the use of technology in distance education.

On the other hand, some instructors may be afraid of losing control and quality of teaching if they use e-learning. Again, the attitude of lecturers as instructors toward e-learning is an important element that must be considered in using technology in distance learning in higher education [37]. This means that, in providing distance learning in higher education must not differ from ordinary education. Eye contact is a very crucial factor in education but this factor can be limited in e-learning environment because lecturers may be unable to observe the emotions of students and cannot predict their satisfaction which puts burdens on them and make students respond differently toward e-learning [37]. e-Learning should be used to enhance teaching and learning in distance learning.

Distance-learning organizational support of the educational process that depends on the availability and convenience of the administrative system and staff can be a challenge for some

students. The abovementioned challenge may be connected with the accuracy and timeliness of the information provided to the students. Another challenge for distance learning in higher education can be the problem of how the content of the course or module meets the expectations of students oriented on getting the opportunity of career growth, personal and professional development on the basis of distance learning. Other challenges of distance learning can be related to the psychological state of students. Among others, this can include: (a) problems caused by the lack of direct contact between student and lecturer; (b) problems associated with feeling of alienation and isolation from the student community; and (c) problems associated with anxiety and concerns regarding the education process and learning results [24].

## 3. Conclusion

To minimize the challenges experienced by distance learning, e-learning should be encouraged. Infrastructure can be updated by introducing modern technology, fast Internet connection, continuous power supply, security, regular maintenance, and efficient administration of distance learning. Distance-learning universities should provide a computer lab equipped with sufficient number of computers and connected with fast Internet. Lecturers and students should also have skills and confidence to use electronic equipment, and to have the necessary knowledge about the method in which the information is delivered. Technology can also be used to improve the quality of traditional education rather than changing the methods of instruction. Lastly, e-learning should be supported in distance learning because it can help learners to have access to education irrespective of distance.

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