# Instructors' Attitude Towards E-learning: An Example of University of Buea Cameroon

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Submitted to the Institute of Graduate Studies and Research in partial fulfillment of the requirements for the degree of

Master of Science in Information and Communication Technologies in Education

> Eastern Mediterranean University February 2021 Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research

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### ABSTRACT

The main aim of this study is to assess instructors' attitudes toward e-learning at the University of Buea, Cameroon. In addition, the study also investigates the relation of e-learning attitude of the instructors with teaching experience and gender. The study was completed utilizing quantitative paradigm together with survey method, while the Test of e-Learning Related Attitudes (TeLRA) scale (Kisanga, 2016) was the data collection tool used to gather data from participants. The participants of this study comprised of 100 instructors from the University of Buea who were working in the 2020-2021 Fall semester.

The outcome of this study revealed that instructors have positive attitudes towards elearning. Although a high percentage of positive attitudes (66%) towards e-learning was determined from the instructors, it was also discovered that there was some level of negative attitudes (34%) exhibited by the instructors towards e-learning. Furthermore, discoveries from the study also indicates that there was no significant difference between instructors' attitudes towards e-learning based on their teaching experience and gender.

**Keywords:** e-learning, instructors' attitudes, University of Buea, attitudes towards e-learning.

Bu çalışmanın temel amacı, Buea Üniversitesi (Kamerun) öğretim elemanlarının eöğrenmeye yönelik tutumlarını incelemektedir. Ayrıca çalışmada, öğretim elemanlarının tutumları, öğretim elemanlarının deneyim ve cinsiyetlerine göre de araştırılmıştır. Çalışma nicel bir araştırma olarak planlanmış ve tarama modeli kullanılarak gerçekleştirilmiştir. Veriler, e-öğrenmeye Yönelik Tutum Ölçeği (TeLRA) veri toplama aracı (Kisanga, 2016) kullanılarak toplanmıştır. Araştırmanın çalışma grubu, 2020-21 Güz Dönemi'nde Buea Üniversitesinde görev yapmakta olan öğretim elemanlarından oluşmaktadır. Çalışmaya toplam 100 öğretim elemanı katılım göstermiştir.

Araştırmanın sonucunda öğretim elemanlarının e-öğrenmeye yönelik tutumlarının genel olarak olumlu olduğu belirlenmiştir. Çalışma sonucunda, öğretim elemanlarının %66'sının e-öğrenmeye yönelik olumlu, %34'ünün de olumsuz yönde tutumu olduğu tespit edilmiştir. Bulgulara ek olarak, öğretim elemanlarının e-öğrenmeye yönelik tutumları ile öğretim deneyimleri ve cinsiyetleri arasında anlamlı bir farklılık belirlenmemiştir.

Anahtar Kelimeler: e-öğrenme, öğretim elemanlarının tutumları, Buea Üniversitesi, e-öğrenmeye yönelik tutum.

## **DEDICATION**

I dedicate this research to all the health workers fighting to save lives from the pandemic and to the victims of this COVID-19 all over the world.

## ACKNOWLEDGEMENT

My profound gratitude to Prof. Dr. Ersun İşçioğlu the supervisor of my thesis for his patience, time, and efforts toward the completion of this research. It was a direct result of his magnanimity influence and persistence that I had the option to finish this work.

I need to say thank you, as well, to the help that was doled out to me in the individual of Miss Bolouere Kikanwa Afenfia for her gigantic help all through this excursion until the finishing of this examination.

I need to say an immense thank you to the whole Njoh family and more distant family for their adoration uphold (good and monetary), supplications, and direction. Not leaving out my twin sibling Nji Mukwa Njoh for his steady petitions, and good help towards my excursion. I realize I can't thank you enough however I appeal to God for God's favoring upon all of you.

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## Chapter 1

## **INTRODUCTION**

The world today is facing an ongoing pandemic as the Coronavirus affects all sectors around the globe. The pandemic, which has resulted in many losses, has led the government to impose mandatory lockdown and quarantine for safety and health measures due to the rising global health emergency. The Coronavirus pandemic has prompted an uncertain lockdown everywhere in the world. Because of the lockdown and social separating measures, the instructive establishments have moved to a webbased educating and learning climate (Abidah, Hidaayatullaah, Simamora, Fehabutar, & Mutakinati, 2020). The present worldwide happenings led to information society utilizing Electronic Learning (e-learning) technologies, which has become a broadly acknowledged method of learning in view of the adaptability and normalization of the large instructive interaction they offer. The information society needs the use of technology to strengthen learning and teaching at various educational institutions (Tuparova, Tuparov, Ivanov, Karastranova, & Peneva, 2006). The development of elearning emphatically affects schooling and training. A study, according to Mason and Rennie (2006), it was found out that enrolment online grew faster than the student body overall and there was an expectation for it to grow further in the Universities in US. E-learning growth in the United Kingdom (UK) was termed rapid due to the race by institutions who competed for a share of the increased and changing demand for higher education (O'neill & O'donoghue, 2004). Thus, due to its importance in lifelong learning, e-learning growth has been powered.

E-learning is commonly believed to establish a versatile, interactive and collaborative approach. A learner-centered environment is only possible through technical innovations and new improvements in the teaching process (Khan, 2005). It is possible to incorporate a wide range of online activities into electronic learning. E-learning can be conducted with the application of digital media (laptops, tablets, phones, etc) for preparing, scheduling, and conducting instructional activities. By means of the utilization of modernized gadgets and materials, e-learning engages and empowers learning. The fast development and boundless utilization of email; visit rooms; casual associations; clever intelligent media applications; online gatherings; and web advancements have changed the customary way to deal with present day presentation strategies (Yamamoto, et al., 2011; Yapici & Akbayin, 2012). A few researchers say that e-learning has executed a progression in presenting methodologies and intelligent learning (Manjulika & Reddy, 2000; Connolly, Stansfield, & Hainey, 2007; Hussain, Hashmi, Abid, & Zahid, 2018).

Throughout the entire existence of e-learning, it is imperative to recall that there is no single acknowledged definition just as no single transformative tree of e-learning, so the advancement of e-learning occurred in different manners in instruction, the tertiary area, business, and the military. This implies e-learning has different implications in various areas. A rundown of e-learning across every area can be known as promising circumstances multiply, since they are held onto, which permits all area and level coaches and instructors to utilize PCs diversely to improve and uphold their students (Charp, 1997; Molnar, 1997). The utilization of the e-learning term has had ramifications that are more extensive, which has a grip on innovations, theoretical positions, and an assorted scope of practices with regards to the instructive environment. This implies that it doesn't just lay emphasis on online setting, but

additionally incorporates a scope of PC based stages for learning and conveyance strategies, arrangements, sorts, and media across all territories of orders. In this way, it portrays a student focused instructional method (Nicholson, 2007).

The turn of events, specialized improvement, and moderateness for PCs are attached to e-learning advancement. Consequently, the late eighties and nineties of the last century birthed the first form of education, electronically computer-based training (CBT) that required personal computers to be connected to different multimedia such as the CD-ROM and it was also considered as the foundation for today's e-learning (Hubackova, 2015). Information at the beginning was first delivered in text format but browsers were later created in the early nineties, which enabled users to upgrade text formats by graphics as technology advanced. As prices declined, the internet spread rapidly and was affordable by the middle class. This improved the web framework into world wide web (WWW) and along these lines the start of the web-based training (WBT). New programs were made with education as the focal point of center, which additionally made learner-instructor correspondence conceivable. While different programs were associated, the WBT framework proceeded to spread and improve quickly (Hubackova, 2015).

Lately, e-learning has acquired acknowledgment and gotten more mainstream as a non-conventional method of advanced education (UNESCO, 2009). E-learning has been proposed by researchers to be the best choice to adapt to schooling. In this manner, instructive access, adequacy, quality, effectiveness, and time at all levels can be improved by e-learning (Kisanga & Ireson, 2016). The significance of e-learning has changed over the long run because of its nonstop advancement and development. The web has various meanings of e-learning with priority on their contents while some

emphasis on correspondence, others on innovation. As per the American Society for Training and Development (ASTD), e-learning is characterized as a variety of programs and processes, for example, online learning, PC based learning, virtual homerooms, and digital collaboration (Paul, 2014). Content conveyance is done through sound and tapes, satellite transmission intelligent television and Compact disc ROM. Different meanings of e-learning lay more significance on the utilization of the web, as modelled in Rosenberg (2001), whose definition states that e-learning is the utilization of web innovation to convey an expansive cluster of arrangements that improves information and execution dependent on some major standards like organization, PC and the perspective on learning.

New learners are being reached by Advanced Education Organizations (AEO) through the possibilities of e-learning innovations at an expanded accommodation, from a good way, and extended instructive freedoms (Kisanga, 2016). Consequently, the reliability of instructors and learners is no longer limited to meet their educational needs, since they don't rely on printed materials, accessible physical media materials in libraries and limited quantities of material (Holmes, Gardner, & Gardner, 2006), thus making e-learning the best alternative when it comes to managing educational access limitations (Kisanga, 2016).

It is for the most part concurred that attitude is the good or adverse views of an individual with respect to discharging a particular conduct (activities) (Ajzen & Fishbein, 1980). Attitude is examined the likelihood of completing and recognizing such activities (Breckler & Wiggins, 1989; Hao, 2004; Harris, 1999; Davis F. D., 1989). The positive or negative disposition of instructors towards e-learning will identify with their online activities that influence their conduct using advanced

innovation research strategies to study (Venkatech, 2000; Zanna & Rempel, 1988), learners' vision of PC based learning is diverse. The level of utilization of the elearning framework can likewise be determined by the investigation of the attitudes of instructors towards e-learning (Ong & Lai, 2006). With respect to e-learning, Martinez (2004) research showed that the estimation of e-learning attitudes would permit instructors to train future instructors in the light of e-learning. The significance of elearning has been portrayed in numerous writing sources as the blend, application, and relationship of various activities for learning and teaching across varieties of electronic media.

According to the acknowledgment, as it concerns development and implementation, the pedagogical and technological aspects of e-learning are significant. E-learning advances could be applied in an assortment of formal and non-formal instructive settings, for example, distance and open learning, and so forth. Higher learning foundations in less developed nations have fallen behind developed countries in the appropriation of e-learning, generally in light of cost and frail framework for the Web. According to Collis and Moonen (2005), some challenges encountered when trying to implement e-learning systems in schools include lack of technical expertise, and resistance to change by students and instructors. Hence, e-learning has become a vital part of tutoring mood. In addition, Sife, Lëoga and Sanga (2007) research which outlined instructors' view towards e-learning, further explains that the adequacy of executing and applying instructional innovation relies vigorously upon the attitudes of the instructors. Accordingly, the view of instructors towards innovation hugely affects their reception, and integration of innovation into their instruction and technique of learning. As a basic condition for fruitful execution, a positive view towards ICTs is generally perceived (Sife, Lëoga, & Sanga, 2007). The instructor's role is to utilize

coordinated learning frameworks effectively as a platform in the education environment.

The Technology Acceptance Model (TAM) by Davis (1986) and the theory of attitudes by Eagly and Chaiken (1993) are the key speculations that intend to explain the view of instructors towards e-learning in higher education organizations. Over the years, various researchers such as Venkatesh, Morris, Davis, and Davis (2003) based on the earlier TAM model by Davis (1986) have elaborated on the TAM model representation stating that TAM model based on the earlier works of Davis (1989; 1986), is a graphical representation showing the connection between Perceived Ease of Use (EoU) and the Attitude (A) towards the users intention, whereby an increase in users perceptions towards technological usability and accessibility, leads to an increase in their attitudes. Moreover, Holden and Rada (2011) believe that Perceived EoU is the appropriate measurement for the usability and flexibility of technologies.

In attitudes theory, social choices depend on the relationship of an individual's advantages, practices, and perceived capacities with the perspectives and assessments of partners with whom they are connected to. Thus, the contextualization of activities offered by attitudes theory is socio-mental. In this theory, attitude is seen as an emotional evaluation of conduct that permits an individual to act towards it with a specific goal in mind (Eagly & Chaiken, 1993; Garling, Gillholm, & Garling, 1998). The works of Armitage and Conner (2001) signifies that the most groundbreaking advancement throughout the whole existence of attitudes concepts is the generation of the Theory of Reason Action (TRA), which was replaced by the Theory of Perceived Behavior (TPB). Moreover, instructors' attitudes toward e-learning relies upon the

specific context and environment inside which it is to be utilized, (includes the requirements and hindrances, and the mentalities and goals of the expected users).

According to Endeley (2016), the lack of guidance and efforts to promote the education of a suitable environment leads to the poor attitudes manifested by instructors towards e-learning in the country. The supply of learning facilities, is one of the areas affected by the lack of productivity (Endeley, 2016). Recent studies of e-learning behaviors have yielded conflicting findings. Although some researchers recorded teachers' uncertain and even negative attitudes towards e-learning (Hammond & Ingalls, 2003), studies by Tani and Nformi (2016) suggested positive attitudes towards e-learning, which is followed by a confidence in teachers' fundamental value of e-learning in Cameroon Schools. Then again, a developing exploration of Endely (2016) proves that perception and view of instructors are continuously improving in a positive way toward e-learning.

Kisanga (2016) expects to evaluate the attitudes of instructors towards more prominent technology (e-learning) in Tanzanian higher institutions. As indicated by the random sampling technique, 258 teachers from four higher learning organizations were associated with the report. The information was examined utilizing SPSS and the chi-square test which was directed to analyze the connections between factors. The study discoveries demonstrated that instructors assumed a positive role in their attitudes towards e-learning and utilization of PCs. This examination advocates that instructors should train in e-learning in order to broaden their comprehension of e-learning.

In addition, Kataria and Mishra (2019) conducted an exploration that introduced discoveries on the examination of educator students' attitudes towards e-learning. A

random sampling technique was used from different B.Ed. Universities in Punjab, which included 300 teacher-trainees (150 males and the latter half confirmed to be females). At the first and second stages, basic skills such as measures of core tendencies and the importance of the difference between the means were computed respectively. The examination results indicated that there was a considerable distinction in the attitudes of the Punjab students-instructors and that gender significantly affected their view towards e-learning.

Also, Tuparova, Tuparov, Ivanov, Karastranova, and Peneva (2006) concentrated on the attitudes of instructors towards learning courses at Bulgarian Universities. The after-effects demonstrated that instructors have an inspirational (positive) view towards learning innovation (e-learning), with PCs and the internet assuming a significant part in their perspectives. The after-effects of this paper depended on poll reactions from instructors and learners, and 210 instructors from higher education organizations in Bulgaria, which was the objective populace.

Furthermore, as indicated in research of Krishnakumar and Rajesh (2011) on discoveries on attitudes of instructors of advanced education towards e-learning, a questionnaire was utilized to gather information from a focused population, which comprised of instructors of advanced education in Tamil Nadu. Differential analysis and two-way analysis of variance was used as statistical techniques and the SPSS package was also used to enable data analysis. In the findings of this study, a favorable attitude of teachers towards e-learning was revealed and teachers who were familiar with computers, information, and communication technology had different attitudes towards e-learning than those without familiarity. Despite government efforts in the supervision of education through enhancing instructions, the educational system of Cameroon still faces challenges which includes; poor knowledge on technology, inadequate training, low self-esteem, lack of constant internet connectivity, excessive cost of internet and digital devices, frequent power outage, inadequate knowledge and skills in e-learning (Chiatoh & Chia, 2020). E-learning is considered to have brought about innovation and a change in regular instruction in the field of schooling. The expanded need and utilization of PC network and the internet are generating a moving environment for instruction. E-learning is a perpetual advantage for imminent instructors as they need to manage their bustling lives by accomplishing practical work at school, college, or Universities and so forth.

Furthermore, Moluayonge (2020) carried out a study on technology (remote learning), its implementation and use in higher education institutions in Cameroon with focus on learners and how to exploit the wide variety of educational technologies in order to create a theme for remote learning, however, little or none research was carried out on attitudes towards e-learning especially instructors' attitudes. Thus, this study is being carried out in order for instructors to have an elaborate knowledge and skills on instructional technologies and their use because limited information on the subject is being provided.

In our today's world technology is rapidly growing, and it is important to assess instructors' attitude towards e-learning. Previous studies carried out indicate that, instructors' attitudes towards e-learning in higher education establishments in Buea have not been adequately studied and limited information was uncovered. Further, this research was carried out in instructors since instructors and their attitudes are the key components for the successful implementation and use of instructional technologies (e-learning). These problems led to the research on instructors' attitudes towards elearning in University of Buea in this study.

### **1.1 Aim of Study**

The study aims at assessing instructors' attitudes towards e-learning with emphasis on the University of Buea, Cameroon.

### **1.2 Research Questions**

The proposed thesis will attempt to answer the following research questions:

1. What are instructors' attitudes towards e-learning in the University of Buea?

2. Is there any relationship between instructors' teaching experience and instructors' attitude towards e-learning at University of Buea?

3. Is there any relationship between instructors' gender and instructors' attitude towards e-learning at University of Buea?

### **1.3 Significance of the Study**

This study is important to instructors who are willing to acquire adequate knowledge on e-learning as an instructional tool, hence, improving instructors teaching methods through e-learning.

This study is of great significance to the University because it will improve the University's knowledge on how instructors perceive e-learning, and also determines the level to which instructors can be receptive towards e-learning implementation and use, and also help them to improve certain parts that may be problematic.

In conclusion, this study will provide useful information for future researchers on instructors' attitudes in different places like Cameroon towards e-learning in the literature, which is a contributing factor to growth of the educational field and the field of instructional technologies.

### **1.4 Limitation of the Study**

The study was restricted to registered instructors in all Faculties at University of Buea during the 2020-2021 fall semester.

#### **1.5 Important Terms**

**ICT:** ICT is defined as an equipment, tool or application which allows interaction or transmission to exchange or collect data and covers anything from radio to satellite imagery to mobile telephones or electronical money transfer. ICTs cover traditional means of communication (e.g., telephones, television, radios) and mobile communications, internet and mobile apps, and artificial intelligence (El Bilali, Bottalico, Palmisano, & Capone, 2019).

**Attitude:** Attitude refers to the way of feeling, thinking, behavior or a metal position with regards a fact or state. It also means the way an individual behaves towards others or how they portray their character in the society. Attitude is about the probability of executing and embracing those behaviors (Hao, 2004).

**E-learning:** E-learning is described as a component of learning theories that combine training and learning on a permanent basis. Instructors need to consider the utilization of e-learning as another technique in the classroom to help learners learn (Bahhouth & Bahhouth, 2011).

**Theory of Reasoned Action (TRA):** According to Otieno, Liyala, Odongo and Abeka (2016), it is a model used by social psychologist to understand and predict human

behavior though a series of related concepts and hypothesis. The theory is based on the assumption that people typically carry on in a reasonable way, as the name of the theory implies; that is, they assess accessible information and think about the ramifications of their actions.

**Technology Acceptance Model (TAM):** The TAM model is utilized to foresee whether another innovation will be embraced by people, gatherings, or associations and was introduced by Davis (1989). TAM was drawn from the Theory of Reasoned Action (Ajzen & Fishbein, 1980) and in its easiest structure suggests that perceived ease of use, perceived usefulness, attitude toward use, and behavioral intention will foresee real utilization of technology (Mortenson & Vidgen, 2016).

**Perceived Ease of Use (PEoU) and Perceived Usefulness (PU):** As the TAM model suggests, people's intention to utilize information technologies are resolved by two conviction structures: PU, is the conviction that one's use of data advances will improve their work execution and PEoU, is the conviction that no important efforts will be saved to utilize information technologies. PU and PEoU are two theoretical designs that are the fundamental determinants of system use (Rahmi, Birgoren, & Aktepe, 2018).

## Chapter 2

## LITERATURE REVIEW

This section centers on assessing related writing as it concerns this postulation. In this chapter, it reviews the work of different analysts in this field including the conceptual review, theoretical review, and related research.

#### **2.1 Conceptual Review**

#### 2.1.1 Concept of Instructors' Attitudes

Attitude drawn from different explores as per Utami (2017), can be characterized as the availability to respond to specific object in a surrounding as an enthusiasm for the object or the response of a person to an object in the surrounding investigation of those object is business. Components discovered to impact instructors' view towards e-learning have been investigated in a few examination (Can & Yildirim, 2013; Yilmaz & Bayraktar, 2014). Writing has broken factors influencing instructors' attitudes towards two groupings: inside and outside components (Teo, 2009). Inside contemplations incorporate instructors' internal feelings about innovation that is, their favorable and unfavorable view of technology, albeit outer components incorporate subjective norms, structure of the organization, technical factors, for example, unpredictability of innovation (Weller, 2007), and ecological variables (or conditions that encourage, for example, information and communication technology (ICT) infrastructure, ICT features and support, and many more) (Chien, Wu, & Hsu, 2014). Literature additionally connects instructors' views through their attributes (interceded factors, for example, gender and teaching experience) (Dong & Zhang, 2011). It is

broadly concurred that attitudes are the good or adverse sensations of an individual about completing the objective activities. Attitudes is about the ability to succeed and accept those propensities (Hao, 2004). The positive or negative view of instructors towards e-learning can prompt web-based learning, using progressed specialized techniques for study, which impacts their conduct (Venkatech, 2000; Zanna & Rempel, 1988). Investigating the perspectives of future instructors towards e-learning will likewise help survey the degree to which the e-learning framework is utilized (Ong & Lai, 2006). In light of e-learning, Martinez (2004) proposed that it may be useful for instructors to help train prospective teachers in a bid to evaluate their attitudes towards e-learning.

Studies have been done to look at the impact of socioeconomics on imminent instructors' perspectives towards e-learning. Also, past exploration examined have added to the formation of the machine, inner segments, and e-learning attitudes in an instructive climate by certain socio-segment components, for example, sex, financial components, such as, monthly pay, educational level, or other cognitive components (Nassuora, 2012). As Ndume, Tilya, and Twaakyondo (2008) mentioned, poor attention skills, poor communication skills, low confidence levels, and absence of trust in the effective utilization of innovation or clashing plans might be the cause of the negative views towards e-learning. The target guidance and mindfulness training are in all probability expected to build up an inspirational view among prospective instructors and improve the perspectives of people about e-learning.

The perspectives of researchers towards e-learning are noticeable in many research findings (Robertson, Calder, Fung, Jones, & O'Shea, 1995). However, both students and instructors in developing countries have particular e-learning idealism (El-Gamal

& El-Aziz, 2011). Nassoura (2012) laid emphasis on the uplifting attitudes towards elearning of numerous students and instructors, and can consequently, affect their inspiration and confidence positively. It can be considered that e-learning has acquired advancement the field of schooling and changed traditional strategies into an advanced academic methodology. The expanded accessibility and utilization of computers and the web are creating a changing environment in education (Chen & Tseng, 2012).

#### 2.1.2 E-learning

The technology training and use of data using electronic PCs is referred to as Information and Communication Technology (ICT). However, ICT alludes to technologies that are being utilized for gathering, putting away, altering, and passing on data in different structures. ICT is of enormous assistance and essential in all regions of instructing and learning. Internationally, ICT is one of the recognized learning and instructing environment today and as one of the critical specialists of globalization. Schooling around the globe is encountering significant outlook changes in instruction under the umbrella of ICT empowered learning environment (Akpabio & Ogiriki, 2017). These days, learners are encircled and associated with data technologies because, they interface with digital media all over, and utilizing those media turns out to be a habit. To put it plainly, they underestimate innovation as a focal point of their lives. Even though no technology is intended to replace the educator, the fast advancements in new technologies (ICTs) will further change the manner in which information is created, gained, and conveyed. Web-based media working together with systems administration, sharing, and producing information and substance, are all highlights of extraordinary incentive concerning advanced education (Bakeer, 2018).

E-learning is an innovation that supports teaching and learning by means of PC web technologies. E-learning is web empowered learning. It provides quicker learning at

decreased expenses, expanded admittance to learning, and clear responsibility for all members in the learning system (Johnson, 2011).

There is a prompt need to join e-learning into the general instruction program. The learners selecting education as a calling should be given a more extensive and broad awareness to training by e-learning (Davies, 2002). Through e-learning programs, they won't just obtain vital ideas of philosophy, psychology, sociology, and gender-based investigations, but e-recreations and e-games that will give them commonsense awareness to the school and classroom (Shazli & Asma, 2015). Alodail (2016), Qutechate, Almarabeh, and Alfayez (2005) characterized e-learning as a utilization of PC networks to forward data to learners.

Ojaste (2013) research focused on the need of applying e-learning in handiwork showing dependency on learners' input. Additionally, the research highlighted few benefits of e-learning such as improving learning and teaching process. Moreover, the survey utilized for their research was email and MS excel. The advantages of elearning utilization comprise of helping learners' accomplishments, adaptability, saving time and material assets (Ojaste, 2013).

According to Greenagel (2002), e-learning supports the nature of combining text, sound, and the software for a multimedia computer, which leads to inspiring and spiking the interest of students, advancing the improvement of fundamental abilities, and improving instructor readiness. It is conceivable to utilize striking moving pictures to give complex and real content that will connect with learners in the learning interaction. Instructors ought to know about the sorts of gadgets proper for classroom instruction. As indicated by Bahhouth and Bahhouth (2011), their research was carried

out to discover the meaning of web-based learning and the effect of education. The researchers characterized e-learning as a part of the joint speculations of adult instruction and sustainable learning which is comprised of "coordinating and analytical capabilities, basic reasoning, critical thinking abilities, oral and composed correspondence, communication with colleagues and teachers, and taking activities" (Bahhouth & Bahhouth, 2011).

In order to provide better opportunities for learners, e-learning integration together with instructor, printed materials, and other supplementary educational materials is advised, where e-learning which is considered as the digital factor, instructor known as the human factor, and printed materials indicated as the printed factor, may join forces and supplement one other in providing comprehensive information and learning (Shazli & Asma, 2015). This can out-perform a large number of the traps of traditional classroom lesson, for example, exhausting slides, unexciting discourse, and two-dimensional representation. An outstanding functionality of e-learning is that the new programming allows you to create a powerful learning environment that is able to overwhelm the material. In such manner, an instructor adjusts to constant expert development in the utilization of educational technology (Sagar & Bagga, 2007).

In this sense, instructors must be skillful to utilize the prospects that ICT offers, particularly a different learning setting, emphasis on the learners, giving them a few sorts of cooperation, offering various levels of control of their learning, and promote collaborative responsibility (Salman, 2012). In this manner, the instructor must (i) take a glance at the subject material in another manner and reconsider promotions to follow an innovative delivery of the course, (ii) improve computational abilities by perceiving the strength and shortcoming components, (iii) form a positive e-learning attitude, (iv)

permit learners to set objectives and plans for them, (v) experience the diverse learning styles of the learners (Shazli & Asma, 2015).

The digital learning model is teaching that occurs by means of an online platform, with irregular face-to-face gatherings called Hybrid (blended) learning. These days, learners take web-based learning classes to enhance their ordinary class learning. The interactions between the instructor and learners are via chats and feedback forms help to improve the teaching-learning process (Rubin & Wessely, 2020). This will eliminate the presence of a physical classroom setting though not totally. In this method, the students are interested to submit assignments or any other simple projects on their own and increase their contribution level of the particular units. The students also chat with their peers through messages or voices as per their willingness and interest in the contents.

According to researchers Zheng, Fan, Yu and Liang (2020) study, they investigated the online supported communication technologies between the instructors and learner's environment and concluded that the internet learning environment is more effective than face-to-face environments. Additionally, it was found out in result drawn from Senthilkumar (2012) study that, the feedback session is necessary for the online learning process.

Dumford and Miller (2018) point out that the maintenance of learner's retention and their attitudes towards online learning is a key challenge. However, Sheffield, McSweeney, and Panych (2015) supported online learning and the learner's positive attitudes and conclusion were made that online learning improves their retention of subjects.

Some of the research works done on online learning and its positive attitude also continues in the future (Huang, Zhang, & Liu, 2017; Joo, So, & Kim, 2018), and the effectiveness of online simulation training towards nurses in medical education involved the need for the flipped classroom (Kim, Park, & O"Rourke, 2017). These researches are upheld by the attitudes towards web-based learning, curiosity in internet learning, and adequate impact towards web-based learning. From the contemplations of this examinations, it can be concluded that web-based learning courses are fundamental in the instructive field. Moreover, researches have analyzed students' and instructors' perspectives towards internet learning encounters in the Coronavirus time frame which will shape their persistent goal to learn on the web (Hebebci, Bertiz, & Alan, 2020).

Computer generated reality and expanded classrooms today permit us to make more communication between the educator and understudies (learners) near an actual classroom-like experience, as could really be expected. The difficulties however, are limited to the utilization of numerous e-educating and e-learning applications. The applications (for example, Google homeroom, Zoom, Simple Class, Go to Meeting, Google Meet, Hang-outs, Remind, Slack, Free telephone call, and numerous other) have been validated to extend to the understudies beyond what many would consider possible. Online learning is a temporary substitute aid during the Covid-19 period, which we are facing, as many businesses and professions are in one way or the other being affected by the Coronavirus pandemic (Donthu & Gustafsson, 2020).

#### **2.2 Advanced Education in Cameroon**

The Higher Education (HE) method operates inside the setting of the 1993 reforms. The government introduced a major overhaul of the HE system between 1992 and 1993, with funding issues and there was a drop in quality at the University of Yaoundé. Presidential decrees No 92/074 of 13 April 1992, no 93/026 of 19 January 1993, no 93/034 of 19 January 1993 and No 93/027 of 19 January 1993 included the amendments. The goals outlined in these decrees included: (a) the promotion of stakeholder participation in the management and support of Universities, (b) the enhancement of autonomy, (c) the professionalization of the higher education sector, (d) concentration and (e) the strengthening of the inter-University and international cooperation, academic and administrative problems, and management concerns. A crucial factor in the changes was the freedom of Universities to raise additional project funds (Fonkeng, 2010). The Cameroon HE system structure was generally Frenchdesigned before the 1993 changes. Before 1993, the higher education framework comprised of the primary (University of Yaoundé) with a few other Universities, professional/specialized schools, and instructive establishments and centers were absolutely isolated from or completely stuck in the University. The University had 40,000 campus students thirty (30) years after it was established, which was initially scheduled for 5,000 students (Njeuma, et al., 1999).

University of Yaoundé is Cameroon's only University at the 1993 changes, that was experiencing a rapid increase in the number of learners, poor ratios of teachers to student and associated adverse effects on the quality of their education and success rates. The budget of the University was primarily spent on students' welfare (more than 43%), to the detriment of the primary education and research missions allocated below 1.5% of the recurring budget. Four-little University centers, on the other hand had been under-used because of the restricted scope and nature of their services. For instance, Buea University had facility capacity for 2,000 students however just 60 students registered in its single school (the School of Interpreters and Translators). In

its tiny School of Food Technology, the University Center of Ngaoundere has only 306 students, and had a space for over 2,000 students. Just 555 people were registered with over 4,000 students at Dschang University Centre. University of Yaoundé programs have been primarily established in line with the French system and students have been mostly taught in French since it is a bilingual institution. This has created access and success issues for English-speaking students.

The first internal policy and regulatory system, controlled the framework of University reforms of 1993, although the changes seemed to have concentrated mainly on resolving the issue of overcrowding and access at the time by creating more Universities and addressing their associated funding problems, it could, in any case, be contended that the cultural critical thinking segment was understood in the changes, however it was less expressed until 2001. The 1993 reforms administered some level of financial autonomy to the newly created Universities at the time and empowerment funding for their massive enrolment (Shu, 2018). Although Universities have interpreted the social service role of higher education in different ways over the years, some, if not most, Universities have planned the use of University competencies to solve social issues for sustainable socio-economic growth. The social support role of Cameroon's higher education system was later outlined and codified in the 2001 higher education orientation reforms in Cameroon. In addition to the organization and distribution of science, cultural and technical information, under the orientation statute, the higher education system in Cameroon has the fundamental mission of promoting national development efforts and the autonomy of Universities (UNESCO, 2006).

Cameroon's higher education system consisted of a two-degree system, under French and Anglo-Saxon systems before 2008. In response to stresses from regional integration and globalization, the versatility between the two sub-systems had been harmonized in line with the bachelor, master and doctor-level frameworks (BMD). The BMD (Bachelor, Master, and Doctoral period of 3+2+3 years) method, which is present in the Anglophone system today, is known as the Francophone structure (UNESCO, 2006). Since 2008, this system has been the latest and comparable degree system that is still operational.

#### **2.3 Theoretical Review**

The theoretical review examined theories relevant to analyzing instructors' attitude towards e-learning: an example of higher education institutions in Cameroon. The theories reviewed in this study included: The Technology Acceptance Model (TAM) by Davis (1986), and the Attitude Theory (Eagly & Chaiken, 1993).

#### 2.3.1 The Technology Acceptance Model (TAM) of Davis (1986)

The Technology Acceptance Model is a theory in information systems that forecasts how technology is adopted and used by the customer. The model consists of four structures: external variables, utility perceived, perceived user friendliness and attitude towards e-learning. The usefulness perceived implies how much an individual accepts that utilizing a specific framework would improve their work execution, and perceived ease of use implies how much an individual accepts that utilizing a specific framework would be liberated from exertion (Davis, 1986). Two developments from the TAM model namely behavioral intension and actual system use (Davis, 1986), were excluded from the reasonable structure since use of e-learning was yet in its earliest stage as at the time (Sanga, Magesa, Chingonikaya, & Kayunze, 2013), and along these lines, the attitude was chosen to be a dependent variable. The investigation depends on the TAM, as characterized in the figure beneath by Davis (1986).

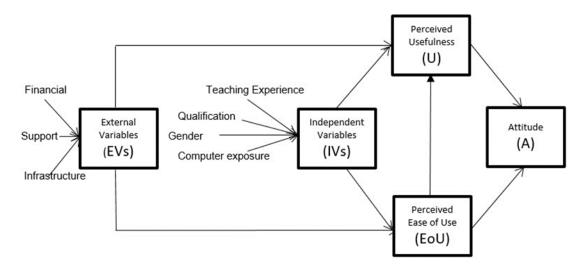


Figure 2.1: The study's conceptual framework (Sources: adjusted from Davis, Bagozzi and Warshaw, 1989)

The outer variable, EV, is proposed in this model to mediate effect on attitudes with a single directional arrow reflecting the one-way influence of the two constructs. This can mean that the presence of outer factors in this model is gainful, this means that it is inaccurate to expect that instructors just accept e-learning out of their availability and utility. Despite its utility, instructors may deny e-learning for reasons identifying with external factors. External factors are factors working in an actual circumstance and, in this examination, consisted of perspectives identified with infrastructural challenges; financial constrains; specialized, and administrative help. To intervene, the effect of perceived usefulness and perceived ease of use on attitudes were mediated through the independent variables (teaching experience and gender). How instructors perceived the usefulness of this examination was estimated by e-learning benefits, while perceived ease of use was measured by how instructors decipher the utilization of PCs in e-learning. Nevertheless, Rogers (2003) and Kisanga (2016) argued that

computer recordings for each individual's degree of use of personal computers may measure the adoption of an innovation related to communications technology.

TAM model is valuable for both expectation and explanation, as in the researchers may identify factors prompting the adoption or non-acceptance of e-learning through the user's internal convictions or different critical factors, and find reasonable remedial measures or clarifications for that choice (Kitchenham, Brereton, Charters, & Budgen, 2010). The TAM model is not difficult to expand and confirm, though the impacts of the utilization of the all-inclusive TAM models are likewise perceived as exact indicators of both adoption and use (Legris, Ingham, & Collerette, 2003).

#### 2.3.2 Attitude Theory (Eagly & Chaiken, 1993)

The behavioral choices in theory of attitudes depends on the association of interest, views and individuals' perceptions of others with whom he or she is connected with. The contextualization of behavior is provided by attitude theory, consequently it is socio-psychological. A subjective evaluation of attitude in this theory characterizes a disposition that makes individuals to behave in a certain way to it (Eagly & Chaiken, 1993; Garling, Gillholm, & Garling, 1998). The development of the Reasoned Action Theory (TRA) and its replacement, the Perceived Behavioral Theory (TPB), has been a basic stage in the advancement of Attitude Theory (Armitage & Conner, 2001). The two theories depend on the possibility that behavior rely together upon inspiration (goal) and capability (behavioral control) (Ajzen, 1987; 1991). Nonetheless, TRA operationalization acts, experimentally, as an intermediary between behavior and behavioral attitudes. The goal is not depending solely upon attitudes but also on subjective norms or social pressures that have been applied significantly to behavioral behavioral behaviors such as guardians and friends (Fishbein & Ajzen, 1975).

The theory of planned behavior postulated by Ajzen (1991) was broadened by the TRA include two behavioral control factors. Moreover, perceived behavioral control is the certainty an individual needs to embrace a specific behavior in a specific circumstance. This idea is not the same as a location of control as applied, by Mokhtarian and Salomon (1997), which is summed up and thus a more decontextualized hope that stays stable across circumstances and forms of action (Ajzen, 1991). Perceived behavioral control is known to directly affect aim and behavior (Ajzen, 1991). Actual behavioral control alludes the accessibility of mandatory opportunities and resources, such as, time, cash, and other participation, that directly affects behavior. Since this construct is often hard to measure, perceived behavioral control is ordinarily utilized as a proxy for actual behavioral control in the attitude theory (Eagly & Chaiken, 1993). Gazmend, Arta, and Rovena (2018) believed that perceived behavioral control and actual behavioral control have a relationship (Garling, Gillholm, & Garling, 1998).

### **2.4 Related Research**

Abdullah (2016) explored the attitudes of instructors towards the utilization of elearning at the College of Education in Albaha University, Saudi Arabia. In order to determine the attitudes of instructors, 41 respondents were involved. The study showed a need computer for education. The findings indicate that the perceptions of men and women in the use of classroom learning have greatly differed. The observations revealed that, there have been statistically relevant difference in the attitudes whereby the female group had more positive attitudes than male.

Gazmend, Arta and Rovena (2018) analyze the perception of instructors' attitude towards e-learning in higher education in Macedonia Case Study: University of Tetovo. This research examined 49 teachers at the University of Tetovo, Macedonia, teaching in 2 main departments. The results suggested that large number of instructors support the proposal of merging the current method of teaching with elearning, although a substantial number of instructors' do not agree to substitute elearning for the traditional teaching method. There is no important connection between the attitudes of teachers towards different gender- and faculty-based e-learning. The discoveries show that the attitudes of instructors assume a significant part in e-learning over the span of education.

Furthermore, Bahiti and Farizi (2018) did an examination which pointed towards the influence of lecturers' demographic factors on their attitudes towards e-learning in Macedonian higher education institutions. The researchers emphasized that the instructor/teacher is perhaps the main part in e-learning integration. 49 lecturers from two significant schools at the University of Tetovo Macedonia were investigated in this examination. The study utilized questionnaires in the collection of data and was being analyzed using numerous statistical techniques, including SPSS, t-test, one-way ANOVA, and correlation analysis. The after-effect of this examination shows that instructors have high (positive) attitude e-learning and that their attitudes don't differ greatly from personal variables (gender, faculty and age), but instead, there were significant differences with variables including teaching experience and e-learning experience. The researchers also proposed that it might be of future interest for academic, administrator and decision makers to include planning, designing and implementing e-learning Policies in Macedonian institutions.

Additionally, a study was conducted by Hussain, Hashmi, Abid, and Zahid (2018) on the attitudes of prospective instructors towards e-learning. It was emphasized that elearning is associated with the ability to share information and materials through different electronic gadgets. Based on this study, cross-sectional survey was carried out and 60 imminent instructors at the Punjab higher educational institution in, Lahore, Pakistan. A 30-point questionnaire consisting of a five-point Likert-Type scale with an alpha = 0.78 coefficient of reliability was developed for the data analysis. In analyzing the data, the researchers used descriptive and inferential statistics techniques and the results revealed that gender had no significant difference in attitude toward elearning.

Moreover, an exploration completed on the faculty employees' attitudes towards elearning at Zanjan University of medical science. The attitudes of 69 employees of the Zanjan University of medical science towards e-learning in this cross-sectional examination while utilizing aa random sampling technique. Information collected was via the utilization of questionnaires which incorporated the demographic data of the faculty members, abilities, access to PC, and standard Mishra attitude. This data was additionally analyzed using the chi-square tests and using descriptive analysis. The aftereffects of the investigation show that computers and computer skills are accessible. A total of 54 persons (78.3%) portrayed a positive attitude towards elearning. This results therefore reflects an appropriate capacity of the faculty members and an effective implementation and usage of e-learning programs in Zanjan University of medical science (Maleki, Faghihzadeh, & Najafi, 2015).

According to Moluayonge (2020), the occasions that prompted higher education organizations to depend on distant learning in order to guarantee continuation of the teaching and learning process was the Coronavirus. The first Coronavirus case found in Cameroon was in March 2020, which prompted some degree of instability in the domain of instruction. The focus point of this examination was on the utilization of

current instructional technology in distant learning in higher education institutions during a pandemic (Coronavirus). In this examination, the researcher targets uncovering proposals on the utilization of instructional technology for distant learning in Cameroon and furthermore proposed to the public authority, investors, policymakers, and instructors a few recommendations in the successful execution of e-learning in higher education institutions in Cameroon.

Despite the fact that e-learning is a well-known instructive environment, insignificant exploration has been done on agrarian instructors' attitudes towards this sort of instructing and learning environment. Hence, the researchers investigated agricultural instructors' perspectives toward e-learning in Iran. In their study, a distinct relationship study approach was utilized, information was gathered using surveys which was circulated among 64 instructive centers and 175 teachers gave reactions in these questionnaires. The discoveries from this research after a statistical analysis exhibited a positive attitude that instructors have towards utilizing e-learning with the help of instructional technology. Dependent on the discoveries of this investigation the researchers further proposed rules for the development -learning environments in agrarian-based education. More significance is given to intrinsic incentives and motivators for the acknowledgment towards utilizing e-learning as opposed to extrinsic incentives and motivators (Mohammadi, Hosseini, & Fami, 2011).

Chiatoh and Chia (2020) conducted a study aimed at portraying the attitude of English instructors' utilization of the web for instruction and their teaching experiences on internet during the time of Coronavirus. Due to the COVID-19 imposed lockdown in March 2020, there was a prime ministerial decision for staff/lecturers including those on the Utilization of English projects in higher institutions of learning in Cameroon to

change to web-based learning. Additionally, a survey was utilized to gather information from 30 utilization of English staff individuals from the University of Bamenda and Buea. The numerical data was analyzed using simple frequencies while the non-numerical data were analyzed descriptively. Results from this study highlights English language teachers' firm view that internet-based tools have the potential to facilitate both general learners and English language learners' display of 21<sup>st</sup> century skills as well as English language skills. However, there wasn't much acknowledgement regarding the successful integration of internet-based tools. The challenges enlisted by the subjects in this study include limited information and communication technology competence, lack of adequate training on how to teach online, poor internet connection, power failures, and high costs of internet subscription. The researchers finally recommended that e-learning should be effectively integrated as a post-pandemic pedagogy for use of English staff in both Universities under study.

## Chapter 3

## **METHODOLOGY**

This chapter described the methods and procedures adopted by the researcher to carry out the study. This section includes the research method, participants, data collection tool, data analysis, and validity and reliability.

### **3.1 Research Method**

A quantitative research method with the application of a survey approach was used in this study. As per Yilmaz (2013), quantitative exploration was characterized as explanation phenomenon as per numerical information which are broke down via mathematically based strategies, particularly statistics. The researcher went further to clarify the term from a more extensive point of view as a kind of experimental examination into a social phenomenon or human issue, while testing theories comprising of variables estimated in numbers and analyzed with statistics in order to decide whether the theory clarifies or predicts the phenomena of interest. A survey approach permits the researches to utilize samples from which conclusions are made. It is one in which gathering of individuals are analyzed by collecting and investigating data from the few individuals who are viewed as representatives of the whole population and the outcomes are generalized to the entire population at the end. A survey research approach defined by Ponto (2015), as a collection of information from individuals (considered as participants) with comparable objectives through their answers to questionnaires. The survey was carried out using a questionnaire in order to assess the instructors' attitudes towards e-learning in the University of Buea.

#### **3.2 Participants**

The University of Buea has 11 faculties/schools which incorporates; Faculty of Education, Faculty of Arts, Faculty of Science, Faculty of Social and Management Sciences, Faculty of Health Sciences, Faculty of Agriculture and Veterinary Medicine, Advanced School of Translation and Interpretation, College of Technology, Faculty of Engineering and Technology, Faculty of Law and Political Sciences, Higher Technical Teachers Training College Kumba. At the beginning of this study, the researcher attempted to reach all the instructors teaching in the fall 2020-2021 semester in various faculties, schools, and college at the University of Buea, however, because of the Coronavirus, only 100 instructors were available and agreed to participate willingly. The teaching staff was examined on the grounds that the study targets instructors' attitudes towards e-learning in the school. The researcher utilized the convenience sampling design. As indicated by Etikan, Musa, and Alkassim (2016), convenience sampling is a sort of non-probabilistic sampling approach where the final objective of the investigation is to include persons from the target population who comply with certain practical standards, such as, easy to access, geographical proximity, accessibility at a certain time, or the willingness to participate. The decision of the inclusion of staff as participants in this investigation was a direct result of their contribution in online teaching as a result of the Coronavirus pandemic with the conviction, that they will provide the information that will best enable and respond to the research questions.

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Faculty Name	Frequency (f)	Percentage (%)
Advanced School of Translation and Interpretation (ASTI)	5	5.0
Faculty of Agriculture and Veterinary Medicine (AVM)	6	6.0
Faculty of Engineering and Technology (E.T)	14	14.0
Faculty of Arts (F.ART)	1	1.0
Faculty of Arts (F.ART)	12	12.0
Faculty of Education (F.EDU)	6	6.0
Faculty of Engineering and Technology (F.ET)	1	1.0
Faculty of Science (F.SC)	17	17.0
College of Technology (F.TEC)	2	2.0
Faculty of Health Sciences (H.SC)	12	12.0
Higher Technical Teachers Training College (HTTC)	8	8.0
Faculty of Social and Management Sciences (SMS)	16	16.0
Total	100	100.0

Table 3.1: Number of instructors according to faculty/school/college

As shown in Table 3.1, it was uncovered in the overview that 100 instructors took an interest in this research from various faculties/schools/colleges in the University of Buea. 5% (5 instructors) came from Advanced School of Interpreters and Translators (ASTI), 6% (6 instructors) from the Staff of Agriculture and Veterinary Medication (AVM), 14% (14 instructors) coupled with another 1% (1 instructor) from Faculty Of

Engineering and Technology (E.T and F.ET),12% (12 instructors) plus 1% (1 instructor) came from Faculty of Art (F.ART), 6% (6 instructors) from Faculty of Education (F.EDU), another 17% (17 instructors) emanated from Faculty of Science (F.SC), 2% (2 instructors) came from College of Technology (F.TEC), also a good number of 12% (12 instructors) came from Faculty of Health Science (H.SC), some instructors 8% (8 instructors) came from Higher Technical Teacher Training College (HTTTC) and the last set came from the Faculty of Social And Management Science (SMS) with 16 instructors making 16%.

Gender	Frequency (f)	Percentage (%)
Male	63	63.0
Female	37	37.0
Total	100	100.0

Table 3.2: Distribution of instructors gender

Table 3.2 above, shows that 100 instructors from the University of Buea were involved in the survey, out of which 63% were made up of male (63 instructors) and the rest of the participants 37% were female (37 instructors) precisely.

The slightly high percentage of male instructors revealed in this survey is due to the fact that male instructors are commonly dominated in higher institutions in some African countries with evidence from Kisanga (2016), Bahiti and Farizi (2018) although researcher Hussain, Hasmi, Abid and Zahid (2018) speculate that more females are dominated in higher institutions.

Frequency (f)	Percentage %
33	33.0
36	36.0
22	22.0
9	9.0
100	100.0
	33 36 22 9

Table 3.3: Distribution of instructors teaching experience

Table 3.3 shows information on participants according to the number of years they have been active in the field of education that is their teaching experiences. 33 instructors indicated that they have been active for 0-5 years (33%), 36% of them said that they have been active for 6-10 years (36 instructors), 22% of them have 11-15 years (22 instructors) teaching experience while the last 9% (9 instructors) have an above 15 years teaching experience according to the survey statistics. By implication, the highest number of instructors are those who have worked (teach) between 6-10 years in the educational field.

Table 3.4: Distribution of ins	tructors qualifications	
Highest qualification	Frequency (f)	Percentage (%)
Higher diploma	3	3.0
Bachelor's degree	16	16.0
Master degree	41	41.0
Doctorate degree	40	40.0
Total	100	100.0

Table 3.4: Distribution of instructors qualifications

The information from Table 3.4 revealed that in the research data collected with respect to the participants, 3 instructors had a Higher diploma which made up 3% of

the sample population, 16 instructors had a Bachelor's degree (16%), 41% of them had a Master's degree (41 instructors), while the last set 40% had a Doctorate degree (40 instructors).

Exposure to computer	Frequency (f)	Percentage (%)
Yes	94	94.0
No	6	6.0
Total	100	100.0

Table 3.5: Instructors exposure to computer

According to the illustrations in Table 3.5 showing computer exposure of the participants, the majority participants (94 instructors) affirmed "YES" to the fact that they are exposed to computers making 94% out of the total population of 100 instructors. On the other hand, only 6 instructors indicated that they are not exposed to computers 6% responses indicating "NO". With the above statistics, it is clear that most of the active teaching staff of the University of Buea are exposed and have knowledge of computers.

Computer in the office	Frequency (f)	Percentage (%)
Yes	85	85.0
No	15	15.0
Total	100	100.0

Table 3.6: Instructor has computer in the office

Table 3.6 above, illustrates statistics showing that instructors have computer in their office, 85 (85%) instructors out of 100 instructors affirmed "YES" to the fact that they

have computers in their office and on the other hand, 15 (15%) instructors indicated that they do not have computers in their office with "NO". Due to this statistic, there is a clear indication that most of the active instructors from the University of Buea have computers in their office because of the affirmed in their responses.

Computer at home	Frequency (f)	Percentage (%)
Yes	81	81.0
No	19	19.0
Total	100	100.0

Table 3.7: Instructor has computer in their home

According to Table 3.7 which shows illustrations based on whether instructors from the University of Buea, have computers at home, 81 instructors affirmed "YES" for having computer at home making 81% out of the 100-total population, while minority of the participants 19 (19%) instructors indicated they don't have computers at home with "NO". The means that majority of the instructors are familiar with computers and interact with it at the comfort of their space (at home).

## **3.3 Data Collection Tool**

The instrument that was used for data collection was a closed-ended questionnaire. This survey was made up of two sections, the demographic and the Test of e-Learning Related Attitude (TeLRA) scale. The first part is demographic and it includes pieces of information such as the name of faculty/school/college, gender, computer exposure, and teaching experience. The TeLRA scale developed by Kisanga (2016), originally scaled from 1-Strongly Disagree (SD), 2-Disagree (D), 3- Agree (A), and 4-Strongly Agree (SA). In this research, the scale given to participants was in the order of 1-Strongly Agree (SA), 2- Agree (A), 3- Disagree (D), and 4- Strongly Disagree (SD). The scale consisted of 36 items; however, 19 items were reverse type items aimed at assessing instructors' attitudes through instructors' experiences, and gender (These items were reverse-coded when the analysis was carried out. The TeLRA Scale used in this research can be seen in Appendix B).

#### **3.4 Data Analysis**

The entire data gathered for the study was examined using the descriptive analysis method with the use of IBM SPSS Statistics, Version 23 software. One-Way ANOVA, t-test, percentage (%), and frequency (f), were used to analyze the data collected. The descriptive analysis is a technique that is used to summarize a given data by explaining the relationship between variables represented either in a sample or an entire population in the form of variable and measurements of frequency, central tendency, variation, and positions (Kaur, Stoltzfus, & Yellapu, 2018). Frequency and descriptive analysis were used to demonstrate the results obtained about the individual research item variable.

## **3.5 Validity and Reliability**

Original research finding conducted by Kisanga (2016) was determined to have a Cronbach's alpha value of 0.857. A high Cronbach alpha value is considered a major factor in research validity and reliability (Tavakol & Dennick, 2011). For this research, an inner consistency test on the reliability coefficient of the TeLRA scale (i.e., 36 items of Cronbach alpha value) was administered and 0.826 was revealed as the results.

# **Chapter 4**

# **FINDINGS AND DISCUSSION**

In this chapter, the findings and the analyzed results of the data are given according to the research questions.

# 4.1 Instructors' Attitudes towards E-learning in the University of Buea

able 4.1: Instructors' positive or negative attitudes towards e-learning		
TeLRA Scale	Percentage (%)	
Instructors' positive attitudes	66	
Instructors' negative attitudes	34	

Table 4.1 above, illustrates instructor attitude towards e-learning is positive in general. Also, as seen in Table 4.1 when looking at the positive and negative attitudes towards e-learning, the study revealed 66% of the instructors' had positive attitude, while 34% of the instructors had negative attitudes towards e-learning.

Generally, the instructors' attitudes towards e-learning was generally positive and is further explained in subsequent tables below for each item.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	41	41.0
ITEM1	Agree	10	10.0
	Disagree	3	3.0
	Strongly disagree	46	46.0
	Total	100	100.0

Table 4.2: Instructors' attitude on e-learning being very economical for educational institutions to adopt

It can be observed in Table 4.2 that 51% of the instructors agreed to the way that elearning adoption is efficient for instructive organizations. Then again, 49% of the instructors disagreed on the idea of e-learning being very economical for educational institutions. The result is almost neutral and this is because of the provision of some online learning equipment like computers and internet present in the University to facilitate learning. More so, since instructors are interested in gaining more skills, knowledge and use of e-learning systems, it can be concluded that e-learning may be less economical for them. However, it is quite expensive for institutions to adopt elearning due to the huge financial and infrastructural resources that are required during its implementation in the institution. Furthermore, institutions should look for government support and further team up with private sectors for the execution of electronic learning to be triumphant (Kisanga & Ireson, 2015).

It can be concluded in findings from Kisanga and Ireson (2015), which is contrary to this study that, in regards to barriers of e-learning adoption in higher institutions, lack of finance is one of the major problems faced by higher institutions in most developing countries since the cost of implementing e-learning infrastructures (hardware, software, and support) is high for institutions to adopt.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	58	58.0
ITEM 2	Agree	25	25.0
	Disagree	9	9.0
	Strongly disagree	8	8.0
	Total	100	100.0

Table 4.3: Instructors believe that the utilization of e-learning will improve the quality of my work

Illustrations from Table 4.3, show that 83% of the instructors affirmed their belief that e-learning utilization will the improve their quality of work, while the minority, 17% of the instructors show that they do not accept that the utilization of e-learning will enhance their work quality. The result shows a high level of positivity in their responses and instructors have a firm belief that value of work will be improved via the use e-learning, this is due to the fact that e-learning provides a wide variety of instructional material and techniques which when effectively utilized by the instructors will yield an improvement in their work.

In essence, the result is similar to that of Samsudeen and Mohamed (2019) which indicates that e-learning positions the best teachers to convey information supported by the most recent updates, helps delivers lectures to various students, giving a chance to engage and cooperate with experts, and furthermore permit these experts to evaluate student's progress simultaneously, which subsequently improve the instructors' value of work.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	53	53.0
ITEM 3	Agree	31	31.0
	Disagree	11	11.0
	Strongly disagree	5	5.0
	Total	100	100.00

Table 4.4: Instructors' opinion the use of computers, which makes their work more interesting

Table 4.4 shows statistics on the use of computers, which shapes the job of instructors to become more interesting. 84% of the instructors affirm that computers make their work more interesting and 16% of the instructors disagree that computers do not make their work more interesting. This outcome shows the positive level in the responses is high and a continuous utilization of PCs (both home and office) makes the instructors' work more fascinating, this is as a result of combining lecture materials together with the use of PCs, which is speculated to improve the quality of instruction.

Additionally, the results gotten from this research is in line with the study of Wilson, Martinez, Mills, et al. (2018), which revealed that online lectures with visuals from the instructor is found to be interesting and enjoyable by both the learners and the instructors and it is believed to be a format that facilitates teaching and learning.

	Statement	Frequency (n)	Percentage (%)
	Strongly agree	27	27.0
ITEM 4	Agree	40	40.0
	Disagree	21	21.0
	Strongly disagree	12	12.0
	Total	100	100.0
	Total	100	100.0

Table 4.5: Instructors attitudes on their preference of reading articles in e-learning

Statistics from Table 4.5 above reveals that 67% of the instructors agreed that they preferred reading articles in e-learning, while the remaining 33% responded negatively to the preference of reading articles in e-learning. The result shows a high level of positivity in the responses and the findings revealed that, most instructors prefer reading articles in e-learning which is essential because it allows instructors to study more in order to acquire knowledge and improve their ability to deliver content (lectures).

Conclusively, results derived from this finding is similar to that of San-Martín, Jiménez, Rodríguez-Torrico, and Piñeiro-Ibarra (2020) revealed that the rule in faceto-face education is no longer followed, therefore the instructor who is the essential provider of information in a traditional setting, turns into the facilitator of a wide range of resources which permits learners to become active participants in knowledge development. Hence, it is necessary for participants (instructors) to have personal commitment to this educational tool (like reading articles in e-learning) in order to enrich their experiences.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	25	25.0
ITEM 5	Agree	23	23.0
	Disagree	42	42.0
	Strongly disagree	10	10.0
	Total	100	100.0

Table 4.6: Instructors attitude on the ease of revising electronic educational materials than printed material

Table 4.6 above illustrates instructors' ease of revising educational materials electronically than printed materials. 52% of the instructors expressed their disagreement with this idea, implying that it is not easier for them to revise electronic educational material than printed material and the remaining 48% affirmed that it is easy for them to revise electronic educational material than printed materials. The results show that instructors show a slightly high level of negativity in their responses and the findings of this research shows that instructors do not like to utilize electronic assets to update instructional material but rather prefer printed materials. This is credited to the fact that although electronic assets are simpler and quicker to utilize, printed material are still mostly preferred due to inadequate skills and knowledge on the use of electronic devices.

In conclusion, findings from Hilton (2016) contradicted this study and suggests that the overall increase in expense of higher education and course readings have prompted studies substituted to open educational resource (OER) by instructors for business course readings as an essential educational plan. The outcomes show that learning is generally achieved by both instructors and learners, when OER is being utilized saves significant money and time. However, some instructors and students still prefer traditionally printed material despite their cost, because they trust in their quality.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	34	34.0
ITEM 6	Agree	50	50.0
	Disagree	9	9.0
	Strongly disagree	7	7.0
	Total	100	100.0

Table 4.7: Instructors' attitude on the preference of utilizing a computer to prepare my lessons

Illustration from Table 4.7 show that 84% of the instructors affirm the preference of computer utilization in order to prepare their lessons. On the other hand, 16% of the instructors exhibited disagreement in their responses to the preference of using computers to prepare their lessons. The results indicate very high positive responses and since the event of the Coronavirus, most instructors utilize PCs to set up their lessons because computers are available to them both at home and in their offices. Moreover, they had learned to effectively utilize them since learning is presently done electronically via instructional technologies (e-learning).

Furthermore, results gotten from this research is contradictory to that of McCulloch, Hollebrands, Lee, Harrison, and Mutlu (2018), where the findings from their research revealed that how well the technology aligns with the objective of the lesson depends on how the technology is being utilized in the lesson. Moreover, the instructor must take into consideration the ease of use for both themselves and the learner when selecting a tool for their lesson.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	27	27.0
ITEM 7	Agree	15	15.0
	Disagree	30	30.0
	Strongly disagree	28	28.0
	Total	100	100.0

Table 4.8: Instructors feeling of being uncomfortable while reading a text book on a computer screen than a physical text book

Table 4.8 illustrates instructors feeling of being uncomfortable when reading a textbook on the computer screen than on a physical textbook. 58% of the instructors generally differ and by suggestion, it implies that they feel good studying a course book on a PC screen than an actual reading material while 42% of them confirms that they feel awkward perusing a course reading on a PC screen than an actual reading material. The instructors indicated a negative response, which reveals that instructors are bit by bit dealing with the reality that, e-learning has as of late become part of the instructional framework, hence they have begun to feel great with reading instructional materials on a PC screen than textbooks. The outcome show that instructors do not feel awkward reading a textbook on a computer screen because they are familiar with computers and these computers are also available and accessible for use from their home or offices. It can therefore be concluded that instructors do not experience an awkward feeling when reading on a computer.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	26	26.0
ITEM 8	Agree	36	36.0
	Disagree	16	16.0
	Strongly disagree	22	22.0
	Total	100	100.0

Table 4.9: Instructors' attitudes on their enjoyment when they teach using computers

Table 4.9 shows the distribution of instructors who enjoy teaching with the use of computers. 62% of instructors agree with this item indicating that they enjoy teaching using computers, on the other hand, 38% of the instructors disagreed with this item, which shows that they do not enjoy teaching when they make use of computers. The findings of this research indicate positive responses from the instructors, it further uncovers that because technology consideration in teaching and learning is quickly assuming control over the instructive environment, computers are available for easy use, and instructors therefore enjoy obtaining knowledge and delivering instructions via the use of PCs.

Conclusively, findings from this research in line with the discoveries from researchers Maharaj-Sharma and Sharma (2017), where the researchers emphasize that learners and instructors generally enjoy the teaching and learning process when they use ICT. However, they believe that for both instructors and the learners, ICT loses its appeal when its use is unreasonable and ill planned.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	17	17.0
ITEM 9	Agree	14	10.0
	Disagree	46	46.0
	Strongly disagree	23	23.0
	Total	100	100.0

Table 4.10: Instructors' attitudes on the difficulty in delivering a lecture through electronic technologies

Table 4.10 presents statistics that indicates whether instructors agreed or disagreed that delivering a lecture with electronic devices is difficult. 69% of instructors disagreed with this statement, which means that it is easy to deliver a lecture through electronic technology, this means that a high percentage of instructors found it easy to deliver lectures through electronic technologies. On the other hand, the remaining 31% agreed with this statement, which shows that they believe delivering lectures through electronic technologies is very difficult. This implies that only a small part of instructors agree that it is easy to deliver lectures through electronic technologies. Furthermore, results of this study show that majority of the instructors disagreed with this statement, which means that technology in education is rapidly progressing, and majority of the instructors no longer think it is hard to deliver instruction utilizing these technologies used for instruction in the institution.

In addition, result from this study is different from that of Kisanga and Ireson (2015), which shows that most partners / instructors need to have sufficient knowledge on e-

learning technologies, which makes it difficult for them to utilize technology in delivering instructions.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	18	18.0
ITEM 10	Agree	2	2.0
	Disagree	30	30.0
	Strongly disagree	50	50.0
	Total	100	100.0

Table 4.11: Instructors' opinion on expensive technical support being required in elearning

The above Table 4.11 reveals that 80% of instructors disagree on the fact that elearning requires expensive technical support while the remaining 20% of instructors agree that e-learning requires expensive technical support. The results from the study reveal that instructors' responses are highly negative. According to the research findings, most instructors indicate that expensive technical support is not required in e-learning, this is due to the fact since they possess some knowledge on e-learning, they also know about e-learning and its operational activities.

Contrary to the findings of this research, the findings from Riahi (2015) study in contradiction to this study reveal that e-learning systems require hardware and software in the way applications are developed, and access have been changed by cloud computing technologies. Thus, an e-learning framework that is dependent on cloud computing infrastructure is practical and can enhance investment efficiency and power of management. This eventually transforms e-learning frameworks into a virtual circle, accomplishing a mutually advantageous arrangement among users and

providers. By suggestion, e-learning requires some costly specialized equipment and programming applications support and improve the effectiveness of the e-learning frameworks.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	30	30.0
ITEM 11	Agree	30	30.0
	Disagree	20	20.0
	Strongly disagree	20	20.0
	Total	100	100.0

Table 4.12: Instructors' opinion on e-learning reducing the quality of knowledge attained

Table 4.12 above is aimed at determining if e-learning diminishes the nature of knowledge attained by instructors. 60% of instructors confirm that e-learning decreases their nature of attained knowledge, however, 40% of instructors indicated that e-learning doesn't reduce their nature of knowledge attained. The results from the study reveal that instructors' responses are slightly high positive, and upon examining the results it is determined that although some instructors indicate that e-learning does not reduce their nature of information attained, majority of instructors actually indicate that it reduces their quality of knowledge attained because the instructors with more teaching experience are reluctant to make use of the variety of online materials at their disposal.

Moreover, contrary to findings of this study, Tawafak, Romli, Malik, Shakir, and Farsi (2019) research revealed that e-learning has a wide array of instructional materials to improve the knowledge gained by the instructors and learners, where the findings from

their research compared e-learning to traditional learning and it was revealed that elearning helps improve learners' academic performance and learning outcome while improving in teaching methods and acquired data.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	24	24.0
ITEM 12	Agree	25	25.0
	Disagree	31	31.0
	Strongly disagree	20	20.0
	Total	100	100.0
	ITEM 12	ITEM 12 Agree Disagree Strongly disagree	Strongly agree     24       ITEM 12     Agree     25       Disagree     31       Strongly disagree     20

Table 4.13: Instructors' attitudes on how frustrating interaction with computer system is

Table 4.13 illustrates the interaction of instructors with the computer systems. 49% of instructors affirm that interacting with computer is often times frustrating, on the other hand 51% of the instructors disagreed in their responses stating that they do not believe that interacting with computers is frustrating. Results from this finding was almost neutral, which means that the findings of this research revealed that instructors don't feel frustrated or dissatisfied while using PC frameworks, because majority of instructors have some level of exposure to computers. Nonetheless, some instructors expressed that they feel frustrated when utilizing PC frameworks.

In conclusion, findings from this research shows that frequent utilization of PC frameworks by instructors reduces the sense of frustration encountered when interacting with computers.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	18	18.0
ITEM 13	Agree	1	1.0
	Disagree	31	31.0
	Strongly disagree	50	50.0
	Total	100	100.0

Table 4.14: Instructors' attitudes regarding face-to-face method being more learnercentred than E-learning methods

As demonstrated in Table 4.14 above, majority of the instructors are strongly against the idea of face-to-face method of instruction being more student-centric than elearning environment as indicated by 81% of the instructors who disagreed. On the other hand, 19% of the instructors are optimistic and agree that face-to-face method of instruction provides a more student-centric environment than when e-learning is used for instruction. Moreover, the findings of this research indicates that when it involves creating a student-centric environment, instructors prefer using e-learning for instruction over face-to-face method of instruction because in e-learning environments more attention is placed on the students instead of the instructors, and the job of the instructor is mainly to act as a facilitator and to provide feedback unlike the face-toface method where the instructor is mainly responsible for the learning process.

Similar to the findings of this research is that of Venkatesh et al. (2020), where the findings of their research suggested that e-learning environments are more learnercentered since individualized learning is allowed, collaborative learning is encouraged and it realigns the role of the educator as a facilitator not a disseminator in the instruction and learning process.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	56	56.0
ITEM 14	Agree	27	27.0
	Disagree	3	3.0
	Strongly disagree	14	14.0
	Total	100	100.0

Table 4.15: Instructors' attitudes on the belief utilizing e-learning technologies will improve their job performance

Table 4.15 illustrates statistics from the belief that utilization of e-learning innovations will improve the work performance of instructors. 83% of instructors agreed that they trust e-learning technologies will improve their work execution. On the other hand, 17% of instructors disagreed with this statement, which implies that they do not believe their work performance will be improved when they use e-learning innovations. The levels at which instructors agree with this statement is very. The study showed that consistent use and association with e-learning technologies may consequently improve the instructors' work performance, because the job performance of the instructors may be assessed from the academic performance of their students, therefore, when students have a good performance academically via the use of e-learning, then the instructors also have an improved performance.

Conclusively, in line with the findings of this study, is the results from Suresh, Vishnu Priya, and Gayathri (2018) research on e-learning, where it was discovered that when e-learning technologies were used, instructors' performances improved.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	42	42.0
ITEM 15	Agree	30	30.0
	Disagree	9	9.0
	Strongly disagree	19	19.0
	Total	100	100.0

Table 4.16: Instructors' opinion on communication through social networks being fun

Table 4.16 illustrates instructors' communication through the use of social networks. While 72% of the instructors agreed that it is fun communicating through social networks, 28% of instructors disagreed with this statement indicating that communication through social networks is not fun for them. As demonstrated in the findings of this study, majority of the instructors agreed with this statement that communication through social networks is fun. While a small number of instructors do not care about communications via social networks, majority showed that it is fun speaking with one another through social networks, because communicating through social networks is networks, because communicating through social networks is networks.

Conclusively, similar to this research, results from Zachos, Paraskevopoulou-Kollia, and Anagnostopoulos (2018) study revealed that the utilization of online social networking platforms had a positive effect on University instructors, however, not all instructors enjoy using social networking platforms.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	37	37.0
ITEM 16	Agree	30	30.0
	Disagree	7	7.0
	Strongly disagree	26	26.0
	Total	100	100.0

Table 4.17: Instructors opinion on their love for reading magazines on new technology innovations

Table 4.17 reveals statistical results based on instructors' love for reading magazines on new technology innovations. 67% of instructors agreed that they like to read magazines on new technology, while 33% of instructors disagreed with this statement implying that they don't like to read magazines on new technology innovations. In reference to the findings of this study, it is determined that instructors enjoy reading magazines that are technologically inclined. A contributing factor to this is the ability to attain necessary information regarding technologies to improve their instruction.

	Statement	Frequency (f)	Percentage (%)
ITEM 17	Strongly agree	23	23.0
	Agree	22	22.0
	Disagree	40	40.0
	Strongly disagree	15	15.0
	Total	100	100.0

Table 4.18: Instructors view on how tiresome teaching through e-learning is

As seen in Table 4.18, 45% of the instructors believe that when teaching is done via elearning, they feel tired. On the other hand, 55% of instructors responded in disagreement which implies that they do not feel tired when they teach using e-learning facilities. The findings indicate a negative level response from instructors based on their utilization of e-learning. This shows that when instructors use e-learning facilities to teach they do not feel tired. A contributing factor to this is the fact that most of the work is done online, hence, less effort is required.

	Statement	Frequency (f)	Percentage (%)
ITEM 18	Strongly agree	23	23.0
	Agree	15	15.0
	Disagree	44	44.0
	Strongly disagree	18	18.0
	Total	100	100.0

Table 4.19: Instructors' attitudes on how e-learning increases learners' social isolation

Table 4.19 demonstrates instructors' attitudes on how e-learning increases learners' social isolation. Based on the above statistics, 38% of instructors affirm the fact that the believe e-learning increases learners' social isolation while 62% of the instructors disagreed, which shows that they do not believe that e-learning increases learners' social isolation. The results suggest that instructors had negative responses, which is a strong indicator that instructors do not believe e-learning environments are capable of increasing learners' social isolation because with e-learning technologies, learner to learner interaction is still possible.

Conclusively, a different result was determined by Ali and Smith (2015) in reference to learners' performances between vis-à-vis courses and online courses where it was discovered that the performance of learners in face-to-face courses were lower than how they performed using e-learning technologies, however, a contradiction from the research implied that there was a high pace of withdrawal for students in online courses than face to face courses. This was as a result of the social isolation learners felt among themselves.

	Statement	Frequency (f)	Percentage (%)
ITEM 19	Strongly agree	21	21.0
	Agree	21	21.0
	Disagree	35	35.0
	Strongly disagree	23	23.0
	Total	100	100.0

Table 4.20: Instructors view on how difficult it is to utilize e-learning technologies

Table 4.20 illustrates statistics showing the instructors' attitudes on how hard elearning innovations are to utilize. As indicated in Table 4.20 above, 42% of instructors agreed with this statement indicating that it is actually difficult to use e-learning technologies (i.e., they find the technology not easy or complex to use), while 58% of instructors disagreed with this statement, stating that e-learning technologies are easy to use, which means that participants found it easier to use e-learning technologies. Discoveries from this study reveals that instructors disagree with the statement, which implies that they believe e-learning technologies are easier to utilize since it is one of the most widely used way to deliver information/instruction and knowing how to utilize these technologies are very important for instructors.

	Statement	Frequency (f)	Percentage (%)
ITEM 20	Strongly agree	18	18.0
	Agree	30	30.0
	Disagree	28	28.0
	Strongly disagree	24	24.0
	Total	100	100.0

Table 4.21: Instructors' attitudes on whether computer systems utilization requires a lot of mental effort

Table 4.21 illustrates instructors' attitudes on whether using computer systems require lots of mental efforts. Based on statistics, 48% of instructors affirm that a lot of mental effort is required when using computer systems, while 52% of instructors expressed disagreement, indicating that using computer systems do not require mental efforts. Findings from this study revealed almost neutral responses from instructors. Outcomes resulting from this research indicates that mental efforts are not required when instructors make use of computers since instructors are familiar and exposed to computer applications and processes on computers either at home or in their offices.

In conclusion, contrary to this study findings, researchers Lin and Kao (2018) study determined that e-learning encourages users' mindfulness of mental efforts in a webbased learning setting and is also used to empower programmed input, however, mental efforts is necessary to know how to use e-learning.

	Statement	Frequency (f)	Percentage (%)
ITEM 21	Strongly agree	33	33.0
	Agree	34	34.0
	Disagree	17	17.0
	Strongly disagree	16	16.0
	Total	100	100.0

Table 4.22: Instructors' attitudes on discussions using e-learning technologies are uninteresting

According to statistics in Table 4.22, 67% of instructors affirmed that discussions using e-learning technologies are not interesting, however, 33% of the instructors disagreed with this statement, implying that discussions conducted using e-learning technologies are interesting. The results show a moderately high level of agreement from instructors for this item. The outcome further implies that instructors do not have interest in facilitating discussions using e-learning technologies because instructors with more experience in the field may be resistant to change, hence, they don't accept the use of e-learning technologies for having discussions.

courses to early out e-rearring				
ITEM 22	Statement	Frequency (n)	Percentage (%)	
	Strongly agree	24	24.0	
	Agree	26	26.0	
	Disagree	5	5.0	
	Strongly disagree	45	45.0	
	Total	100	100.0	

Table 4.23: Instructors' opinion on their institution having enough teaching-learning resources to carry out e-learning

The illustration of Table 4.23 above shows statistics on instructors' attitudes towards institutions having sufficient teaching and learning assets to execute e-learning. Based on the results of this item, equal responses from instructors were derived. 50% of instructors agree with this statement that their institution has sufficient teaching and learning assets to execute e-learning while the remaining 50% of instructors disagreed with this statement implying that their institution does not have sufficient teaching and learning assets to execute e-learning activities. The results of this study reveal that instructors respond neutrally, which indicates that the University of Buea is adequately equipped with instructional materials to conduct e-learning, however, these resources may not be enough for all the instructors to use.

Furthermore, findings from Ngala, Fongod, Orock, Ayuk, and Njenwi (2019) study similar to this study revealed that the distance education program is achieving its objectives at the University of Buea with regards to inputs, processes and output stages of implementation.

In conclusion, results from Mustafa Radif (2019) similar to this study proves that resources available in the schools are not enough, however, instructors do not adequately utilize the available resources. Consequently, instructors were found to have prior knowledge on e-learning efficiency for pedagogy although the institutions had inadequate support mechanism for e-learning.

	Statement	Frequency (n)	Percentage (%)
	Strongly agree	43	43.0
ITEM 23	Agree	26	26.0
	Disagree	7	7.0
	Strongly disagree	24	24.0
	Total	100	100.0

Table 4.24: Instructors' attitudes on how e-learning use will increase teachers' efficiency

Statistics on Table 4.24 above illustrates instructors' attitudes on how the use of elearning will enhance their efficiency. 69% of instructors state that e-learning will actually improves their efficiency level. On the other hand, 31% of instructors disagreed, indicating that their efficiency level will not be improved through the use e-learning. The findings indicate a high positivity. With reference to result derived from the study, it can be concluded that instructors are idealistic about their productivity being improved through e-learning since they constantly make use elearning to deliver instruction, hence, an improvement in their skills and knowledge of e-learning may be attained.

Table 4.23. Instructors view on their excitement while working with computers			g with computers
	Statement	Frequency (f)	Percentage (%)
	Strongly agree	47	47.0
ITEM 24	Agree	27	27.0
	Disagree	6	6.0
	Strongly disagree	20	20.0
	Total	100	100.0

Table 4.25: Instructors' view on their excitement while working with computers

Table 4.25 illustrates instructors' excitement when they work with computers. While 74% of instructors agreed that working with computers is exciting for them, the remaining 26% expressed disagreement, which indicates that working with computers is not exciting for them. The outcome shows a high level of positivity in the responses derived from instructors. The instructors' excitement level are high when they work with PCs because it may allow them to explore, learn, communicate with each other while acquiring more skills.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	38	38.0
ITEM 25	Agree	33	33.0
	Disagree	9	9.0
	Strongly disagree	20	20.0
	Total	100	100.0

Table 4.26: Instructors' attitudes on their love for discussions about new e-learning innovations

According to statistics illustrated on Table 4.26, 71% of instructors affirm to their love for discussions about new e-learning technologies, on the other hand, 29% of the instructors disagreed that they do not like new e-learning technologies and discussions associated to it. In regards to findings from this study, instructors' responses were found to be positive and more instructors enjoyed talking and staying optimistic about e-learning innovations, since new e-learning technologies emerge with advance teaching and learning techniques which when implemented effectively may yields a tremendous result in the process of education and learning. In essence, results from Subramani and Iyappan (2018) similar to this study, acknowledge that advanced pedagogy has become a means to upgrade the presentation of the instruction. The researchers went further to say that it is basic to apply creative teaching and learning strategies if the spirits of instruction need to be motivated and aroused. The role of education in the context of this study is for the academic staff (instructors) to teach what should be taught and that students should become rapidly familiar with the expected standards (alter in e-learning).

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	27	27.0
ITEM 26	Agree	13	13.0
	Disagree	36	36.0
	Strongly disagree	24	24.0
	Total	100	100.0

Table 4.27: Instructors' attitudes on the difficulties in supporting learners in an elearning environment

Illustrations in Table 4.27 demonstrate instructors' attitudes on the difficulties of supporting learners in an e-learning environment. 40% of instructors affirmed that it is quite hard for them to give support to their learners in an e-learning environment, while 60% of instructors expressed disagreement which implies that it is easy for them to provide support to their learners in an e-learning environment. The outcome of this study reveals a slightly high negative response from instructors. It was concluded in reference to this item that, it is easy for instructors to provide adequate support for learners in an e-learning environment since much work may not be required from the instructor who is considered as facilitators in the e-learning process.

Conclusively, findings from Sadeghi (2019) different from this study reveals that it is difficult to support learners in e-learning environment since learners may face problems with assignments and need follow ups. This result may be due to the difficulties for both parties encountered by both parties to communicate with each other.

	Statement	Frequency (f)	Percentage (%)
ITEM 27	Strongly agree	27	27.0
	Agree	13	13.0
	Disagree	36	36.0
	Strongly disagree	24	24.0
	Total	100	100.0

Table 4.28: Instructors' attitudes on how expensive e-learning infrastructure is for the government to afford

Statistics of e-learning infrastructures being very expensive for the government to afford is illustrated on Table 4.28 above. 40% of the instructors affirms that e-learning infrastructures are very expensive for the government to afford. On the other hand, 60% of instructors differed, implying that although e-learning infrastructures are very expensive, it can still be afforded by the government. The findings of this study revealed a slightly negative response from instructors. In addition, outcome proves that e-learning infrastructures are not actually costly for the public authorities to purchase since grants may often be provided by the government to Universities.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	45	45.0
ITEM 28	Agree	8	8.0
	Disagree	25	25.0
	Strongly disagree	22	22.0
	Total	100	100.0

Table 4.29: Instructors view on how difficult it will be for them to become skilful through the utilization of e-learning tools

Illustration in the above Table 4.29 shows instructors' attitudes on how hard it is to become skillful when utilizing e-learning technologies. 53% of instructors agreed with this statement that it is difficult for them to gain skills through the use of e-learning technologies, while 47% of instructors disagreed with this statement, which implies that believe it is easier for them to be experts through e-learning technologies. The outcome shows that most instructors agreed with this statement, which means that when instructors' utilize-learning technologies, it is harder for them to master their sills. Nevertheless, a good number of instructors remained hopeful and convinced that the utilization of e-learning technologies may enhance their skills.

Statement	Frequency (f)	Percentage (%)
Strongly agree	27	27.0
Agree	4	4.0
Disagree	48	48.0
Strongly disagree	21	21.0
Total	100	100.0
	Strongly agree Agree Disagree Strongly disagree	Strongly agree27Agree4Disagree48Strongly disagree21

Table 4.30: Instructors' attitudes towards making frequent errors when using a Computer

Table 4.30 illustrates instructors' attitudes towards making frequent errors when using a computer. The results show that instructors believe errors are frequently made when using computers as indicated by the 31% of instructors who agreed. 69% of the instructors disagreed, implying that instructors do not frequently make errors when using computers. According to this study, instructors portray high level of negativity in their responses, this means that instructors hardly make mistakes while utilizing computers due to the availability of computer to them.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	47	47.0
ITEM 30	Agree	12	12.0
	Disagree	25	25.0
	Strongly disagree	16	16.0
	Total	100	100.0

Table 4.31: Instructors' attitudes on the feeling of frustration while utilizing a computer at home

Table 4.31 illustrates instructors' attitudes on the feeling of frustration while utilizing computers at home. The result revealed that 69% of instructors affirm that they feel frustrated when they use of computers at home. On the other hand, 31% of instructors disagreed, which implies that instructors do not feel frustrated while utilizing computers at home. The study reveals high positivity level in the responses gotten from instructors which means that when University instructors make use of computers at home, they feel frustrated. A reason for this may be the level of knowledge and skills they have on utilizing computers.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	55	55.0
ITEM 31	Agree	27	27.0
	Disagree	8	8.0
	Strongly disagree	10	10.0
	Total	100	100.0

Table 4.32: Instructors' attitudes on how the use e-learning technologies will allow them accomplish more work than would otherwise be possible

According to Table 4.32, 82% of instructors affirm that e-learning technology will allow them to do more work than traditional techniques can do. 18% of these instructors indicated in their responses otherwise, implying that more work will be accomplished utilizing traditional methods than e-learning technologies. Results from the illustration above show a relatively high positive response from instructors, which means instructors are highly optimistic about e-learning being able to increase their level of productivity since it may be cheaper, easier and faster to work with e-learning technologies than traditional methods.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	22	22.0
ITEM 32	Agree	31	31.0
	Disagree	10	10.0
	Strongly disagree	37	37.0
	Total	100	100.0

Table 4.33: Instructors' attitudes on how much they enjoy computer games

The above illustration on table 4.33 demonstrates instructors' attitudes on how enjoyable computer games can be. 53% of instructors agreed that they enjoy computer games very much, while 47% of instructors disagreed with this statement, which implies that they do not enjoy computer games very much. Based on the findings of this study, most instructors agreed with their responses to this statement. In addition, majority of the instructors indicate that they actually enjoy playing computer games since it may act as a relaxation strategy for them or it is part of an instruction.

ITEM 33	Statement	Frequency (f)	Percentage (%)
	Strongly agree	19	19.0
	Agree	7	7.0
	Disagree	26	26.0
	Strongly agree	48	48.0
	Total	100	100.0

Table 4.34: Instructors' view on e-learning being a threat to their employment

Table 4.34 illustrates instructors' attitudes on whether e-learning is a threat to their employment. 26% of instructors affirm that e-learning is a threat to instructors' employment. On the other hand, majority of the instructors indicated as 74% disagreed, stating that e-learning is not a threat to their employment because they are still actively involved as facilitators in the e-learning process. According to this study, instructors express high level of negativity in their responses and hold a strong believe that the implementation and use of e-learning in institutions is not considered a threat to their jobs, because for effective interactions between students and the content, the instructor acting as the facilitator and providing feedback must be present.

In conclusion, contrary to this study, findings from Ananga (2020) revealed that the implementation of e-learning in an institution may threaten the role of instructors acting as facilitators in the educational process.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	49	49.0
ITEM 34	Agree	29	29.0
	Disagree	10	10.0
	Strongly agree	12	12.0
	Total	100	100.0

Table 4.35: Instructors' attitudes towards e-learning providing them with better learning opportunities than traditional means of learning

Table 4: 35 shows instructors' attitudes towards the conviction that e-learning provides more learning openings over traditional methods for learning. 78% of the instructors agree that e-learning provides variety of learning opportunities over traditional methods of instruction. The remaining 22% of instructors expressed responses in contradiction, stating that e-learning does not provide them with more learning openings as that of traditional methods of learning. The results indicate high level of positivity in instructors' responses, reveals that e-learning provides a variety of learning opportunities for instructors due to the wide array of instructional materials, strategies and information available to them.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	45	45.0
ITEM 35	Agree	20	20.0
	Disagree	30	30.0
	Strongly disagree	5	5.0
	Total	100	100.0

Table 4.36: Instructors' attitudes on how unexciting they find computer online interaction

Table 4.36 illustrates instructors' attitudes on how unexciting online computer interaction can be. 65% of instructors believes that they do not find online computer interaction fascinating, on the other hand, 35% of instructors disagreed, which indicates that they find online computer interaction fascinating. Results of this research revealed instructors' responses to be positive, however, the results show that instructors' interactions online via the use computers are not fascinating. Conclusively, interactions between instructors and computers online may not be interesting because the instructors do not possess adequate knowledge and skills for online computer interactions.

	Statement	Frequency (f)	Percentage (%)
	Strongly agree	30	30.0
ITEM 36	Agree	32	32.0
	Disagree	15	15.0
	Strongly disagree	23	23.0
	Total	100	100.0

Table 4.37: Instructors' attitudes on how annoying it is to communicate through electronic mails

Table 4.37 illustrates instructor's attitudes on how annoying they feel when communicating through electronic mails. 62% of instructors affirm that it is actually annoying for them to communicate through emails, while 38% of instructors responded in disagreement, implying that communication through electronic mails is pleasant for them. It was discovered in the findings that instructors demonstrated positivity in their responses which shows that when they communicate via the utilization of emails, they find it very annoying due to certain problems associated with email interactions such as slow response time, and several spam messages sent to the instructors without prior knowledge.

Furthermore, similar to the findings of this research, results from Nikandish, Kheleva, Yin-Fah, and Chuen (2020) revealed that communication through mail is one of the most important means of communication, and using it has led to many problems in today's digital interactive world. This is because spam mails which are often received contains offensive contents or advertisements often sent to recipients without request, hence, making communication via emails very annoying.

Conclusively, the findings of this study suggests that instructors at the University of Buea generally exhibit positive attitudes towards e-learning due to reasons such as their familiarity to e-learning tools (computers) and methods. Hence, their attitudes show that they are receptive towards e-learning implementation, have little skills on elearning and are willing to learn more on how to use it. Additionally, research findings from Krishnakumar and Rajesh (2011) which is similar to the findings of this study revealed that academic lecturers exhibited positive attitude towards e-learning, and further explains that when using technology in instruction, instructors' attitude plays a vital role for positive change. Further research made by Suri and Sharma (2017) also indicated that instructors' attitudes towards e-learning was positive.

## 4.2 Relationship between Instructors' Attitudes Towards E-Learning and Instructors' Teaching Experience

The findings of this section determines if any relationship exists between instructors' attitudes towards e-learning and their teaching experience at the University of Buea. A statistical analysis was conducted to measure the effect of teaching experience on instructors' attitude towards e-learning for the varying years of teaching experience. Statistically, as revealed by the findings of this research, instructors' attitudes towards e-learning did not differ significantly for the different years of teaching experience.

Moreover, findings from this research uncovered that there is no significant difference in instructors' attitudes towards e-learning based on their teaching experience. The results derived further explain that years of experience teaching has no effect on the instructors' attitudes towards e-learning, therefore, there is no relationship between teaching experience and instructors' attitude towards e-learning. A contributing factor to this result is in relation to the fact that majority of the instructors have below 15 years of teaching experience (69%) in this case.

Additionally, the discoveries from this research is not similar to the findings of Bahiti, and Farizi (2018) where it was discovered that the attitudes of the instructors based on their different years of teaching is significantly different towards e-learning.

In conclusion, the findings of this research revealed that, there is no effect of teaching experience on instructors' attitudes towards e-learning in University of Buea.

# 4.3 Relationship between Instructors' Attitudes Towards E-Learning and Instructors' Gender

The findings of this section determines if any relationship exists between instructors' attitudes towards e-learning and instructors' gender at University of Buea. Additionally, a statistical analysis was conducted to measure gender and e-learning attitudes among instructors. As shown in the findings of this research, no significant difference was discovered on the instructors' attitude towards e-learning with respect to their gender. The implication of this discovery implies that gender had no effect on the attitudes exhibited by the instructors towards e-learning, hence no relationship exists between gender and instructors' attitudes towards e-learning.

Moreover, the result of this research is similar to that of researcher Suri and Sharma (2017) where teachers' attitudes towards computer and e-learning was examined and conclusions from their examination revealed that teachers exhibit positive attitudes towards e-learning, and no significant relation exists between the teachers' gender or faculty and their attitudes towards e-learning and computer. On the other hand, results from Alodail (2016) research differ from the findings of this research, where it was discovered that instructors' attitudes and their gender differed significantly (between male and female teachers) towards e-learning, hence, the researcher considered gender as a factor for determining and shaping instructors' attitudes towards e-learning and its use.

Conclusively, the result of this research revealed that there is no reasonable connection of both genders (male and female) on instructors' attitudes towards e-learning at University of Buea. However, it was determined that the females were less more positive but had negative attitudes as well as the males did, therefore gender was not considered as a significant determinant of instructors attitudes towards e-learning in the University of Buea.

## Chapter 5

## CONCLUSION

The purpose of this thesis was to determine instructors' attitudes toward e-learning at the University of Buea and how it relates to teaching experience and gender.

Findings at the end of the study reveals that majority of instructors have high levels of positive attitude towards the use of e-learning at the University of Buea which means that they are receptive towards e-learning implementation and its use. However, although a positive attitude was revealed in the study as indicated by 66% of the instructors, there was also some level of negativity shown by 34% of the instructors that participated in this research. Nevertheless, when taking into considerations responses from individual items, it was noticed that there was a mixture of both positive, negative, and close to neutral responses in this case. Some important results found for this research were: I believe using e-learning will improve the quality of my work 83% agreed with this item, computers make work more interesting 84% agreed with this item, I prefer using a computer to prepare my lessons 84% agreed with this item, I believe using e-learning technologies will improve my job performance 83% agreed with this item, delivering a lecture through e-learning technologies is very difficult 69% disagreed with this item, expensive technical support required in elearning 80% disagreed with this item, face-to-face method is more learner-centered than e-learning 81% disagreed with this item, e-learning will be a threat to their employment 74% disagreed with this item, my institution has enough teaching

resources to carry out e-learning 50% agreed with this item while 50% disagreed with this item.

Subsequently, the finding of this thesis also indicated that, instructors' attitudes towards e-learning are not different based on their years of experience in teaching, which proves that teaching experience is not considered as a determinant factor, hence, it has no relation with the instructors' attitudes towards e-learning at University of Buea.

More so, this research finding proves that an instructor's attitude has no significant relationship with the gender of the instructors. This suggests that the gender of the instructors (male or female) does not affect their attitudes towards e-learning at University of Buea.

Conclusively, the findings of this thesis suggests that University of Buea instructors strongly exhibit positive attitudes towards the use of e-learning, and that teaching experience and instructors gender had no impact on the attitudes posed by the instructors at University of Buea towards e-learning.

#### REFERENCES

- Abdullah, A. (2016). The Instructors' Attitudes toward the Use of E-learning in Classroom in College of Education at Albaha University. *TOJET: The Turkish Online Journal of Educational Technology*, *15*(1), 126-135.
- Abidah, A., Hidaayatullaah, H. N., Simamora, R. M., Fehabutar, D., & Mutakinati, L.
  (2020). The Impact of Covid-19 to Indonesian Education and Its Relation to the Philosophy of "Merdeka Belajar. *Studies in Philosophy of Science and Education*, 1(1), 38-49.
- Ajzen, I. (1987). Attitudes, traits, and actions: Dispositional prediction of behavior in personality and social psychology. In *Advances in experimental social psychology* (Vol. 20). Saga Publications.
- Ajzen, I. (1991). "The theory of planned behavior". Organizational Behavior and Human Decision Processes, 50, 179-211.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englwood cliffs, NJ: Prentice Hall.
- Akpabio, E., & Ogiriki, I. B. (2017). Teachers use of information and communication technology (ICT) in teaching English language in senior secondary schools in Akwa Ibom state. *Equatorial journal of education and curriculum studies*, 2, 28-3.

- Ali, A., & Smith, D. (2015). Comparing social isolation effects on students attrition in online versus face-to-face courses in computer literacy. *Issues in Informing Science and Information Technology*, 12(1), 11-20.
- Alodail, A. (2016). The instructors' attitudes towards the use of E-Learning in classroom in college of education at Albaha University. *Turkish Online Journal of Educational Technology-TOJET*, 15(1), 126-135.
- Ananga, P. (2020). Pedagogical considerations of e-learning in education for development in the face of COVID-19. *International Journal of Technology in Education and Science-IJTET*, 4(4), 310-321.
- Armitage, J. C., & Conner, M. (2001). Efficacy of the theory of planned behavior: a meta-analytic review. *British Journal of Social Psychology*, 40, 471 – 499.
- Babu, G. S., & Sridevi, K. (2018). Importance of E-learning in Higher Education: A study. *International Journal of Research Culture Society*, 2(5), 1-8.
- Bahhouth, J., & Bahhouth, V. (2011). Significance of E-learning in traditional classes. *International Journal of Education Research*, 6(2), 1-9.
- Bahiti, R., & Farizi, A. (2018). Investigation of lecturer'attitudes towards e-learning according to demographic variables. *European Journal of Engineering and Formal Sciences*, 2(1), 60-65.

- Bakeer, A. M. (2018). Effects of information and communication technology and social media in developing students writing skill: A case of Al-Quds Open University. *International Journal of Humanities and Social Science*, 8(5), 45-53.
- Breckler, S. J., & Wiggins, E. C. (1989). On defining attitude and attitude theory: Once more with feeling. In *In Attitude structure and function* (pp. pp. 407-427).
- Can, G., & Yildirim, S. (2013). A path model for technology integration into elementary school settings in Turkey. *Computers science*, 5(3), 12-23.
- Charp, S. (1997). Some reflections. the 30-year history of computers in education. *The journal*, 24(1), 8-11.
- Chen, H. R., & Tseng, H. F. (2012). Factors that influence acceptance of web-based elearning systems for the in-service education of junior high school teachers in Taiwan. *Evaluation and program planning*, 35(3), 398-406.
- Chiatoh, B. A., & Chia, J. (2020). The Covid-19 Pandemic and the Challenge of Teaching English Online in Higher Institutions of Learning in Cameroon. *Journal of English Language Teaching and Applied Linguistics*, 2(5), 35-42.
- Chien, S.-P., Wu, H.-K., & Hsu, Y.-S. (2014). An investigation of teachers' beliefs and their use of technology-based assessments. *Computers in Human Behaviour, 31*, 198-210.

- Collis, B., & Moonen, J. C. (2005). *An on-going journey: Technology as a learning workbench*. Enschede, the Netherlands: University of twente. Retrieved from https://research.utwente.nl/en/publications/an-on-going-journey-technology-as-a-learning-workbench
- Connolly, T. M., Stansfield, M., & Hainey, T. (2007). An application of games-based learning within software engineering. *British Journal of Educational Technology*, 38(3), 416-428.
- Davies, S. (2002). *Marketing in Higher Education: Matching promises and reality to Expectations*. OECD Report.
- Davis, F. D. (1986). A technology acceptance model for empirically testing new enduser information systems: Theory and results. Doctoral dissertation, Massachusetts Institute of Technology.
- Davis, F. D. (1989). Perceived usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly, 13* (3), 319-339.
- Dong, J. Q., & Zhang, X. (2011). Gender differences in adoption of information systems: New findings from China. *Computers in Human Behaviour*, 27(1), 384-390.
- Donthu, N., & Gustafsson, A. (2020). Effects of COVID-19 on business and research. Journal of business research, 117, 117, 284.

- Dumford, A. D., & Miller, A. L. (2018). Online learning in higher education: Exploring advantages and disadvantages for engagement. *Journal of Computing in Higher Education*, 6, 1–14.
- Eagly, A. H., & Chaiken, S. (1993). *The Psychology of Attitudes*. Orlando, FL: Harcourt Brace Jovanovich college publishers.
- El Bilali, H., Bottalico, F., Palmisano, G. O., & Capone, R. (2019). Information and Communication Technologies for Smart and Sustainable Agriculture. *In Scientific-Experts Conference of Agriculture and Food Industry*, 321-334.
- El-Gamal, S., & El-Aziz, R. (2011). An Investigation of the Effect of Higher Education Students. In Perception on their Readiness for E-Learning Adoption', *The 2011 International Conference on e-Learning, e-Business, Enterprise Information Systems, and e-Government WorldComp, 11*, pp. 18-20.
- Endeley, M. N. (2016). Teachers' culture and attitudes towards the implementation of inclusive education in Cameroon public secondary schools. *Imperial Journal of Interdisciplinary Research (IJIR)*, 2(10).
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. (Addison-Wesley, Reading, MA).

- Fonkeng, G. E. (2010). The History of Education in Cameroon: 1844-2010. (Revised Edition) New York: The Edwine Meeler Press.
- Garling, T., Gillholm, R., & Garling, A. (1998). "Reintroducing attitude theory in travel behavior research". *Transportation*, 25, 129-146.
- Gazmend, X., Arta, F., & Rovena, B. (2018). Teachers' Attitude towards E-Learning in Higher Education in Macedonia Case Study: University of Tetovo. *EJECE*, *European Journal of Electrical and Computer Engineering*, 2(5), 14-18.
- Greenagel, F. L. (2002). The Illusion of e-learning: why we are missing out on the promise of technology. Retrieved December 18th, 2020, from http://www.guidedlearning.com/illusions.pdf
- Hammond, H., & Ingalls, L. (2003). Teachers' attitudes toward inclusion: Survey results from elementary school teachers in three southwester rural school districts. *Rural Education Quarterly*, 22(2), 24-30.
- Hao, Y. W. (2004). Students 'Attitudes toward Interaction in Online Learning: Exploring the Relationship between Attitudes, Learning Styles, and Course Satisfaction. Retrieved from Retrieved from http://www.lib.utexas.edu
- Harris, R. W. (1999). Attitudes toward End-user Computing: A Structural Equation Model. *Behavior and Information Technology*, 18(2), 109-125.

- Hebebci, M. T., Bertiz, Y., & Alan, S. (2020). Investigation of views of students and teachers on distance education practices during the Coronavirus (COVID-19)
  Pandemic. *International Journal of Technology in Education and Science* (*IJTES*), 4(4), 267-282.
- Hilton, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Educational technology research and development*, 64(4), 573-590.
- Holden, H., & Rada, R. (2011). Understanding the influence of perceived usability and technology self-efficacy on teachers' technology acceptance. *Journal of Research on Technology in Education*, 43(4), 343-367.
- Holmes, B., Gardner, J., & Gardner, J. N. (2006). *E-learning: Concepts and practice*. London: SAGE Publications Ltd.
- Huang, L.-Q., Zhang, J., & Liu, Y. (2017). Antecedents of student MOOC revisit intention: Moderation effect of course difficulty. *International Journal of Information Management*, 37, 84–91.
- Hubackova, S. (2015). History and perspectives of elearning. *Procedia-Social and Behavioral Sciences*, 191, 1187-1190.
- Hussain, T., Hashmi, A., Abid, N., & Zahid, F. (2018). Prospective Teachers' Attitude towards e-learning: A Case of Pakistan. *International Journal of Humanities* and Social Science, 8 (2), 187-190.

Johnson, Y. (2011). incorporate e-learning into the teacher education programs.

- Joo, Y. J., So, H. J., & Kim, N. H. (2018). Examination of relationships among students' self-determination, technology acceptance, satisfaction, and continuance intention to use K-MOOCs. *Computers & Education*, 122, 260– 272.
- Kataria, M. K., & Mishra, M. (2019). Analysis Of Teacher-Trainees Attitude Towards
  E-Learning. Aayushi International Interdisciplinary Research Journal (AIIRJ), 6(5).
- Kaur, P., Stoltzfus, J., & Yellapu, V. (2018). Descriptive statistics. International Journal of Academic Medicine, 4(1), 60-63.
- Khan, B. H. (2005). *Managing e-learning: Design, delivery, implementation, and evaluation*. Hershey: PA: Information Science Publishing.
- Kim, S., Park, C., & O"Rourke, J. (2017). Effectiveness of online simulation training: Measuring faculty knowledge, perceptions, and intention to adop. *Nurse Education Today*, 51, 102–107.
- Kisanga, D. (2016). Determinants of teachers' attitudes towards e-learning in Tanzanian higher learning institutions. *International Review of Research in Open and Distributed Learning: IRRODL, 17*(5), 109-125.

- Kisanga, D., & Ireson, G. (2015). Barriers and strategies on adoption of e-learning in Tanzanian higher learning institutions: Lessons for adopters. *International Journal of Education and Development using ICT*, 11(2).
- Kisanga, D., & Ireson, G. (2016). Test of e-Learning Related Attitudes (TeLRA) scale:
  Development, reliability and validity study. *International Journal of Education* and Development using ICT, 12(1).
- Kitchenham, S., Brereton, F., Charters, H., & Budgen, T. (2010). Does the technology acceptance model predict actual use? A systematic literature review. *Information and Software Technology*, 52(5), 463-479.
- Krishnakumar, R., & Rajesh, K. M. (2011). Attitude of Teachers' of Higher Education towards E-learning. *Journal of Education and Practice*, 2(4).
- Legris, P., Ingham, J., & Collerette, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Journal of Information and Management*, 40, 191–204.
- Lin, F. R., & Kao, C. M. (2018). Mental effort detection using EEG data in E-learning contexts. *Computers & Education*, 122, 63-79.
- Maharaj-Sharma, R., & Sharma, A. (2017). Using Ict In Secondary School Science Teaching–What Students And Teachers In Trinidad And Tobago Say? *European Journal of Education Studies*, 3(2).

- Maleki, A., Faghihzadeh, S., & Najafi, L. (2015). Faculty Members' Attitude toward e-Learning Zanjan University of Medical Sciences. *Education Strategies in Medical Sciences*, 8(3), 159-164.
- Manjulika, S., & Reddy, V. (2000). *The world of open and distance learning*. Indira Gandhi National Open University, India.
- Martínez, J. G. (2004). Attitudes towards new technologies: A student perspective at Inter American University of Puerto Rico. *3*, *1*, 95-95. Ceiba.

Mason, R., & Rennie, F. (2006). *Elearning: The key concepts*. Routledge.

- McCulloch, A. W., Hollebrands, K., Lee, H., Harrison, T., & Mutlu, A. (2018). Factors that influence secondary mathematics teachers' integration of technology in mathematics lessons. *Computers & Education*, *123*, 26-40.
- Mohammadi, D., Hosseini, S. M., & Fami, H. S. (2011). Investigating agricultural instructors' attitudes toward e-learning in Iran. *Turkish Online Journal of Distance Education*, 12(1), 174-183.
- Mokhtarian, P. L., & Salomon, I. (1997). "Modeling the desire to telecommute: the importance of attitudinal factors in behavioral models."3. *Transportation Research A*, *31*, 35-50.
- Molnar, A. (1997). Computers in education: A brief history. *The journal*, 24(11), 63-68.

- Moluayonge, G. (2020). The Use of Modern Educational Technologies in Remote Learning in Higher Education During a Pandemic: the Case of COVID-19 in Cameroon. *Jornal of Learning for Development-JL4D*, 7(3), 479-484.
- Mortenson, M. J., & Vidgen, R. (2016). A computational literature review of the technology acceptance mode. *International Journal of Information Management*, 36(6), 1248-1259.
- Mustafa Radif, N. A. (2019). Computer science teacher's perception and needs towards E-learning in Iraq. *Journal of Southwest Jiaotong University*, 54(5). doi:10.35741/issn.0258-2724.54.5.42
- Nassuora, A. B. (2012). Students' acceptance of mobile learning for higher education in Saudi Arabia. *American Academic & Scholarly Research Journal*, 4(2), 1-12.
- Ndume, V., Tilya, F. N., & Twaakyondo, H. (2008). Challenges of adaptive e-learning at higher learning institutions: a case study in Tanzania. *International Journal of Computing and ICT Research*, 2(1), 47-59.
- Ngala, J. S., Fongod, G. M., Orock, T. J., Ayuk, B. M., & Njenwi, E. A. (2019).
  Evaluating distance education programme using Stufflebeam CIPP model:
  University of Buea Cameroo. *Journal of Engineering Research and Application*, 9(10-I), 1-15.

Nicholson, P. (2007). A history of e-learning. Computers and education, 1-11.

- Nikandish, A., Kheleva, I., Yin-Fah, B. C., & Chuen, P. W. (2020). A Proposed Model of Electronic Mail Communication: Content Marketing Channel among Generation Y. *TEST Engineering and Managements*, 82, 637-652.
- Njeuma, D., Endeley, H., Mbuntum, F., Lyonga, N., Nkweteyim, D., Musenja, S., & Ekanje, E. (1999). *Reforming a national system of higher education: the case of Cameroon*. Washington: ADEA-WGHE.
- Ojaste, A. (2013). E-learning in teaching handicaraft: A monitoringstudy on students. *Rural Environment Education Personality*, *6*, 324-330.
- O'neill, K. S., & O'donoghue, J. (2004). Implementing eLearning Programmes for Higher Education: A review of the literature. *Journal of Information Technology Education: Research*, 3(1), 313-323.
- Ong, C. S., & Lai, J. Y. (2006). Gender differences in perceptions and relationships among dominants of e-learning acceptance. *Computers in human behavior*,, 22(5), 816-829.
- Otieno, O. C., Liyala, S., Odongo, B. C., & Abeka, S. O. (2016). Theory of reasoned action as an underpinning to technological innovation adoption studies. *World Journal of Computer Application and Technology*, 4(1), 1-7.
- Paul, T. V. (2014). An evaluation of the effectiveness of e-learning, mobile learning, and instructor-led training in organizational training and development.
   Hampton University: ProQuest LLC.

- Ponto, J. (2015). Understanding and evaluating survey research. *Journal of the advanced practitioner in oncology*, 6(2), 168.
- Qutechate, W., Almarabeh, T., & Alfayez, R. (2005). E-learning system in the university of Jordan: Problem solving case study. *Journal of Theoretical and Applied Information Technology*, *53*(3), 353-358.
- Rahmi, B. A., Birgoren, B., & Aktepe, A. (2018). A meta analysis of factors affecting perceived usefulness and perceived ease of use in the adoption of e-learning systems. *Turkish Online Journal of Distance Education*, 19(4), 4-42.
- Riahi, G. (2015). E-learning systems based on cloud computing: A review. Procedia Computer Science, 62, 352-359.
- Robertson, S. I., Calder, J., Fung, P., Jones, A., & O'Shea, T. (1995). Computer attitudes in an English secondary school. *Computers & Education*, 24(2), 73-81.
- Rogers, U. (2003). diffusion of innovations theory and educational technology-related studies based on Rogers' theory. *Turkish Online Journal of Educational Technology*, 5(2), 14-23.
- Rosenberg, G. (2001). E-Learning: strategies for delivering knowledge in the digital age. *Performance Improvement*, 5(2), 96-116.

- Rubin, G. J., & Wessely, S. (2020). The psychological effects of quarantining a city. BMJ, 368.
- Sadeghi, M. (2019). A shift from classroom to distance learning: Advantages and limitations. *International Journal of Research in English Education*, 4(1), 80-88.
- Sagar, A., & Bagga, R. (2007). SMILE-Learning Strategy for the Digital Age. University News, 45(33), 10-20.
- Salman, G. (2012). E-Tivities: The Key to an active online learning, Kogan Page, Limited.
- Samsudeen, S. N., & Mohamed, R. (2019). University students' intention to use elearning systems. *Interactive Technology and Smart Education*, 19(3).
- Sanga, C., Magesa, M. M., Chingonikaya, E., & Kayunze, K. A. (2013). Can elearning promote participation of female students in STEM disciplines in higher learning institutions of Tanzania? *International Journal of Education* and Development using Information and communication technology (IJEDICT), 9(3), 86-102.
- San-Martín, S., Jiménez, N., Rodríguez-Torrico, P., & Piñeiro-Ibarra, I. (2020). The determinants of teachers' continuance commitment to e-learning in higher education. *Education and Information Technologies*, 25(4), 3205-3225.

- Senthilkumar, D. (2012). Performance and emission characteristics of CI engine fuelled with non-edible. *European Journal of Business and Management*, 4(6), 48-56.
- Shazli, T., & Asma, S. (2015). Educational Vision of Muslims in India: Problems and Concerns. International Journal of Humanities and Social Science Invention, 4(3), 21-27. Retrieved October 10th, 2020, from http.www.academia.edu
- Sheffield, S. L., McSweeney, J. M., & Panych, A. (2015). Exploring future Teachers' awareness, competence, confidence, and attitudes regarding teaching online. *The Canadian Journal of Higher Education*, 45(3).
- Shu, D. (2018). The 1993 Reforms Administrative and Financial Autonomy in Newly Created Universities.
- Sife, A., Lëoga, E., & Sanga, C. (2007). Neë technologies for teaching and learning: Challenges for higher learning developing countries. *Challenges for higher learning institutions in International journal of education and development using ICT*, 3(2), 5.
- Subramani, P. N., & Iyappan, V. (2018). Innovative methods of teaching and learning. *Journal of applied and advanced research*, *3*(Suppl 1), S20-S22.
- Suresh, M., Vishnu Priya, V., & Gayathri, R. (2018). Effect of e-learning on academic performance of undergraduate students. *Drug Invention Today*, 10(9).

- Suri, G., & Sharma, S. (2017). Teachers' attitude towards computer and E-learning: An exploratory study of Panjab University, Chandigarh, India. PACIFIC BUSINESS REVIEW INTERNATIONAL, 9(8), 68-73.
- Tani, E. L., & Nformi, D. J. (2016). Inclusive education in Cameroon: Dictates of learning environment on the academic participation of students with physical disabilities in the South West Region of Cameroon. *International Journal of History and Cultural Studies (IJHCS)*, 2(3), 48 – 61.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, *2*, 53-55.
- Tawafak, R. M., Romli, A., Malik, S. I., Shakir, M., & Farsi, G. A. (2019). A systematic review of personalized learning: Comparison between e-Learning and learning by coursework program in Oman. *International Journal of Emerging Technologies in Learning*, 14(9).
- Teo, T. (2009). Modelling technology acceptance in education: A study of pre-service teachers. *Computers and Education*, 52, 302–312.
- Tuparova, D., Tuparov, G., Ivanov, S., Karastranova, E., & Peneva, J. (2006).
   Teachers' attitude towards e-learning courses in Bulgarian universities.
   *Current Developments in Technology-Assisted Education, 3*, 1755-1759.
- UNESCO. (2006). Draft Document of the Sector Wide Approach to Education. Cameroon. Retrieved 2020

- Utami, C. W. (2017). Attitude, subjective norm, perceived behaviour, entrepreneurship education and self efficacy toward entrepreneurial intention university student in Indonesia. *European research studies journal, 20*(2A), 475-495.
- Venkatech, V. (2000). Determinants of the perceived Ease of Use: Integrating Control, Intrinsic Motivation and Emotion into the Technology Acceptance model 1. *Information systems Research*, 1(4), 342-365.
- Venkatesh, S., Rao, Y. K., Nagaraja, H., Woolley, T., Alele, F. O., & Malau-Aduli, B. S. (2020). Factors influencing medical students' experiences and satisfaction with blended integrated E-learning. *Medical Principles and Practice*, 29(4), 396-402.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. 425-478. MIS quarterly.
- Weller, M. (2007). Virtual learning environments: Using, choosing and developing your VLE. London: Routledge Taylor and Francis Group.
- Wilson, K. E., Martinez, M., Mills, C., D'Mello, S., Smilek, D., & Risko, E. F. (2018).
  Instructor presence effect: Liking does not always lead to learning. *Computers* & *Education*, 122, 205-220.

- Yamamoto, G. T., Demiray, U., Kesim, M., Yuzer, T. V., Demirci, B. B., & Eby, G. (2011). Türkiye'de e-öğrenme: gelişmeler ve uygulamalar. *Efil Yayınevi., Vol.* 155.
- Yapici, İ. Ü., & Akbayin, H. (2012). The effect of blended learning model on high school students' biology achievement and on their attitudes towards the internet. TOJET: The Turkish Online Journal of Educational Technology,, 11(2).
- Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European journal of education*, 48(2), 311-325.
- Yilmaz, O., & Bayraktar, D. M. (2014). Teachers' attitudes towards the use of educational technologies and their individual innovativeness categories. *Procedia - Social and Behavioral Sciences,*, 116, 3458-3461.
- Zachos, G., Paraskevopoulou-Kollia, E., & Anagnostopoulos, I. (2018). Social media use in higher education: A review. *Education Science*, 8(4), 194.
- Zanna, M. P., & Rempel, J. K. (1988). Attitudes: A new look at an old concept. In I. D.–T. (Eds.), *The social psychology of knowledge*, (pp. 315–334.).
- Zheng, S., Fan, J., Yu, F., & Liang, T. (2020). Viral load dynamics and disease severity in patients infected with SARS-CoV-2 in Zhejiang province, China, January-March 2020: a retrospective cohort study. *BMJ 2020*, 369.

**APPENDICES** 

### **Appendix A: Instructors Demographic Information**

#### **Dear Respondents**

I am a post graduate student from the Department of Computer Education and Instructional Technology at the Eastern Mediterranean University of Cyprus carrying out a study on "Instructors' attitudes towards e-learning in the University of Buea, Cameroon". The information I will gather will help realize this study. I therefore plead with you to respond to the questions. Your responses shall be treated confidentially and shall be used strictly for academic purposes. Thank you for your sincere participation.

#### **PART 1: DEMOGRAPHIC INFORMATION**

Instruction: Place a tick ( $\sqrt{}$ ) where appropriate and fill the appropriate answers in the spaces provided

1.Name of faculty/school/college: \_\_\_\_\_

**2. Gender:** Male ( ) Female ( )

3. Highest qualification: Higher Diploma () Bachelors' Degree () Masters' Degree

( ) Doctorate Degree ( ) Others \_\_\_\_\_

**4. Teaching experience:** 0 - 5 years () 6 - 10 years() 11 - 15 years ()

Over 15 years ( )

```
5. Exposure to compute: Yes ( ) No ( )
```

- 6. Computer in the office: Yes ( ) No ( )
- 7. Computer in at home: Yes ( ) No ( )

## **Appendix B: TeLRA Scale**

The following questions stated below will be answered with the given 4 point Likert scale, with 1 specifying that you Strongly Agree(SA), 2 specifying that you Agree(A) with the idea, 3 specifying that you Disagree (D) and 4 stating that you Strongly Disagree(SD) with the idea.

**Instruction:** Place a tick  $(\sqrt{)}$  where appropriate

Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD)

SN	STATEMENT	SA	Α	D	SD
1	E-learning is very economical for educational institutions				
	to adopt.				
2	I believe using E-learning will improve the quality of my				
	work				
3	Computers make work more interesting.				
4	I prefer reading articles in E-learning.				
5	It is easier to revise electronic educational materials than				
	printed material				
6	I prefer using a computer to prepare my lessons.				
7	I feel uncomfortable reading a text book on a computer				
	screen than a physical text book				
8	I enjoy teaching using computers.				
9	Delivering a lecture through electronic technologies is very				
	difficult.				
10	E-learning requires expensive technical support.				
11	E-learning reduces quality of knowledge attained.				
12	Interacting with the computer system is often frustrating.				
13	A face-to-face method is more learner-centred than E-				
	learning methods.				
14	I believe using E-learning technologies will improve my				
	job performance.				
15	Communicating through social networks is fun.				
16	I like reading magazines on new technology innovations.				
17	Teaching through E-learning is tiresome.				
18	E-learning increases learners' social isolation.				
19	E-learning technologies are difficult to use.				
20	Using computer systems requires a lot of mental effort.				
21	Discussions on E-learning technologies are uninteresting.				
22	My institution has enough teaching-learning resources to				
	carry out E-learning.				
23	E-learning will increase teachers' efficiency.				
24	Working with computers is exciting.				
25	I like discussing about new E-learning innovations.		1	1	
26	Supporting learners in an E-learning environment is very				
	difficult.				

27	E-learning infrastructure is very expensive for the government to afford.				
28	<u> </u>				
20	learning tools.				
29	I make errors frequently when using a Computer.				
30	Using a computer at home is very frustrating.				
31	Using E-learning technologies will allow me to accomplish				
	more work than would otherwise be possible.				
32	I enjoy computer games very much.				
33	E-learning is a threat to teachers' employment.				
34	E-learning will provide me with better learning				
	opportunities than traditional means of learning				
35	I find computer online interaction unexciting.				
36	Communicating through electronic mails is annoying				

### **Appendix C: Consent Form for Instructors**

## CONSENT FORM FOR INSTRUCTORS' QUESTIONNAIRES

Dear instructors,

I am currently a master's student in the Information Communication Technology in Education program in Department of Computer Education and Instructional Technology currently undergoing my thesis on instructors' attitude towards E-learning with focus on instructors from the University of Buea, Cameroon.

The aim of this thesis survey is to analyze instructors' attitude towards E-learning with emphasis on University of Buea, Cameroon in order to suggest recommendations necessary to improve it.

The aim of my thesis is as follows:

1. What are instructors' attitudes towards e-learning in the University of Buea?

2. Is there any relationship between instructors' teaching experience and instructors' attitude towards e-learning at University of Buea?

3. Is there any relationship between instructors' gender and instructors' attitude towards e-learning at University of Buea?

E-learning is a component of the combination of adult and permanent learning theories. Essentially, instructors must accept e-learning as a new tool to support learning among students.

- The following information derived from this scale is only used in the analysis of the teacher's e-learning attitude and is not used for any other research.
- Simple responses are required and it is necessary that the importance of this thesis is taken into account in all questions and places.

The survey consists of two parts and takes about 10 minutes to answer all questions. Please place a tick in the most suitable room after reading the questions attentively. You are free to withdraw from the study at any time and time is honestly allocated for you to complete the survey. All the information you have provided is kept confidential and is only used for research purposes. You can contact me or my thesis supervisor without hesitation for further information or complaints. Please fill and sign the appropriate fields below if you voluntarily accept and consent to participate in the survey questionnaire.

Thank you for your time and participation.

Tengu Akwi Njoh M.Sc Candidate Information and Communication Technologies in Education Department of CITE Eastern Mediterranean University Email: tenguaknjoh@gmail.com Phone:03926303123

Prof. Dr. Ersun ISCIOGLU Thesis Supervisor Department of CITE Eastern Mediterranean University Email: ersun.iscioglu@emu.edu.tr Phone:03926303123 I have read and understood this form. I have asked my necessary questions and received answers to my questions. I accept to participate in this survey voluntarily. Name- Surname:

Date:

Signature:

## **Appendix D: Approval Letter from Ethics Committee**



Etik Kurulu / Ethics Committee

Eastern Mediterranean University "Virtue, Knowledge, Advancement"

99628, Gazimaĝusa, KUZEY KIBRIS / Famagusta, North Cyprus, vla Mersin-10 TURKEY Tel: (+90) 392 630 1995 Faks/Far: (+90) 392 630 2919 E-mail: bayek@emu.edu.tr

18.01.2021

Reference No: ETK00-2021-0004 Subject: Your application for ethical approval. Re: Tengu Akwi Njoh (20511161) Faculty of Education.

EMU's Scientific Research and Publication Ethics Board (BAYEK) has approved the decision of the Ethics Board of Education (date: 15.01.2021, issue: 2021/83) granting Tengu Akwi Njoh from the Faculty of Education to pursue with his/her MA thesis work titled "Analyzing Instructors' Attitude Towards E- learning: An Example of University of Buea, Cameroon" supervised by Prof. Dr. Ersun lscioğlu.

Prof. Dr. Yücel Vural Chair, Board of Scientific Research and Publication Ethics - EMU

YV/şk.

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www.emu.edu.tr

## **Appendix E: Turnitin Originality Report**

Turnit	tin Originality Report	
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