

# Exploring Students' Perceptions on Effective Online Tutoring at a Distance Education Institution

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**Abstract:** Online or e-tutoring is a component of e-learning that involves teaching in an online setting where the e-tutor provides support to a small group of students, which can increase confidence, improve topic comprehension and develop critical learning skills. To enhance e-tutoring in the Department of Financial Accounting at the University of South Africa, this study examined student perspectives or evaluations on the effectiveness of e-tutoring in a distance learning environment, as well as the challenges encountered during its implementation. The study adopted a quantitative design where online questionnaires were used as data collecting instruments. A total of 3,837 questionnaires were completed by students who indicated their willingness to participate in the study. Statistical Package for Social Sciences (SPSS) was used to analyse the data. The major findings revealed that e-tutoring has enhanced students' learning options in financial accounting modules, through the provision of assistance and the promotion of interactive classrooms. The study revealed that students expressed a need for increased training for e-tutors to enhance their abilities in supporting academic goals, while technological challenges such as bad internet and internet cost were identified as significant barriers to successful e-tutoring. Recommendations include promoting e-tutoring in higher education institutions to support students' academic endeavours, providing regular training for e-tutors to handle technical content and overcome technological challenges, and establishing effective communication channels to facilitate student-tutor interactions. These measures aim to improve teaching and learning in the online environment, fostering a supportive and engaging experience for students.

**Keywords:** Distance learning, e-Tutor, Online learning, Online support, Student support, Technology

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## 1. Introduction

Higher education institutions (HEIs) have experienced significant shifts, in recent years, with the introduction of modern technologies and methodologies to enhance teaching and learning (Treve, 2021). Iivari, Sharma and Ventä-Olkkonen (2020) found that the method of delivery has undergone a remarkable transformation, and students are more informed and technologically inclined than they were in the past. HEIs have embraced technology-enhanced learning and creative delivery methods for student assistance. Online or e-tutoring has been introduced to foster collaborative learning due to the geographic dispersion of students, availability and other personal constraints. Globally, HEIs are faced with massification, student retention, large classrooms, student engagement and shortage of resources to keep up with the rapidly rising number of enrolments (Msiza, Ndhlovu & Raseroka, 2020). Regarding these issues, several HEIs, including those in South Africa, have incorporated e-tutoring to meet their teaching and learning obligations. This method of online tutoring is seen as a crucial approach to enhancing student participation and increasing the understanding of the module content (Maré & Mutezo, 2021).

The use of modern technologies has aided the facilitation of online learning and students from various geographical locations, the world over, can easily connect and form groups with a single objective (Regmi & Jones, 2020). The adoption of e-tutoring has promoted teamwork amongst academic stakeholders, which creates new opportunities and academic excellence (Sauti, 2021). Maré and Mutezo (2021) affirm that e-tutoring is among the technological trends in education that developed quickly due to the outbreak of the Covid-19 pandemic and HEIs have adapted their teaching methods towards providing an optimum learning environment for students. With the aid of internet-based technologies, Goosen and Molotsi (2019) assert that the e-tutoring system provides a platform where students can learn, interact with the e-tutor, communicate with other students, ask questions, share materials and track academic progress. The primary goal of e-tutoring is to increase students' success rates and learning experiences, and to ensure that the online learning environment is handled in a way that creates the right conditions for effective learning outcomes (Sauti, 2021).

Concerning the significance of online learning in achieving academic competence, the purpose of this study was to investigate students' perspectives on the effectiveness of e-tutoring in an online environment. The study investigated the insights of accounting students registered in the Department of Financial Accounting at the University of South Africa (Unisa). Unisa is a learning institution that operates through open distance and e-learning (ODEL) methods, caters to a student population exceeding 370,000 individuals with various backgrounds, and who are geographically dispersed across Africa and other countries (Joubert & Snyman, 2018; Ramorola, 2018). These large student numbers create challenges to most academics in the Department of Financial Accounting in terms of effective communication, personalized support, and timely feedback. Timely student support, encouragement, and regular communication between students and lecturers, to enhance teaching and learning, must be done in conjunction with e-tutors who take responsibility for around 400 students at a time. The e-tutoring concept was introduced recently and, therefore, it was deemed paramount to examine students' perspectives regarding its success in actualising their academic dreams.

The main research objectives of this study were to investigate the students' evaluations of the effectiveness of online tutoring and the challenges that hinder its implementation in the Department of Financial Accounting. The study is motivated by the need to address the gap in knowledge regarding the effectiveness of online tutoring in distance education. The outcome of the study seeks to improve online educational practices, student support mechanisms and optimise the delivery of e-tutoring services by understanding students' perspectives. The study specifically focuses on undergraduate students in their first to third years in the Department of Financial Accounting at Unisa. It further examines the effectiveness of the e-tutoring platforms such as Moodle, Microsoft Teams, Skype and Zoom, or other online communication tools and challenges encountered during online engagements. In addition, it is important to note that the e-tutors in this study play a specific role in facilitating the module content of financial accounting modules. Their primary objective is to support students in achieving their learning goals within the Department of Financial Accounting. The study aims to provide insights into the effectiveness of this specialised support in meeting the learning objectives of the students, by examining students' views. The recommendations of this study will serve as a guide in making further policies on the methods of e-tutoring delivery at Unisa and other HEIs that adopt online teaching and learning across the globe.

## **2. The Concepts of Tutoring and e-Tutoring**

Tutoring is viewed as the most instructive and stimulating activity for students, since it helps them build capacities for critical analysis and paradigms that they can use throughout their entire careers (Yung, 2020). Crow, Luxton-Reilly and Wuensche (2018) assert that tutoring is a type of specialised teaching, centred on face-to-face communication between the tutor and the student. From the standpoint of effective instruction, Amamou and Cheniti-Belcadhi (2018) concur that tutoring focuses on the social development of students on both personal and cognitive levels. Kim and Kim (2018) view a tutor as a person who supports and educates students, while giving each student personal attention and providing constant backing to be successful in their academic pursuits. Also, Qwaider and Abu-Naser (2018) agree that tutoring refers to teaching students, putting them through academic preparation and inspiring a passion to pursue their right careers.

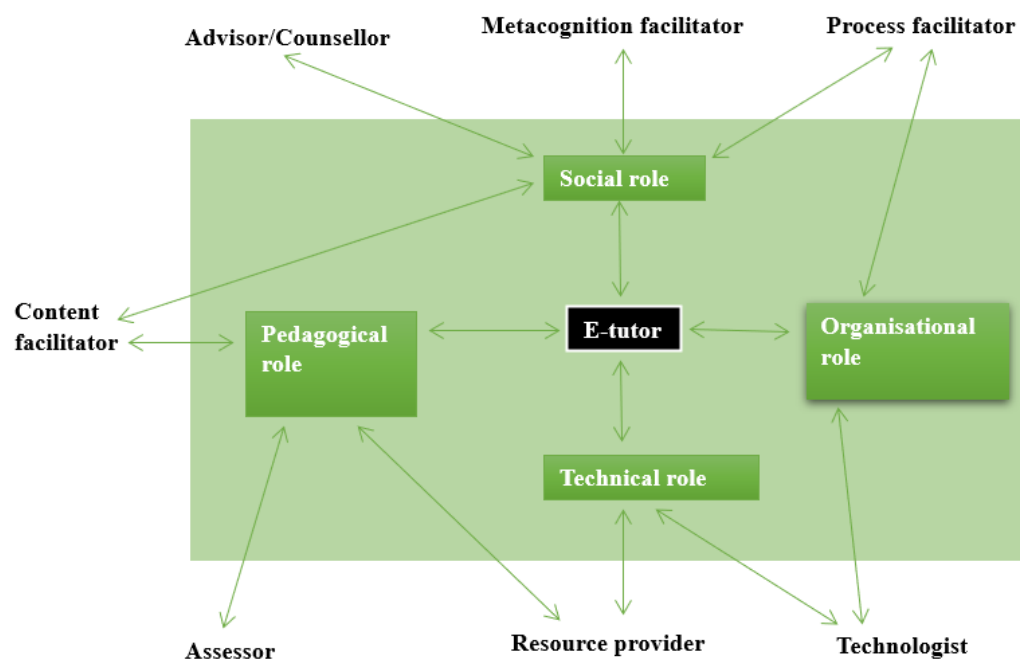
E-tutoring is increasingly gaining popularity, which is not surprising, given how effective it has been in improving students' success and strengthening their practical understanding of the subjects (Youde, 2020). The prefix "e" in the word "e-tutor" only designates an additional information technology contribution to communication between the tutor and the student. E-tutoring refers to an online learning method that allows tutors to work one-on-one or in small groups with students and allows students to get immediate answers to their questions (De Metz & Bezuidenhout, 2018). The e-tutor communicates with students digitally, to facilitate learning, and communication can take place synchronously or asynchronously through text, voice or video (Johns & Mills, 2021). E-tutoring can also take on a wide range of forms depending on the technological capabilities, aptitudes and instructional techniques used by the e-tutor and the student (Maré & Mutezo, 2021).

The adoption of e-tutoring by HEIs all over the world has provided opportunities for students to receive modified attention and quicker responses to their questions (Barnová, Krásna & Gabrhelová, 2019). Doukakis, Michalopoulou and Chira (2020) point out that e-tutoring has assisted students to participate actively in social and academic activities on an online platform, which has a beneficial effect on student progress and support. Consistent with this assertion, Tan (2019) reflected that e-tutoring provides students, in a distance education setting, with a supportive learning environment, which is one of its most significant advantages. Some students who pursue remote learning may find it incredibly difficult to follow some topics, thereby losing motivation to study, but e-tutoring often closes this gap through online instructions and guidance (Novillo & Pujolà, 2019). In

the view of Molotsi and Goosen (2019), e-tutoring enhances collaborative learning, giving students additional options to benefit from one another’s expertise and get practical experience through collaborations. Joubert and Snyman (2020) further assert that the e-tutoring system can save students from failing, improve a sense of support, resolve academic issues, and stop students from feeling lonely and disconnected. As an online learning approach, Rakoma (2018) augments that e-tutoring offers free private coaching in the comfort of the student’s home, which minimises any physical discomfort.

Pitsoane and Lethole (2022) point out the roles of e-tutors to include identifying students’ needs, assisting them in their personal growth, describing the material to be used, assessing progress, providing feedback, involving students in promotional activities, inspiring and motivating students, and resolving issues that may arise during the learning process. The primary responsibility of an e-tutor is to direct and facilitate the learning process by assisting students in locating resources and helping to empower students to succeed (Tan, 2019). E-tutors can also assist by ensuring that learning activities are planned and carried out in a way that encourages students to interact with one another on the subject matter (Maré & Mutezo, 2021). Similarly, De Metz and Bezuidenhout (2018) state that e-tutors ensure that they convey their ideas, opinions and inputs to the students, to assist them in their academic endeavours. E-tutors are required to be flexible and possess essential technological abilities, which is key in the online learning environment (Van der Poll & Van der Poll, 2018). Although e-tutoring is a relatively new concept, tutors need to possess the same fundamental qualities regardless of the delivery mode (Maré & Mutezo, 2021). The qualities required of exceptional e-tutors include good organisation skills, familiarity with the course content, subject knowledge, enthusiasm, ability to use resources effectively, positive relationships with students, communication skills and a flexible approach (Fandiño & Velandia, 2020).

In Figure 1, the combined e-tutor role model, which depicts the four primary roles of e-tutors, is presented.



**Figure 1: Combined e-tutor role model**

Adapted from Goold, Coldwell and Craig (2010)

As is evident from Figure 1, the combined e-tutor roles include pedagogical roles, organisational roles, technical roles and social roles (Goold, Coldwell & Craig, 2010). The e-tutors’ primary pedagogical roles are to facilitate student learning, encourage and uphold their participation in discussions (Halimah & Sukmayadi, 2019). Regarding organisational roles, the e-tutors’ roles include planning learning activities and tasks, outlining procedures and establishing standards for decision-making (Goold, Coldwell & Craig, 2010). The technical roles of the e-tutor include understanding the Information Communication Technology (ICT) systems and software that make up the e-learning environment – this is regarded as the most crucial job (Goold, Coldwell & Craig, 2010). This is a prerequisite for e-tutors since online technologies are employed as the platform for teaching,

assistance, management and student assessment. Technology is essential to all facets of higher education, but it is especially crucial in institutions of distance learning where it is used for engagement, research, as well as teaching and learning (Bond *et al.*, 2020). Finally, the social roles of the e-tutor include facilitating lectures and providing counselling for students to succeed (Sauti, 2021). These roles should be held in high esteem by all e-tutors in the online environment to ensure that students meet their learning expectations and achieve academic excellence.

### 3. E-tutoring at the University of South Africa

Unisa, an ODeL institution, offers e-tutoring services as part of its comprehensive teaching and learning approach. E-tutoring is an online mode of learning that provides academic support to remote students through platforms like video conferencing, e-mail, instant messaging and the Moodle online Learning Management System (LMS) (Bakkali, 2023). E-tutoring at Unisa refers to the online delivery of teaching and learning through the internet, and e-tutors are qualified experts who support and enable students, via online platforms, to learn effectively in various subjects (Maré & Mutezo, 2021). These tutors, sourced nationally, work as independent contractors on a part-time basis, interacting with students virtually from anywhere in the country (Unisa, 2021). Students are notified of their allocated e-tutor through system-generated e-mails and can access them by logging into the myUnisa LMS platform. The tutor site on myUnisa provides communication tools, such as discussion forums, for students to interact with their e-tutor and collaborate with peers (Unisa, 2021). E-tutoring utilises tools like discussion forums and announcements on the online platform for teaching and learning (Sauti, 2021).

Unisa implemented e-tutoring across all undergraduate programmes in 2014 to provide support to all students, regardless of their location, thus reducing the teacher-learner ratio and improving teaching effectiveness (Unisa, 2021). E-tutors undergo training sessions to familiarise themselves with the available tools and receive subject-specific training from module lecturers. The LMS facilitates both synchronous and asynchronous communication through discussion forums, enabling students to engage with their peers and receive immediate feedback (Ali *et al.*, 2021). According to Maré and Mutezo (2021), e-tutors work closely with individual students, providing personalised academic support, feedback on written work and facilitating online discussions. They also create and share resources, monitor students' progress and collaborate with other support services to ensure comprehensive assistance (Pitsoane & Lethole, 2022). E-tutoring not only serves pedagogical purposes, but also creates a social learning environment that addresses students' feelings of isolation and lack of motivation (Unisa, 2021).

The Department of Financial Accounting at Unisa has almost 60,000 registered undergraduate students, making it the largest department within the College of Accounting Sciences and one of the largest in the institution. E-tutoring has been adequately facilitated in the department and this study seeks to find out the students' evaluations of the effectiveness of this programme, as well as the challenges of its facilitation. The findings of this study will contribute significantly to shaping e-tutoring practices not only in South Africa, but also in other developing countries. Obtaining views from these students will enhance the effectiveness of e-tutoring and improve the learning experience for distance learning students at Unisa, and other higher education institutions.

### 4. The Challenges of e-Tutoring in Online Institutions

Many HEIs are showing their support for increasing levels of technology in e-learning services, by adopting tools like tablets and personal computers, enhancing internet connectivity and developing programmes to increase computer literacy for both educators and students (Eze *et al.*, 2020). As a result, digitalisation in institutions of learning has grown in importance and even before the Covid-19 pandemic, e-tutors encountered numerous challenges in adjusting to online teaching, keeping at least a basic level of communication with students, and fostering the growth and learning of students (Parte & Herrador-Alcaide, 2021). There are various issues that e-tutors encounter and one of these includes the adoption of online curricula and teaching methods to accommodate new online educational resources (Adnan, 2018). With learning now being more active, contextual and collaborative, e-tutors must establish their objectives, cultivate a conducive environment and determine how the online environment can assist in achieving set goals (Ismailov & Laurier, 2022). Van Leeuwen and Janssen (2019) suggest that pedagogical adjustments are needed for these.

Even while cloud-based collaboration tools and video conferencing software have advanced significantly in recent years, technological problems continue to be a barrier, hindering the growth of e-tutoring platforms, especially in developing countries (Akhter *et al.*, 2022). Tan (2019) confirms that the top technical concerns for e-tutors include unreliable connections or a lack of good equipment. E-tutors and students may encounter

problems with operating systems and browser compatibility, which can be frustrating and cause them to give up on their academic pursuits (Rakoma, 2018). The main issues surrounding insufficient equipment or connectivity are considered the access constraint, and Adnan and Anwar (2020) point out that the implementation of educational technology will not be feasible if an institution is unable to possess adequate computers and a fast internet connection. Regarding inadequate technological development, Pitsoane and Lethole (2022) suggest e-tutors should be provided with effective professional development on new technologies, to be able to apply them to their full potential. Maré and Mutezo (2021) opine that the e-tutor support constraints should be enhanced through the facilitation of technology integration, including technical support and administrative/peer support.

Youde (2019) discovered that the lack of experience is another challenge to e-tutoring. Consistent with this assertion, Kebritchi, Lipschuetz, and Santiago (2017) affirm that e-tutors who lack experience may struggle to effectively manage the virtual classroom, engage with students and provide adequate support. To address this challenge, Kebritchi *et al.* (2017) recommend that e-tutors receive adequate training on online pedagogy, technologies and instructional strategies to ensure that they are well-equipped to facilitate virtual learning environments. In the view of Altmann *et al.* (2022), the experience level of the e-tutor is another general challenge, because assisting students to interact with knowledge is a critical factor in an online learning setting. Altmann *et al.* (2022) suggest that experienced e-tutors are better equipped to help students engage with knowledge in an online learning environment. They can provide timely and meaningful feedback, create interactive and collaborative learning activities, and foster a sense of community among students. In contrast, inexperienced e-tutors may struggle to effectively manage the virtual classroom and may not be able to provide the necessary guidance and support to students. Therefore, it is important to ensure that e-tutors are adequately trained and have the necessary experience to facilitate virtual learning environments (Youde, 2019).

Carless (2022) postulates that inadequate feedback is another challenge of e-tutoring, even though feedback loops are excellent online teaching options that help establish strong ties with students, even when learning is not synchronous. Carless (2022) further suggests that feedback is a critical component of online teaching, as it provides students with a sense of direction and helps them to identify areas for improvement. Feedback loops can help to establish a sense of community and trust between e-tutors and students, even in asynchronous learning environments. However, providing effective feedback in online learning can be challenging, due to the lack of face-to-face interaction and the need for e-tutors to rely on technology to deliver feedback (Cook *et al.*, 2021). In this case, e-tutors are expected to provide clear justification for their comments as well as recommendations for how students can improve their learning outcomes (De Metz & Bezuidenhout, 2018). This procedure allows students to consider criticisms, resulting in an iterative cycle that focuses on each student's development (Sauti, 2021). Online examinations, as active learning tools, are important components of online education solutions as they enable e-tutors to assess students' performance accurately, thus giving them immediate and detailed comments (Garcia, Falkner & Vivian, 2018).

## **5. Research Method**

This study investigates the perspectives or evaluations of students on the effectiveness of e-tutoring in an online environment, using the Department of Financial Accounting with large student numbers at Unisa as a case study. This study was conducted to propose strategies to enhance e-tutoring in the department, as Unisa is the largest ODeL institution in South Africa. The integrated e-tutor project aims to decrease dropouts, increase completion rates and enhance student support. The study adopted a descriptive quantitative research strategy to provide answers to the problems of this study. According to Bloomfield and Fisher (2019), the descriptive quantitative research design can provide an in-depth examination of data and aid in the development of a thorough understanding of the study problem. The study was guided by two research objectives, which are to investigate the students' evaluations of the effectiveness of e-tutoring and the challenges that hinder the successful application of e-tutoring in the Department of Financial Accounting. An online survey was formulated, which was sent through the e-mail addresses of students. A total of 3,837 questionnaires were completed by students who indicated their willingness to participate in the study. The questionnaires were gathered and analysed using Statistical Package for Social Sciences (SPSS). In the analytical section, both descriptive and inferential statistics were applied. Descriptive statistics facilitated summarising the set of data associated with the population of the study. It focused on describing and summarising all quantitative data to identify trends and patterns revealing the relationships among variables. The inferential statistics made reasonable predictions, generalisations and conclusions about the population from the sample. This also involved conducting further statistical tests to establish how variables interrelate among themselves. Validity was attained by ensuring that the research instruments used in the study effectively measured what they intended to measure. To further maintain validity,



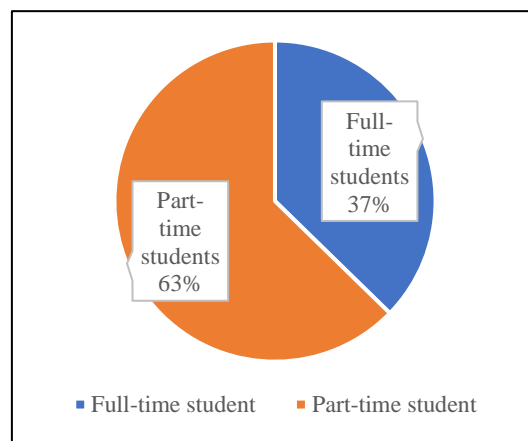
the questionnaire items were carefully designed based on existing literature and consultation with experts in the field of e-tutoring. The researchers conducted a pilot study to assess the clarity and appropriateness of the questionnaire items, making necessary adjustments to enhance validity. Reliability was attained in this study by ensuring consistency and stability in the measurement of variables. The researchers employed techniques such as test-retest reliability, where a subset of participants completed the questionnaire twice, with a time interval in between, to assess the stability of responses. Additionally, internal consistency reliability measures, such as Cronbach's alpha, were employed to assess the reliability of the questionnaire items. It was found out that all the constructs measured in the study were 0.858 Cronbach alpha coefficients, indicating that they have relatively high internal consistency and above the threshold of 0.7 according to Di Iorio (2005), Hinton *et al.* (2004) and Cohen (1988). Ethical standards observed in the study included obtaining informed consent from the participants. Prior to their participation, the students were provided with clear information about the purpose of the study, procedures, its potential risks and benefits. Students were informed that participation was voluntary, while they could withdraw from the study at any time. They were assured that their decisions would not affect their relationship with the institution. Anonymity of responses was also ensured, as the researchers took precautions to remove any personally identifiable information from the collected data. The study did not include personal information in the questionnaire. For this reason, it was not determined if students' participation in the e-tutor project influences their results (pass and retention rates). The study adhered to ethical guidelines and principles to ensure the well-being and rights of the participants, while also maintaining the integrity and validity of the research findings. The researcher further interpreted the results to ensure that they conform to the focus of the study, as well as provide tangible evidence at which the problem of the study could be resolved. Furthermore, the study corroborated the findings with that of the literature review, to provide solutions to the problems of the study.

## 6. Presentation of Research Results

This section presents the results obtained from the online questionnaires that were sent to financial accounting students who were registered in undergraduate modules. The responses used in this study are from 3,837 students who participated in the study. In the first section of the results presentation, the biographical information of the respondents was presented, while the perspectives of the students on e-tutoring usage and the challenges of using e-tutoring as a medium of teaching and learning were presented in the second and third section.

### 6.1 Presentation of Biographical Information

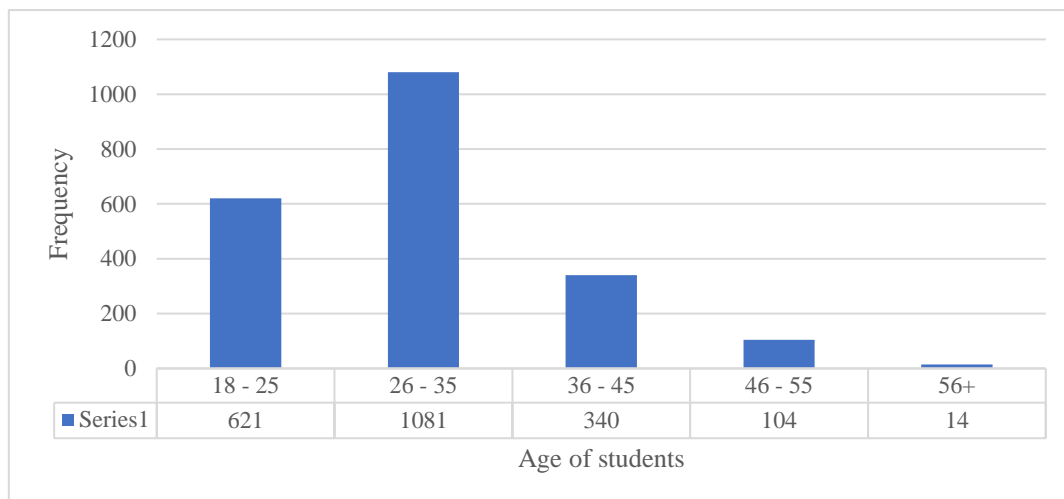
This section presents the results obtained from the online questionnaires that were sent to accounting students who used e-tutors in various studies. In this section, descriptive statistics such as the status of the student who uses e-tutoring services, ages of students who use e-tutoring services and users of e-tutoring services were presented. Figure 2 presents the status of the 2,160 participants who use e-tutoring services.



**Figure 2: Status of students who used e-tutoring services**

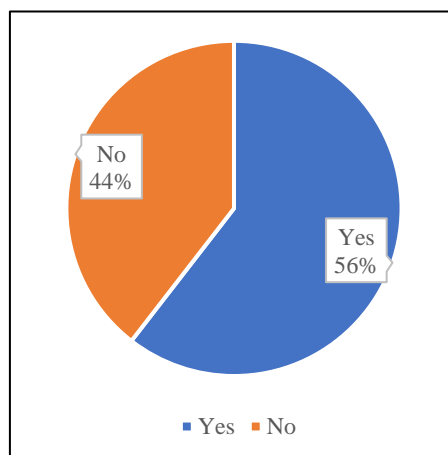
Figure 2 shows that 63% (1,361) of the students participated in the study part-time whilst working during the day, while 37% (799) are studying full-time. In the next section, more information will be provided on students' usage of e-tutoring services.

Figure 3 presents the ages of students who indicated that they use e-tutoring services provided by the department. The data confirms that the majority of students who used e-tutoring services fall within the age range of 26 to 35, with a count of 1,081. Following that, the age group of 18 to 25 has the next highest count of 621 students. The numbers gradually decrease as the age ranges increase, with 340 students in the 36 to 45 age group, 104 students in the 46 to 55 age group and 14 students who are 56 years old or older. The data, as presented in Figure 3, portrays that e-tutoring usage is particularly popular among students in the 26 to 35 age range, which could suggest that individuals within this age group actively seek out additional support and resources to enhance their learning experiences. It should be noted that the number of students decreases as the age groups progress, potentially indicating that older students may be less likely to utilise e-tutoring services or have different preferences for academic support.



**Figure 3: Ages of students who use e-tutoring services**

Figure 4 presents the usage of e-tutoring by students in the Financial Accounting Department.



**Figure 4: Usage of e-tutoring services**

Figure 4 portrays that from the total of 3,837 students who participated in the study, it was revealed that e-tutoring services have been utilised by a significant number of students, with 56% (2,160) of students indicating that they have used these services. This high count reflects the perceived value and positive uptake of e-tutoring as an effective form of academic support. However, 44% (1,677) of students do not use the e-tutoring services, suggesting the need for further exploration into the reasons behind this. It is important to ensure that e-tutoring services are accessible and promoted to cater for the needs of all students, while also considering alternative forms of academic support that may be preferred by some students.

**6.2 Usage of e-Tutoring Services by Students in the Department of Financial Accounting**

This section presents the results related to the usage of e-tutoring as a method of teaching and learning at the Department of Financial Accounting at Unisa. Table 1 presents the KMO and Bartlett’s test.

**Table 1: KMO and Bartlett’s Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.966
Bartlett’s Test of Sphericity	Approx. Chi-Square	2.804
	Df	136
	Sig.	.000

Table 1 presents the KMO, Bartlett’s test and the descriptive statistics. In Table 1, factor analysis is used to identify the important factors concerning students’ perspectives of those who use e-tutors. Kaiser-Meyer-Olkin’s measure of sampling adequacy reflects a score of 0.966, which is well above the recommended value of 0.7 (Feng *et al.*, 2017). Bartlett’s test of sphericity is significant at  $p < 0.05$  levels. It is concluded that the correlation matrix is not an identity matrix.

Table 2 shows all the factors (can be referred to as components) extractable from the analysis along with their eigen values and only two factors were considered. The study hypothesised that the seventeen questions considered form one common scale and the factor analysis indicates that this might not be true, as two factors were extracted.

**Table 2: Total variance explained**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cum. %	Total	% of Variance	Cum. %	Total	% of Variance	Cum. %
1 Strategies	10.106	59.447	59.447	10.106	59.447	59.447	7.026	41.329	41.329
2 Age	1.163	6.843	66.290	1.163	6.843	66.290	4.243	24.960	66.290
3 Accounting in High School	.708	4.166	70.456						
4 ModuleSpecific	.624	3.668	74.125						
5 SolveProblems	.589	3.464	77.589						
6 HelpSpecific	.487	2.866	80.455						
7 Content Interesting	.437	2.573	83.027						
8 E-tutorSolveProb	.397	2.338	85.365						
9 MoreDiffTopics	.346	2.034	87.399						
10 VeryHelpful	.320	1.880	89.279						
11 ModMoreInterest	.305	1.797	91.076						
12 EssentialSuccess	.288	1.696	92.771						
13 AddressesNeeds	.269	1.583	94.354						
14 EffectiveUse	.263	1.550	95.904						
15 MorethanDiscuss	.242	1.422	97.326						
16 InteractInterest	.239	1.406	98.732						
17 AdditionalInfo	.215	1.268	100.00						
Extraction Method: Principal Component Analysis.									



The extraction method used was principal component analysis factoring with varimax rotation. The varimax method was chosen because it was assumed that the factors are independent of each other. For analysis and interpretation purposes, the study was only concerned with Initial Eigen Values or Extracted Sums of Squared Loadings. In this case, two components contain 66.29% of the variation of the original variables, so the study considerably reduced the complexity of the data set by using these components, with only a 33.71% loss of information. Component 1 explains 59.447% of the variation and Component 2 explains 6.843%. The remaining fifteen components explain only 33.71%.

The idea of rotation is to reduce the number of factors on which the variables under investigation have high loadings. The Rotated Component Matrix displays the factor loadings for each variable and identifies the factor on which each variable is most heavily loaded. In Table 3, based on these factor loadings, the positive perspectives subsets loaded strongly on Component 1 and this is the “address needs” factor group. The “get assistance” factor is strongly loaded in Component 2. High usage of e-tutoring mainly hinges on addressing of learners needs and assistance. These pull-factors need to be maintained.

**Table 3: Rotated component matrix**

	Component	
	1 Address needs	2 Get assistance
Q8_EtutorSolveProb	.806	
Q9_MoreDiffTopics	.805	
Q10_VeryHelpful	.840	
Q11_ModMoreInterest	.791	
Q12_EssentialSuccess	.751	
Q13_AddressesNeeds	.728	
Q14_EffectiveUSE	.669	
Q15_MorethanDiscuss	.631	
Q17_AdditionalInfo	.646	
Q18_MonitorMyProgress	.638	
Q19_Motivates	.670	
Q20_HelpsOrganise	.632	
Q22_AnswerTimeously		.643
Q23_AssistWithTech		.830
Q24_AssistAdmin		.844
Q25_TutorRoleClear		.624
Q26_RoleClearToMe	.537	.535
Extraction Method: Principal Component Analysis		
Rotation Method: Varimax with Kaiser Normalization		
a. Rotation converged in 3 iterations		

### 6.3 Challenges of e-Tutoring

This section presents the challenges of adopting e-tutoring, by the Department of Financial Accounting, as a method of teaching and learning. Table 4 presents the KMO and Bartlett’s test.

**Table 4: KMO and Bartlett’s Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.862
Bartlett’s Test of Sphericity	Approx. Chi-Square	1.095
	Df	66
	Sig.	.000

Table 4 presents the KMO, Bartlett’s test and the descriptive statistics. In Table 4, factor analysis is used to identify the important factors concerning students’ evaluations of those who use e-tutors. Kaiser-Meyer-Olkin’s measure of sampling adequacy reflects a score of 0.862, which is well above the recommended value of 0.7. Bartlett’s test of sphericity is significant at  $p < 0.05$  levels. It is concluded that the correlation matrix is not an identity matrix. Table 5 presents the Total Variance Explained.

**Table 5: Total variance explained**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.872	40.600	40.600	4.872	40.600	40.600	3.346	27.882	27.882
2	1.500	12.498	53.098	1.500	12.498	53.098	2.520	21.000	48.883
3	1.264	10.534	63.632	1.264	10.534	63.632	1.770	14.749	63.632
4	.911	7.589	71.221						
5	.600	4.996	76.217						
6	.575	4.790	81.007						
7	.557	4.645	85.652						
8	.443	3.690	89.342						
9	.420	3.503	92.845						
10	.359	2.993	95.838						
11	.318	2.654	98.493						
12	.181	1.507	100.000						

**Extraction Method: Principal Component Analysis.**

Table 5 shows all the factors or components extractable from the analysis, along with their eigen values, and only three factors were considered. The study hypothesised that the twelve questions considered form one common scale and the factor analysis indicates that this might not be true, as two factors were extracted. The extraction method used was principal component analysis factoring with varimax rotation. The varimax method was chosen because it was assumed that the factors are independent of each other. For analysis and interpretation purposes, the study was only concerned with Initial Eigen Values or Extracted Sums of Squared Loadings. In this case, three components contain 63.632% of the variation of the original variables, so the study considerably reduced the complexity of the data set by using these components, with only a 36.368% loss of information. Component 1 explains 40.6% of the variation, Component 2 explains 12.498% and Component 3 explains 10.534%. The remaining nine components explain only 36.368%. Table 6 presents the Rotated Component Matrix.

Table 6: Rotated component matrix

	Component		
	1. Communication challenges	2. Training needs	3. Internet-related costs
Q28_StruggleToInteract	.655		
Q29_StrugglesAnswer	.734		
Q30_DontGetAssistance	.658		
Q31_GetTraining		.834	
Q32_OnlineTraining		.897	
Q33_TrainTechTools		.873	
Q34_PostManyAnnounce	.630		
Q35_DuplicateAnnounce	.713		
Q36_Redundant	.627		
Q38_TakesMyTime	.650		
Q39_BadInternetConnect			.858
Q41_InternetCost			.865
<b>Extraction Method: Principal Component Analysis</b>			
<b>Rotation Method: Varimax with Kaiser Normalization</b>			
<b>a. Rotation converged in 6 iterations</b>			

The idea of rotation is to reduce the number of factors on which the variables under investigation have high loadings. The Rotated Component Matrix displays the factor loadings for each variable and identifies the factor on which each variable is most heavily loaded. In Table 6, based on these factor loadings, the positive perspective subsets loaded strongly on Component 1 and this is the “communication challenges” factor group. The “training needs” subset is strongly loaded in Component 2, while Component 3 is mainly comprised of the “internet-related costs” subset. The dominant factor is “communication challenges”, which implies that a greater number are facing challenges when communicating with the respective lecturers. The second factor implies learners are experiencing “training needs”. Adequate training is required to change learners’ perspectives. The “internet-related costs” factor impacts learners, hence communication challenges. Addressing the factors will reduce learners’ negative perspectives towards the mode of studying.

## 7. Discussion of Research Results

This study investigated accounting students’ evaluations or perspectives of the effectiveness of e-tutoring in an online learning environment, where student numbers are large and e-tutors are employed to assist academics with more personal student support. The findings revealed that students agreed that the e-tutoring services provided by Unisa have assisted them in achieving their academic endeavours, by addressing their needs. E-tutors solved many of the queries, attended to more difficult topics and have been very helpful in their learning process. These findings are in line with findings by Sauti (2021) who noted that the main duties of e-tutors are to help students succeed, while also making sure that the online learning environment is managed in a way that fosters optimal learning conditions. Since the e-tutors in the Department of Financial Accounting play an important role to overcome the challenges of high student-lecturer ratio, findings further indicate that e-tutoring makes modules more interesting and fosters interactive discussions. Given how successful it has been in raising students’ achievements and strengthening the practical comprehension of their course outcomes, Youde (2020) affirms that e-tutoring has become a learning aid. In the same direction, Barnová, Krásna and Gabrhelová (2019) confirm that HEIs all around the world are adjusting to adopt e-tutoring, to ensure that students are provided with the opportunity to receive individualised attention and prompt answers to their inquiries. Furthermore, findings affirm that e-tutors provide additional information, monitor students’ progress, provide motivation, help in organising and assist in providing clear roles. According to Tan (2019), e-tutoring has made it possible for students to actively engage in social and academic activities on an online platform, which

has a positive effect on student development. According to Doukakis, Michalopoulou and Chira (2020), who support this claim, one of the most important benefits of e-tutoring is that it gives students, in a distance education setting, a helpful learning environment and fills a vacuum by providing students with online instructions and directives. Furthermore, the combined e-tutor model, as presented in Figure 1 provides that students meet certain learning expectations and achieve their academic goals (Goold, Coldwell & Craig, 2010). Finally, the students confirm that they get assistance by making use of e-tutoring services, which assists first-year lecturers where their students often encounter challenges with an unfamiliar e-learning setting. In this regard, students are provided clear goals and are assisted with technological and administration related issues.

Regarding the communication challenges of e-tutoring, feedback from the accounting students indicates that e-tutors struggle to create group interactions, struggle to answer module questions, do not provide assistance on financial accounting modules, post too many announcements and duplicate lecturers' announcements. Similarly, in a study by Adnan (2018), students highlighted that e-tutors often failed to provide timely and comprehensive feedback, which hindered their progress. Another study by Quang and Tri (2021) explored the challenges and opportunities of online learning during the Covid-19 pandemic, and findings indicate that communication challenges were a significant issue for both students and teachers. In this regard, communication challenges are a common issue in online learning and several studies have explored this topic (Almaiah, Al-Khasawneh, Althunibat, 2020; Hebebcı, Bertiz & Alan, 2020; Khalil *et al.*, 2020). The challenges reported by the accounting students in the present study align with the findings of previous research. E-tutors must work to address these challenges, to ensure that students have a positive learning experience and are not hindered by communication barriers. Findings further depict that e-tutors should get training, online training and training on technical tools. Ismailov and Laurier (2022), as well as Van Leeuwen and Janssen (2019), propose that training is required in an endeavour to enhance the learning environment. Consistently, Kebritchi *et al.* (2017) and Youde (2019) agree that e-tutoring has difficulties due to a lack of experience, while e-tutors' lack of experience affects their capacity to enhance the teaching and learning process. In this regard, Altmann *et al.* (2022) opine that experience and the constant training of e-tutors play a vital role in supporting students to interact with knowledge in the online learning platform.

Furthermore, findings revealed that students encounter technology-related problems, such as bad internet and internet cost. Akhter *et al.* (2022), and Majola and Mudau (2022) state that the development of e-tutoring platforms in South Africa is still constrained by technological issues, despite recent advancements in cloud-based collaboration tools and video conferencing software. In the view of Tan (2019), unstable connections or a lack of quality equipment are the main technical issues encountered in e-tutoring. The technical issues, as documented by Rakoma (2018), include bad operating systems and browser compatibility issues, which cause severe frustration to the students. Adnan and Anwar (2020), and Kibuku *et al.* (2020) note that technology-related problems, such as bad internet connectivity and internet cost, are common challenges facing e-tutoring services and students who participate in online learning. E-tutors and universities can address this challenge by providing students with technical support and guidance, investing in improving internet connectivity, providing internet connectivity and devices to students who cannot afford them, and using simple and easy-to-use technologies that do not require high internet bandwidth. Pitsoane and Lethole (2022) recommend that e-tutors should be well-versed with new technological inventions, to be able to utilise them to their fullest extent, in an endeavour to address technological barriers. According to Maré and Mutezo (2021), the facilitation of technology integration, including technical support and administrative/peer support, should be provided by e-tutors to improve e-tutoring, to ensure that students achieve their academic targets. The subsequent section presents the contributions of the study.

## **8. Contributions of the Study**

This study investigates the students' perspectives or evaluations of the effectiveness of e-tutoring in an online learning environment and the challenges in the implementation of e-tutoring. The study found that e-tutoring services provided by the university have helped students in achieving their academic goals, by addressing their needs and resolving their problems. The use of e-tutoring makes modules more interesting, enhances essential success, effective use of learning resources and fosters interactive discussions. However, the study also revealed communication challenges faced by e-tutors, which include struggling to create group interactions and answer module questions, posting too many announcements and taking up most of the student's study time. Due to large student numbers with undergraduate financial accounting modules, it is practically difficult to assist students on a one-on-one basis. It also seems that e-tutors do not always have the required knowledge on module content and technology to assist the groups of students. Challenges with technology, for both tutor and student, make e-tutors not as successful, as explained by other previous students. Moreover, technical issues,

such as bad internet connectivity and internet cost, have been a common challenge facing e-tutoring services and students who participate in online learning. The study recommends that e-tutors should get training, online training and training on technical tools, while universities should work to address technological issues to ensure a positive learning experience for students.

Furthermore, the study disagreed with the assumption that e-tutoring allows students to connect with other students, that e-tutors are too demanding and that they would prefer e-tutoring support to be provided on a different platform, such as Microsoft Teams. This could be a major finding of the study, because it challenges some commonly held assumptions about e-tutoring. The findings suggest that e-tutoring may not be as effective in fostering social connections between students, as previously thought, and that students may not find e-tutors to be overly demanding. Additionally, the finding that students did not prefer e-tutoring support to be provided on a different platform may indicate that the current platform used for e-tutoring is effective and well-suited to the students' needs. These findings provide important insights into the effectiveness of e-tutoring and the perspectives of students towards this form of support. They could help inform future research and the design of e-tutoring programmes that are more responsive to the needs and preferences of students.

## **9. Recommendations**

The recommendations of this study are made to the students, e-tutors and educational institutions.

### **9.1 Recommendations to the Students**

The following recommendations are made to the students.

- Take advantage of the benefits of e-tutoring: Although some students may not feel that e-tutoring helps them connect with other students, it can still be an effective way to receive academic support. E-tutoring can be more convenient and flexible than traditional in-person tutoring, and it can be a great way to get help when in need.
- Communicate with your e-tutors: If e-tutors are too demanding, students must communicate their concerns with e-tutors and let them understand. They may be able to adjust their expectations or provide additional support.
- Consider using different platforms for e-tutoring: Students should communicate their frustrations to their instructor or e-tutoring programme coordinator if they prefer to receive e-tutoring support on a different platform, other than the one currently being used, such as Microsoft Teams. They may be open to exploring different options that work better.
- Stay engaged and take advantage of all available resources: Students should ensure to participate in e-tutoring sessions and ask questions when they need help. They should also take advantage of all available resources, such as online resources and study materials. Additionally, they should consider forming study groups with other students to help connect with their peers and receive additional academic support.

### **9.2 Recommendations to the e-Tutors**

The following are the recommendations for e-tutors.

- E-tutors should be approachable and create a friendly learning environment: Students should appreciate e-tutors who are approachable and who create a positive and supportive learning environment. Additionally, e-tutors should ensure that they are available to answer questions and provide support when needed.
- Avoid being too demanding: While it is important to challenge students, it is also important to avoid being too demanding. Students may feel overwhelmed if they are constantly pushed to their limits. E-tutors should strike a balance between challenging students and providing support.
- Use a variety of teaching methods: Students learn in different ways, therefore, e-tutors should use a variety of teaching methods to accommodate different learning styles. For example, some students may prefer visual aids while others may prefer hands-on activities.
- Provide support on a platform that students prefer: The study found that some students preferred to receive e-tutoring support on Microsoft Teams, rather than the current platform. E-tutors should be flexible and willing to provide support on the platform that students prefer.
- Encourage group discussions: Although some students did not find e-tutoring helpful in connecting with other students, e-tutors can still encourage group discussions and collaboration. This can help students to develop a deeper understanding of the material and learn from their peers.

- Provide constructive feedback: Students benefit from receiving feedback on their work. E-tutors should provide constructive feedback that is specific, actionable and helps students to improve their understanding of the material.

### 9.3 Recommendations to Educational Institutions

Based on the findings of the study, the following recommendations are made to institutions.

- Clear guidelines and expectations for e-tutors: Institutions should provide clear guidelines and expectations for e-tutors, including their roles and responsibilities, communication protocols and the level of support they should provide to students. This will ensure that e-tutors are aware of their responsibilities, and can provide consistent and effective support to students.
- Offer training and support for e-tutors: Institutions should offer training and support for e-tutors, to help them develop the necessary skills and competencies for online tutoring. This could include training in communication skills, online teaching strategies and the use of technology platforms.
- Use multiple platforms for e-tutoring support: Institutions should consider offering e-tutoring support on multiple platforms to accommodate students' preferences. This could include platforms such as Zoom, Microsoft Teams or Skype.
- Encourage student participation: Institutions should encourage students to participate in e-tutoring sessions and promote the benefits of online tutoring. This could include providing incentives for participation or highlighting success stories of students who have benefited from e-tutoring.
- Collect feedback from students: Institutions should collect regular feedback from students on their e-tutoring experiences, to identify areas for improvement and make necessary adjustments. This could include surveys or focus groups to gather feedback from students.

## 10. Conclusion

E-tutoring provides students with access to learning resources and it is intended that this method will help students grow in several ways, including self-reliance, practical information processing methods, teamwork, collaborative learning, communication skills and ownership of their learning. This study set out to obtain the perspectives of accounting students who use e-tutoring in their learning. To achieve this aim, the study adopted a quantitative study where online questionnaires were sent to students who use e-tutoring in their learning options. The findings of the study revealed that e-tutoring was perceived positively by the students, with most students finding it helpful in their learning and academic progress. The study also found that e-tutoring was effective in enhancing students' engagement and communication with their tutors. However, the study also identified some challenges that students faced in e-tutoring, such as technical difficulties, lack of personalised attention and difficulty in building connections with other students. Additionally, some students expressed a preference for using a different platform, such as Microsoft Teams, for e-tutoring. Based on these findings, recommendations were made to students, e-tutors and institutions. Students were advised to ensure that they have a reliable internet connection and the necessary equipment to participate in e-tutoring effectively. They were also encouraged to communicate with their e-tutors and ask questions when they encounter challenges. E-tutors were advised to provide personalised attention to students and use interactive techniques to engage and motivate students. Institutions were recommended to provide technical support to students and e-tutors, and to consider offering training for e-tutors to enhance their e-tutoring skills. The study highlights the importance of e-tutoring in ensuring that students receive a quality education. With the appropriate measures in place, e-tutoring can be an effective way to enhance student engagement, learning and academic success.

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