

Exploring the Impact of Blended Learning on Learners' Academic Performance in Accounting

Sanele Fanwell Sibandze, O. I. Oloyede, L. Pereira

Faculty of Education, Department of Curriculum & Teaching, University of Eswatini, Eswatini

Abstract:

Background: Academic performance in Accounting in the EGCSE curriculum has been poor since 2012, hence the study explored the impact of blended learning on learners' academic performance in Accounting. The study sought to achieve and answer four objectives and research questions. It determined mean performance and difference in mean performance for the experimental and control group in the pre-test and post-test. It hypothesised that there was no significant difference in the mean performance for the two groups in both tests.

Materials and Methods: The study was quantitative in nature and a quasi-experimental design was used. It involved Form 5 intact classes in two schools (selected on convenience and purposive). In School A (experimental group, n=12) learners were taught using blended learning method whilst in School B (control group, n=16) learners were taught using traditional method. Pre and post tests were used to gather data which were analysed using means, standard deviation, independent samples t-tests computed on SPSS 20.

Results: The results showed a statistically significant difference ($p=0.004$, $p>0.05$) in the mean performance of the experimental and control group in the pre-test in favour of the control group. A significant difference ($p=0.008$, $p>0.05$) in the mean performance of the experimental and control group in the post-test in favour of the experimental group was also revealed.

Conclusion: The study concluded that blended learning improves learners' academic performance in Accounting.

Key Words: Blended learning, Traditional learning, Online learning, Accounting, Academic performance.

Date of Submission: 27-04-2020

Date of Acceptance: 10-05-2020

I. INTRODUCTION

Education inculcates important skills, abilities and knowledge in individuals, which in turn lead to the overall growth and progress of the individual, community and the country at large. Such skills, abilities are inculcated through the teaching-learning process. Schools and other educational institutions are centres where the teaching-learning process is facilitated through various activities and subjects offered by the institutions' curriculum.

Public secondary schools in Eswatini offer the Eswatini General Certificate of Secondary Education (EGCSE) curriculum. One subject offered in this curriculum is Accounting which is concerned with the process of identifying, measuring, summarizing, recording, analyzing, and interpreting or communicating financial data of an organization to interested users so that they can make informed judgment and decisions (Wood & Sangster, 2012).

According to Obidile, Amobi, Uzoekwe and Akuezilo (2017), Accounting is one of the subjects needed by every individual irrespective of his or her profession. It helps people to understand transactions they engage in on daily basis and to make informed decisions on using their limited resources. Also, for a business or country to thrive, accounting knowledge is necessary.

Accounting prepares learners for occupations such as accountants, bookkeepers, auditors, among others, which are key in all sectors of industry. Some learners have passion for such occupations, thus they aim for careers leading to these occupations. As such, if at secondary school level learners perform well in Accounting they are likely to opt for such careers.

However, learners' academic performance in Accounting in Eswatini since 2012 has been poor compared to Business Studies and Economics as well as to other subjects in the EGCSE curriculum in terms of learners who are able to get credits (C grade to A*) passes. Accounting pass rate in terms of credit passes between 2012 and 2019 has been ranging between 21.07% and 27.18% with Economics ranging between 41.33% and 47.03%, whilst Business Studies ranges between 30.65% and 37.78%.

This indicated that Accounting for the past eight years has been ranked position 3 (last position) out of the three subjects in the business education field. When comparing Accounting with other subjects in the EGCSE curriculum in 2019, the Examination Council of Eswatini [ECESWA] Report (2019) ranked the subject position 18 out of 21 subjects written whilst Economics and Business Studies became position 2 and 10 respectively.

Quite a number of studies have been carried out to investigate the factors responsible for students' poor academic performance in Accounting. These factors include the unavailability of resources such as the physical structure, computer/ internet, and textbooks, teacher's qualifications and training, learners' attitude towards Accounting, and inadequate number of Accounting teachers (Mwangi, 2004; Obidile, Amobi, Uzoekw & Akuezilo, 2017; Gakunga, 2005; Tshiovhe, Monobe & Mulaudzi, 2018). Tshiovhe, Monobe and Mulaudzi (2018) argue that using English as medium of instruction is another factor that is responsible for poor academic performance in Accounting. Also, poor performance in Accounting is caused by inadequate time for teaching Accounting (Obidile, Amobi, Uzoekw & Akuezilo, 2017).

This shows that there is a need for teaching-learning strategies and methodologies that address these problems. The Ministry of Education and Training [MoET] in Eswatini, through the Business Education Inspectorate office, use all possible means to ensure that the teaching-learning of Accounting is effective. This includes capacitating teachers with the necessary skills to effectively teach the subject through workshops and cluster meetings. However, some scholars argue that the mode of lesson delivery plays a very important role in the academic success of learners (Celyan & Kesici, 2017; Du, 2011; Hiralaal, 2012). Modes of lesson delivery include; traditional, online, blended, among others (Garrison & Vaughan, 2008; Graham, 2006; Nuruzzaman, 2016).

The traditional mode of lesson delivery, which is instruction where the instructor/teacher and students meet in one place at the same time (Alsaaty, Carter, Abrahams & Alshameri 2016; Redmond, 2011), is still dominant in most if not all schools in the country, despite its restrictions which include inadequate one to one teacher-student interactions, delayed feedback, and limitations in visual aids and materials that the instructor can use in a class session which affects learners' performance (Garrison & Vaughan, 2008; Graham, 2006; Nuruzzaman, 2016). Lin, Tseng and Chiang (2017), and Bath and Bourke (2010) argue that using the traditional mode of instruction move all students through the curriculum at the same pace, regardless of mastery since the instructor has little time to assist individual student, and at home students have no one to turn to for assistance thus some learners end up not performing well.

As a result of the drawbacks of the traditional mode of lesson delivery, and the increasing prevalence of information and communication technology and the internet, online learning has emerged (Viz & Kaur, 2017). Studies have shown that online learning is as effective, and often times more effective, than traditional (face-to-face) learning (Hinkhouse, 2013), but it also has some challenges such as network problems.

Many studies have shown that combining the traditional mode of instruction with online learning mediates the challenges of traditional learning and online learning (Poon, 2013; Lalima & Dangwal, 2017; Du, 2011). This is often termed 'blended learning' (Kazu & Demirkol, 2014; Nuruzzaman, 2016; Aly, 2013; de la Varre et al, 2010; Graham, 2019; Tayebnik & Puteh, 2012; Lalima & Dangwal, 2017; Poon, 2013). Blended learning has been discovered to be a mode of lesson delivery which improves learner's academic performance (Ghaith, 2010; Du, 2011; Celyan & Kesici, 2017; Hiralaal, 2012) since it enables learners to learn, get guidance and assist each other anytime and anywhere.

Fakhir (2015) argues that adopting blended learning strategy should be considered quickly and effectively, since the traditional ways and styles of learning are not enough for the coming era. Recently, the use of blended learning as a learning model has increased especially in institutions of higher learning (Utami, 2018). Notably, some institutions of higher learning in the country such as the University of Eswatini already use blended learning (Vilakati, 2014). Blended learning can also be used in secondary and high schools. Allen and Seaman (2006) posits that in the United States, blended learning is being used by 63% of school districts.

However, in a majority of schools in most developing countries like Eswatini blended learning is still not yet used, yet most developing countries including Eswatini now have the internet, and information and communicating technology [ICT] needed for blended learning. Interestingly, MoET has committed itself to facilitate enabling environments for use of ICT in all education and training establishments by digitization of information relating to curricula, mobile learning, e-learning, e-assessment and e-governance (MoET, 2018). Further, the ministry in its Information and Communication Technology Strategic Framework (2018) aims to introduce blended learning in all learning areas in the long-run (MoET, 2018).

From such perspective, this study explored the impact of blended learning on learners' academic performance in the poorly performed subject, Accounting, so as to determine if blended learning could be used to improve academic performance in Accounting in the country which may assist MoET determine whether or not there is an urgent need to introduce blended learning as a mode of instruction in secondary and high schools in Eswatini.

Research Questions

The following questions were answered by the study:

- a) What is the mean performance of both experimental and control group in the pre-test?
- b) What is the mean performance of both experimental and control group in the post-test?
- c) How does the mean performance of the experimental group compare with that of the control group in the pre-test?
- d) How does the mean performance of the experimental group compare with that of the control group in the post-test?

Research Hypotheses

Two hypotheses were tested by the study:

H₀ 1: There is no significant difference in the mean performance of both the experimental and control group in the pre-test.

H₀ 2: There is no significant difference in the mean performance of both the experimental and control group in the post-test

II. LITERATURE REVIEW

Blended learning

In as much as the use of blended learning might date back to before the advent of technology (Bryan & Volchenkova, 2016), scholars started documenting blended learning in 2006. Today a number of books and articles on blended learning have been published. What has been noted is that different scholars and writers define blended learning differently (Graham, 2019). Scholars have defined blended learning as a mix of the best features of the traditional face-to-face and the on-line learning so that instruction occurs both in the classroom and online (through technology) where the online component becomes a natural extension of traditional classroom learning so as to deliver valuable educational experience to students (Vernadakis, Giannousi, Derri, & Michalopoulos, 2012; Kazu & Demirkol, 2014; Nuruzzaman, 2016; Aly, 2013; de la Varre et al, 2010; Graham, 2006; Tayebinik & Puteh, 2012; Gilbert & Flores-Zambada, 2011).

Blended learning is not necessarily the integration of technology in teaching-learning. Blended learning is about rethinking and redesigning the teaching and learning relationship such that learners have the independence, convenience and interaction opportunities of being online (Garrison & Kanuka, 2004; Cleveland-Innes & Wilton, 2018). It necessitates a complete redesign of teaching methods to create meaningful and engaging integration between in-class and online learning.

If well planned, designed and implemented, blended learning provides learners opportunities such as improved learning and grades; ability to manage their time well; technology and communication skills that may help them academically and generally in life; increased learning skills; greater access to information; improved satisfaction and learning outcomes; and to learn with others and to teach others. (Garnam & Kaleta, 2002; Spilka, 2002; Cleveland-Innes & Wilton, 2018).

Empirical studies

A number of studies have been done to investigate the impact of blended learning on learners' academic performance. A study by Vernadakis et al (2012) carried out at the Democritus University of Thrace in Greece, investigated the impact of traditional and blended instruction, on students' performance in Physical Education in an Early Childhood course. The results of the study showed that there were significant differences between students who attended the traditional course and those who attended the blended method instruction ($t(51) = 2.66, p > .05$), with students who attended the course with blended instruction showing higher performance. Thus it was concluded that blended learning improved students' performance in Physical Education Early Childhood better than traditional learning.

Another study was done by Tseng, Kano, Hsu (2014) in Taiwan to determine the effect of integrating blended teaching into Mathematics learning for Junior High School students. The findings of the study showed that learning effectiveness of "blended teaching" was significantly better than that of "traditional instruction". Thus it was also concluded that integrating blended learning into the teaching of Mathematics improved the learning effectiveness.

Al-Madani (2015) in Saud Arabia investigated the effect of Blended Learning approach compared to the traditional learning approach on fifth grade students' achievement in 'My Beautiful Language Textbook' and the development of their verbal creative thinking. The study concluded that learning 'My Beautiful Language Textbook' using the blended approach was more effective than the traditional method in terms of achievement and the development of verbal creative thinking skills.

Celyan and Kesici (2017) investigated the effects of blended learning on the middle school students' academic achievement level and product evaluation scores. The study involved grade six learners doing

'Computer Technologies and Creating Software Product' who were divided into two groups. One group was taught using blended learning and the other using traditional learning. Their study showed that the learners who were taught using blended learning performed significantly better than those taught using traditional learning.

There are studies which are specific to Accounting. One of these studies was carried out by Hiralaal (2012), in South Africa. Hiralaal studied students' experiences of blended learning in Accounting Education at the Durban University of Technology so as to determine if blended learning helps in enhancing performance in Accounting Education. The study concluded that blended learning in Accounting Education has benefited students by enabling them: improvement in academic performance in Accounting Education; increased motivation to learn; independence in the learning process which helped them become lifelong learners, among other benefits.

Another study was done by Du (2011) who carried out a study in the United States of America, comparing the traditional and blended learning in introductory principles of accounting course (Principles of Accounting I /ACT 211) at the University of Massachusetts Dartmouth. The study concluded that although the blended teaching model does not directly improve the student final performance but it improves the student final performance through in-class activities after controlling for prior GPA, math grade, gender, transfer, program, level, homework grade, online quiz grade, and in-class exercise grade.

No evidence has been gathered of studies carried out to explore the impact of blended learning on learner's academic performance in Accounting in Eswatini secondary or high schools hence the need for this study.

III. MATERIAL AND METHODS

The study was quantitative in nature since it collected learners' scores in tests and used statistics to analyse the data so as to make conclusions on the impact of blended learning on learners' academic performance.

Study Design: It used the quasi-experimental (pretest-posttest) design because it was impractical to assign participants into the groups and impossible to control some variables like the age of the learners since Sage Edge (2019), Mushoriwa (2010) and Muijs (2004) argue that in such instances this design is more suitable.

Study Location: The study was based in two secondary schools in the Shiselweni region of Eswatini.

Study Duration: It took three weeks from 17th June 2019 to 05th July 2019.

Sample size: Twenty-eight (28) learners in intact Form 5 classes from two schools (School A – n=12 and School B – n=16) were part of this study.

Subjects & selection method: School A (experimental group) was selected on convenience whilst School B (control group) was selected purposively.

Treatment

The topic 'Interpretation of Financial Statements' was selected from the EGCSE Accounting syllabus and taught over a duration of three (3) weeks to both the experimental and control group. Class meetings for both groups were five times a week. Efforts were made to ensure that students in the two learning environments participate in the same class exercises, assignments, textbooks and supplementary learning aids such as assignment solutions, and solutions to past examinations. The control group (school B) was taught using the traditional mode of lesson delivery. The experimental group (School A), on the other hand, was taught using blended learning where the content was redesigned and developed into a blended format (on line and face to face). Learners attended face to face sessions and also learn online through 'Google Classroom' application and WhatsApp so as to benefit from its interactive environments which provides communication tools enabling learners to; participate in the discussions and activities or exchange ideas and experiences, do self-assessment questions tool which relays immediate feedback to the student when participating in answering questions in these tools as well as reference materials which were given to learners in the form of Word or PDF file or through hyperlinks in some useful sites available on the web and related to the curriculum which learners could download. In addition, class session and YouTube video clips on the topic being taught were posted for learners to view. All learners participated in a 1 hour compulsory online discussion forum everyday between 1800hrs and 1900hrs for the entire duration of the treatment (3 weeks). They had access to the online site Google Classroom and WhatsApp at any time through their mobile phones.

Data Collection Instruments: Data was gathered using pre and post tests.

Validity & Reliability of Instruments: Face and content validity of data collection instruments were checked by Business Education Lecturers from the University of Eswatini. The reliability of the tests, on the other hand, was already checked since published tests (IGCSE past exam question papers) were used. For Cohen, Manson and Morrison (2005) argue that published tests are reliable.

Data Collection Procedure

The pre-test was administered to both the experimental and control group on the same day, in the morning and afternoon respectively. The researcher administered the pre-test personally in both the experimental and control groups. Learners were given fifty-five minutes to answer the test. The pre-test was marked by the researcher (trained marker – Examination Council of Eswatini) and then given to a business education teacher to moderate. The scores were recorded for use in the study. After the treatment a post-test was administered to both groups. Again, the researcher administered the post-test in both groups, marked the test and gave it to a business education teacher for moderation. Cohen, Manion and Morrison (2005) argue that it is unethical to inflate scores as such the researcher ensured that learners' scores were recorded as they were.

Statistical analysis

Scores from the pre-test and post-test were used to compute the means and standard deviation using SPSS 20. Before calculating the means outliers were checked and WikiHow (2019) steps in calculating outliers were used. The t-test for independent samples was used to test the hypothesis because Aly (2013) suggests that where the independent or grouping variable is nominal (approach = Blended vs Traditional) and the dependent variable in each case is ratio scale, the t-test is appropriate. Since it is argued that conclusions from an independent t-test can be trusted if certain assumptions are met and these assumptions include; independence, normality and homogeneity (SPSS tutorials, 2019), these assumptions were checked. The assumption of independence was ensured by selecting an experimental group and control group from different schools thus were independent from each other. To check the assumption of normality in the pre-test and post-test for both groups the SPSS 20 Kolmogorov-Smirnov and Shapiro-Wilk tests were used. The assumption of homogeneity of variance, on the other hand, was verified using the Levene's test.

IV. RESULTS

Research Question 1: What is the mean performance of experimental group and control group in the pre-test?

As indicated in Table 1 below the results showed a mean performance of 10.50 for the experimental group which was lower than that of the control group which was 20.13 in the pre-test.

Table 1. Means and Standard deviations for both experimental and control groups in the Pre-test and Post-test

	Pre-Test		Post-Test	
	Mean	Standard deviation	Mean	Standard deviation
Experimental group	10.50	8.141	54.33	13.398
Control group	20.13	7.779	38.25	15.693

Research Question 2: What is the mean performance of the experimental and control group in the post test?

As shown in Table 1 above the mean performance for the experimental group was 54.33 which was higher than that of the control group which became 38.25.

Research Question 3: How does the mean performance of the experimental group compare with that of the control group in the pre-test?

Table 2 below shows that the difference between the experimental and control group mean in the pre-test was -9.63. This means that the mean for the control group was 9.63 higher than that of the experimental group in the pre-test

Table 2. Mean Difference for both experimental and control groups in the Pre-test and Post-test

	Pre-Test Mean	Post-Test Mean
Experimental group	10.50	54.33
Control group	20.13	38.25
Mean Difference	-9.63	16.08

Research Question 4: How does the mean performance of the experimental group differ from that of the control group in the post-test?

As depicted in Table 2 above the difference in mean between the experimental and control group in the post-test was 16.08. This indicated that the mean for the experimental group was 16.08 higher than the mean of the control group in the post-test.

Testing Hypotheses

H₀1: There is no significant difference in the mean performance of both the experimental and control group in the pre-test.

To test this null hypothesis, the independent sample t-test was run in SPSS 20 and a significant level of 0.05 was set. Table 3 below presents the results of the independent samples t-test for both groups in the pre-test.

Table 3. Independent sample T- test Results for the Experimental and Control Group in the Pre-test

		Levene's Test for Equality of Variances		T-Test for Equality of means				
		F	Sig.	T	Df	Sig. (2tailed)	Mean Difference	Std. Error Difference
Scores	Equal variance assumed	.310	.583	-3.177	26	.004	-9.625	3.030
	Equal variance not assumed			-3.155	23.235	.004	-9.625	3.030

In table 3 above the t-test for equality of means shows a t- value of -3.177, which indicated that the control group mean was higher than the experimental group mean. As such the null hypothesis was rejected and it was concluded that the control group and experimental group differed significantly, in favour of the control group, in performance in the pre-test.

H₀2: There is no significant difference in the mean performance of both the experimental and control group in the post-test.

The independent samples t-test was also run in SPSS 20 to test this hypothesis where the significant level was placed at 0.05 the results of which are presented in Table 4 below.

Table 4. Independent sample T- test Results for the Experimental and Control Group in the Post-test

		Levene's Test for Equality of Variances		T-Test for Equality of means				
		F	Sig.	T	Df	Sig. (2tailed)	Mean Difference	Std. Error Difference
Scores	Equal variance assumed	.945	.340	2.852	26	.008	16.083	5.639
	Equal variance not assumed			2.919	25.492	.007	16.083	5.510

As shown in Table 4 above, the t-test for equality of means shows a t- value of 2.852, which implied that the experimental group mean was higher than the control group mean in the post test. As such the null hypothesis was rejected and it was concluded that the control group and experimental group differed significantly in performance in the post-test, in favour of the experimental group.

V. DISCUSSION

The results showed a significant difference in the mean performance of the experimental and control group in favour of the control group in the pre-test. This indicated that the control group which was taught using traditional learning had better knowledge on the topic taught compared to the experimental group before the treatment. This may be as a result of extraneous factors such as that some learners in the control group might have read ahead thus had knowledge in interpreting financial statements, Berry (2008) agrees that some learners do well in pre-test because they work ahead on the content so that they can do better on the pre-test as a matter of pride. However, such extraneous factors could not distort the results since the homogeneity of variance was equal.

These findings are similar to the findings of Kayii and Dambo (2018) who studied the effect of blended learning approach on students' achievement in business education in River State University, Nigeria which showed a higher mean for the control group compared to that of the experimental group in the pre-test given to the students before the treatment. Another similar finding was by Tseng, Kano and Hsu (2014) who carried out a study in Taiwan to find out the effect of integrating blended teaching into Mathematics learning for Junior High School in Pingtung. The results showed that the control group performed better than the experimental group in the pre-test.

On another note, the results of the study revealed a significant difference in the mean performance of the two groups in the post test in favour of the experimental group, which tells us that the experimental group outsmart the control group in the post test. This means teaching the experimental group using blended learning improved their performance.

This was as a result of exposing the experimental group to blended mode of instruction where in addition to the face to face sessions learners were given an online platform using Google Classroom and WhatsApp to discuss, ask questions from the teacher and colleagues anytime, read notes posted, do activities posted online and submit them online where feedback was provided immediately, watched class session video clips and directed to online sites with YouTube videos related on the topic learnt which the control group was not exposed to. As such there was improved learner engagement and interaction which enabled them to achieve improved learning thus were able to understand and master the taught concepts better than the learners who were taught using the traditional face to face learning.

These online learning activities enabled the quieter learners to be able to ask questions and respond to questions since they had a wide range of communication formats such as writing questions or responses, and recording audio on WhatsApp. This was evident in that learners who rarely ask questions or answer questions posed by the teacher in class were seen asking questions and responding to other learners' questions on WhatsApp. This is consistent to Young's (2002) argument that blended learning enables quieter students to find a voice since a wide range of communication formats and a variety of learning styles are available.

Furthermore, blended learning enabled the experimental group more learning opportunities which helped them to master the concept learnt since they had the opportunity to learn online afterschool in addition to the face to face sessions they had during the day. This is in agreement with Nurruzzaman's (2016) statement that blended learning overcomes the barriers of time and location thus creates a number of learning opportunities for learners. The same sentiment is shared by Ghaith (2010) when he says blended learning provides asynchronous learning where learners learn the same material at different times and locations that is at 'any time and any place' in addition to face-to-face learning. He argues that the learner can have access to the course at any time that is convenient, not just during the specific schedule time set for a traditional course in the institution's timetable, .

Also, directing the experimental group to websites with YouTube videos which they watched (as many times they felt like) enabled them to master the concepts learned better than the control group taught using traditional face to face learning where once a lesson was over the learner didn't have the opportunity to go over the lesson again. Fakhir (2015) concurs that if learners are given access to a wide variety of learning resources through their devices that are connected to the Internet in the comfort and safety of their classrooms or even homes, they perform better.

Learners in the experimental group were also given personal attention where learners who were lagging behind were given direct support through their WhatsApp inbox by clarifying concepts they didn't understand and also allowing them to do personalized exercises where feedback was provided immediately through WhatsApp inbox. This ensured that no learner was left behind unlike in traditional learning where the teacher might not be able to give such personal attention due to time. This benefit of blended learning that improves learners performance is attested by Marsh (2012) who argues that blended learning provides more personalized learning support where learners are given notes, advise and hints related to certain concepts learnt other than those that are generalized for the whole class, through the online platform.

Moreover, the online platform provided in blended learning enabled learners in the experimental group to ask questions or share an idea immediately they have that question unlike in traditional learning where Sands

(2002) argues that the conversation and discussion is negatively affected by the academic timetable in that, if a student has an idea on a certain concept while at home after school, and he/she wants to express it to the teacher or fellow students the following day, and only to find that the next class for the subject is after two days or so, then he/she will be forced to wait to discuss the idea which may result in the idea being lost or distorted.

On another note, the networked or online learning environment which learners who learnt through blended learning were exposed to, promoted inquiry and discovery learning since the setting permitted the learners to engage with their teacher and colleagues anytime and construct knowledge through the interaction and guidance from their peers and the teacher which according to Vygotsky (1978) (as cited in Mishra, 2013) makes the learners to master learned concepts or learn with ease and to reflect on inconsistency and to change their conceptions as they communicate online.

Blended learning also assisted learners who were not able to attend the face to face session such as those who were absent, to be able catch up with the lesson through the discussions, notes, exercises that were offered online, class session video clips which were posted on WhatsApp, as well as YouTube videos which learners were directed to watch. This is evident in that during the three weeks period when the treatment was carried out three learners were sent home by the administration since they haven't paid school fees, these learners were able to follow what was learnt in class through the online discussion, notes, exercises as well as the YouTube videos which the learners were directed to watch. Such benefit of blended learning Ghaith (2010) regard as 'flexibility of attendance' which he says it means through blended learning learners who did not attend the face to face class, can catch up through the online platform which helps learners to follow the lessons and not to lag behind in their studies.

These findings are congruent with the findings of Celyan and Kesici's (2017) study which was carried out in Aydin, Turkey investigating the effects of blended learning on the middle school students' academic achievement level using fifty-three sixth grade learners doing Computer Technologies and Creating Software Product course during the 2014/2015 school year where the students were divided into two groups: the experimental group and control group, taught using blended and traditional learning respectively. The results showed that learners taught through blended learning performed better than those who were taught using traditional learning. Other studies which showed the same findings were done by Utami (2018); Kazu and Demirkol (2014); Tseng, Kano, and Hsu (2014), and Al-Madani (2015).

VI. CONCLUSION

From the findings of the study it was concluded that blended learning method improved learners' academic performance in Accounting.

RECOMMENDATIONS

In light of the findings obtained from the study and the literature review it is recommended that;

- It is necessary for teachers to implement blended learning method in the course of their instruction, as planned in MOET Information and Communication Technology Strategic Framework (2018), as soon as possible in secondary schools to help improve learners' academic performance since it has been discovered from this study that learners' academic performance is improved when learners are learning through blended learning method.
- For blended learning method to be implemented effectively and efficiently it would be necessary that learners are equipped with appropriate information and communication technology (e.g. smart phones or tablets) since it was observed in this study that some parents cannot afford to buy smart phones and airtime or data bundles for their children.
- It would also be necessary to train in-service and pre-service teachers on how to design electronic courses using virtual learning environment on a correct scientific and educational basis so as to equip them with the skills necessary for designing and implementing blended learning. This is because it was observed in the present study that planning and designing blended learning is not an easy and speedy process thus without proper training on the teacher's part on how to successfully design and implement blended learning many teachers may be demotivated or unable to design or implement blended learning.

REFERENCES

- [1]. Allen, I. E., & Seaman, J. (2006). *Making the Grade: Online Education in the United States*. Boston: Sloan Consortium.
- [2]. Al-Madani, F. M. (2015). The Effect of Blended Learning Approach on Fifth Grade Students' Academic Achievement in My Beautiful Language Textbook and the Development of their Verbal Creative Thinking in Saudi Arabia. *Journal of International Education Research*, 11(4), 263-260 Retrieved 01/22/2019 from <https://eric.ed.gov>

- [3]. Alsaaty, F. M., Carter, E., Abrahams, D., & Alshameri, F. (2016). Traditional versus Online Learning in Institutions of Higher Education: Minority Business Students' Perceptions. *Business and Management Research*, 5(2): 31-41. Retrieved 12/17/2018 from <http://bmr.sciencedupress.com>. doi:10.5430/bmr.v5n2p31
- [4]. Aly, I. (2013). Performance in an Online Introductory Course in a Hybrid Classroom Setting. *Canadian Journal of Higher Education*, 43(2), 85-99. Retrieved 02/13/2019 from <https://www.semanticscholar.org>
- [5]. Bath, D., & Bourke, J. (2010). *Getting Started with Blended Learning Guide*. Retrieved 03/16/2019 from <https://www.griffith.edu.au/gihe>.
- [6]. Berry, T. (2008). Pre-Test Assessment. *American Journal of Business Education*, 1(1), 19–22. Retrieved 03/12/2019 from <https://pdfs.semanticscholar.org>
- [7]. Bryan, A., & Volchenkova, K. N. (2016). Blended Learning: Definition, Models, Implications for Higher Education. Bulletin of the South Ural State University. Ser. Education. *Educational Sciences*, 8(2), 24–30 doi: 10.14529/ped160204
- [8]. Ceylan, V. K., & Kesici, A. (2017). Effect of Blended Learning to Academic Achievement. *Journal of Human Sciences*, 14(1), 308-320. doi:10.14687/jhs.v14i1.4141
- [9]. Cleveland-Innes, M., & Wilton, D. (2018). *Guide to Blended Learning*. British Columbia: Commonwealth of Learning.
- [10]. Cohen, L., Manion, L., & Morrison, K. (2005). *Research Methods in Education*. 5th Edition. London: Routledge Falmer.
- [11]. de la Varre, C., Keane, J., & Irvin, M. J. (2010). Enhancing Online Distance Education in Small Rural Us Schools: A Hybrid, Learner-Centered Model. *Research in Learning Technology*, 18(3), 193 – 205. doi:10.1080/09687769.2010.529109
- [12]. Du, C. (2011). A Comparison of Traditional and Blended Learning in Introductory Principles of Accounting Course. *American Journal of Business Education*, 4(9), 1-10
- [13]. Fakhir, Z. (2015). *The Impact of Blended Learning on the Achievement of the English Language Students and their Attitudes towards it* (Unpublished master's thesis). Middle East University, Middle East Retrieved 01/15/2019 from <https://meu.edu.jo/libraryTh>.
- [14]. Gakunga, D. K. (2005). *Determinants of Accounting Students' Performance at National Examinations in Private and Government Training Institutions in Uasin Gishu District, Kenya* (Unpublished Master's Thesis). University of Nairobi, Nairobi.
- [15]. Garnam, C., & Kaleta, R. (2002). Introduction to Hybrid Courses. *Teaching with Technology Today*, 8(6), 1-6. Retrieved 02/05/2019 from <https://www.uwsa.edu/ttt/articles/garham.htm>
- [16]. Garrison, D. R., & Vaughan, N. D. (2008). *Blended Learning in Higher Education: Framework, Principals, and Guidelines*. San Francisco, CA: Jossey-Bass.
- [17]. Garrison, R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The internet and Higher Education*, 7, 95-105. doi:10.1016/j.iheduc.2004.02.001
- [18]. Ghaith, O. (2010). *The Impact of Blended Learning on Female Student-Teachers in Kuwait* (Unpublished master's thesis). Brunel University, Uxbridge, London.
- [19]. Gilbert, J., & Flores-Zambada, R. (2011). Development and Implementation of a "Blended" Teaching Course Environment. *Journal of Online Learning and Teaching*, 7(2), 244-260.
- [20]. Graham, C. R. (2006). Blended Learning Systems: Definition, Current Trends, and Future Directions. In *Handbook of Blended Learning: Global Perspectives, Local Designs*, edited by C. J. Bonk and C. R. Graham (pp. 3–21). San Francisco, CA: Pfeiffer Publishing.
- [21]. Graham, C. R. (2019). Current Research in Blended Learning. In M. G. Moore & W. C. Diehl (Eds.), *Handbook of Distance Education* (4th ed., pp. 173–188). New York, NY: Routledge.
- [22]. Hinkhouse, H. C. (2013). *Investigating Blended Learning in the High School Science Classroom* (Master's thesis). Retrieved 11/15/2018 from Electronic Theses and Dissertations (75). <https://scholarworks.uni.edu/etd/75>
- [23]. Hiralaal, A. (2012). Students' experiences of blended learning in Accounting Education at the Durban University of Technology. *SAJHE*, 26(2), 316–328
- [24]. Kayii, N. E. & Dambo, B. I. (2018). Effect of Blended Learning Approach on Business Education Students' Achievement in Elements of Business Management in Rivers State University. *International Journal of Innovative Information Systems & Technology Research*, 6(1), 38-48. Retrieved 01/22/2019 from <https://www.academia.edu>
- [25]. Kazu, I. Y. & Demirkol, M. (2014). Blended Learning: Let's Get Beyond E- Learning. *Turkish Online Journal of Educational Technology*, 13(1), 78-87.
- [26]. Lalima & Dangwal, K. L. (2017). Blended Learning: An Innovative Approach. *Universal Journal of Educational Research*, 5(1), 129-136. doi:10.13189/ujer.2017.050116

- [27]. Lin, Y., Tseng, C., & Chiang, P. (2017). The Effect of Blended Learning in Mathematics Course. *EURASIA Journal of Mathematics Science and Technology Education*, 13(3), 741-770. Retrieved 01/25/2019 from <https://www.ejmste.com>pdf-6214>
- [28]. Marsh, D. (2012). *Blended Learning Creating Learning Opportunities for Language Learners*. New York: Cambridge University Press.
- [29]. Ministry of Education & Training [MoET] (2018). *National Education and Training Sector Policy 2018*. Eswatini Government
- [30]. Mishra, R. K. (2013). Vygotskian Perspective of Teaching-Learning. *Innovation: International Journal of Applied Research*, 1(1), 21-28 Retrieved 01/27/2019 from <https://ijar.publicationsupport.com>
- [31]. Muijs, D. (2004). *Doing Quantitative Research in Education with SPSS*. London: SAGE Publication Ltd.
- [32]. Mushoriwa, T. D. (2010). *Educational Research*. (Unpublished Module) University of Swaziland, Matsapha, Swaziland.
- [33]. Mwangi, N. N. (2004). *Investigating The Causes of Poor Performance in Accounting at Kenya Certificate of Secondary Education (KCSE) Examination in Selected Schools in Kiambu District* (Unpublished master's thesis). University of Nairobi, Kenya. Retrieved 10/12/2018 from <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/18408>
- [34]. Nuruzzaman, A. (2016). The Pedagogy of Blended Learning: A Brief Review. *IRA International Journal of Education and Multidisciplinary Studies*, 4(1), 125-134. Retrieved 01/28/2019 from <https://pdfs.semanticscholar.org>
- [35]. Obidile J. I., Amobi, S. C., Uzoekwe H. E. & Akuezilo J. A. (2017). Perceived Factors Influencing Academic Performance of Students in Accounting in Secondary Schools in Anambra State. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 22(2), 96-99.
- [36]. Poon, J. (2013). An Examination of a Blended Learning Approach in the Teaching of Economics to Property and Construction Students. *Property Management*, 31(1), 39-54. Retrieved 12/05/2018 from <http://dx.doi.org/10.1108/02637471311295405>
- [37]. Redmond, P. (2011). From Face-to-Face Teaching to Online Teaching: Pedagogical Transitions. In G. Williams, P. Statham, N. Brown & B. Cleland (Eds.), *Changing Demands, Changing Directions. Proceedings ascilite Hobart 2011* (pp.1050-1060). Retrieved 01/20/2019 from <http://www.ascilite.org.au/conferences/hobart11/procs/Redmond-full.pdf>
- [38]. Sage Edge (2019). *Quasi-Experimental and Single-Case Experimental Designs*. Retrieved 01/25/2019 from <https://us.sagepub.co>upm-binaries>
- [39]. Sands, P. (2002). Inside Outside, Upside Downside: Strategies for Connecting Online and Face-to-Face Instruction in Hybrid Courses. *Teaching with Technology Today*, 8(6), 6 -12 Retrieved 11/12/2018 from <https://www.uwsa.edu/tt/articles/sands2.htm>
- [40]. Spilka, R. (2002). Approximately "Real World" Learning with the Hybrid Model. *Teaching with Technology Today*, 8(6), 12-21. Retrieved 01/028/2019 from <https://www.uwsa.edu/tt/articles/spilka.htm>
- [41]. SPSS Tutorials (2019). *SPSS Kolmogorov-Smirnov Test for Normality – The Ultimate Guide*. Retrieved 07/25/2019 from <https://www.spss-tutorials.com>spss>
- [42]. Tayebinik, M., & Puteh, M. (2012). Blended learning or E- Learning? *International Magazine on Advances in Computer Science and Telecommunications (IMACST)*, 3(1), 103-110.
- [43]. Tseng, W.; Kano, T.; & Hsu, C. (2014). Effect of Integrating Blended Teaching into Mathematics Learning for Junior High School Students. *Journal of Computers and Applied Science Education*, 1(2), 39-57. Retrieved 01/26/2019 from <https://bit.kaus.edu.tw>
- [44]. Tshiovhe, T., Monobe, R., & Mulaudzi, O. (2018). Learner Performance in Accounting for Grade 12 in the Vhembe District. *J Soc Sci*, 55(1-3): 45-65. DOI: 10.31901/24566756.2018/55.1-3.2018
- [45]. Utami, I. S. (2018). *The Effect of Blended Learning Model on Senior High School Students' Achievement*. doi.org/10.1051/shsconf/20184200027
- [46]. Vernadakis, N., Giannousi, M., Derri, V. & Michalopoulos, M. (2012).The Impact of Blended and Traditional Instruction in Students' Performance. *Procedia Technology*, 1, 439–443. Retrieved 01/17/2019 from <https://www.sciencedirect.com>
- [47]. Vilakati, N. (2014). *Innovating ODL Practice through Blended E-Learning. A Report on the 2013 Workshop Sessions for Creating Learning Materials*. Matsapha: Institute of Distance Education - University Of Swaziland.
- [48]. Viz, D., & Kaur, N. (2017). Effect of Blended Learning Approach on Achievement in Geography at Secondary School Stage. *Scholarly Research Journal for Humanity Science & English Language*, 4(22), 5478-5485. Retrieved 01/25/2019 from <https://www.srjis.com>
- [49]. WikiHow (2019). *How to Calculate Outliers: 10 Steps (with Pictures)*. Retrieved 02/10/2019 from <https://wikihow.com>
- [50]. Wood, F., & Sangster, A. (2012). *Business Accounting I*. London: Prentice Hall

- [51]. Young, J. (2002). 'Hybrid' Teaching Seeks to End the Divide Between Traditional and Online Instruction. *Chronicle of Higher Education*, 48(28), 33-34. Retrieved 01/20/2019 from <https://www.chronicle.com>

Sanele Fanwell Sibandze. "Exploring the Impact of Blended Learning on Learners' Academic Performance in Accounting." *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 25(5), 2020, pp. 01-11.