Students' and Teachers' perception towards WAPASA Application for e-Learning in Harare, Zimbabwe

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Abstract: This paper examined the perception of grade 1 pupils and their teachers towards WAPASA Application in the teaching and learning. The study employed the descriptive research design. A stratified random sampling of 210 pupils and a purposive sample of 12 teachers were from three purposively selected primary schools in Harare City. Of those, eight teachers and 196 pupils responded. Due to positive attitude of teachers and learner, it was concluded that WAPASA App is very useful for teaching and learning as it was perceived to be fun and interesting to use. Therefore, it can be used to support and enhance learning. If properly incorporated into the teaching and learning process, e-learning will play an important role for learning effectiveness. Therefore, it is recommended that, teachers should use the WAPASA App for maximized learning effectiveness. The Ministry of Education as well as directors of schools should provide in-service professional development workshops for teachers so that they may gain more knowledge on how to use the application.

Keywords: Teachers' perception; learners; pupils; perception; WAPASA; Application; e-learning

Introduction
Learning has shifted from traditional approaches and is now becoming more of learner centered through interactivity. According to Poljanowicz and Robert (2010), continuous development of multimedia communication techniques, data exchange systems, intelligent learning systems, free

e-learning portals and tools for creating e-learning courses led to perception of on-line education as the factor that encourages students' interest in learning. According to Kekkonen, Moneta, Synnove and Giovanni (2002), e-learning can be defined as application of internet-related technologies in the instructional processes. Information Communications Technology is a technology that can be accessed through internet. It provides efficient ways of improving education.

WAPASA Application is an animated and video based game in the Shona native language in Zimbabwe. It was developed by Chinyere Errynett Clarah in 2021. The system was named WAPASA, a Shona word meaning "you have passed." This was a marketing strategy through which students would think that they will pass if they happen to use the application for learning. The application focuses more on the learning content rather than examination coaching. The application is for grade 1 students, which enhances the grooming of the learners at a tender age. WAPASA App provides Shona games for learners to play. It is a web based game that can be accessed by any type of electronic gadget including laptops, desktops, smartphones and tablets. The application was designed to ensure simplicity and ease of use to the end users. The main aim was to educate young learners in a manner that they quickly understand and grasp the concepts taught. The interfaces are colorful, enticing and eye catching so that the learning experience becomes exciting.

Other educational e-learning applications developed in Zimbabwe include Ruzivo by Econet Wireless, Zimsec Maths Revision by Van Lee Chigwada of Age X Development, Wagona Maths by Ray Khumalo and Rex Ndengeya and ShonaApp by Russel Kanyera. Similarly to the WAPASA application, there is an overview of how these applications work, the number of students using these applications, subjects offered and whether they are used at primary or secondary school level. Due to rapid growth of e-learning technologies in the world, mobile applications for Zimbabwean education are failing to catch up with modern technologies because of resistance of change from traditional learning as well as limited exposure with the current e-learning technologies. Therefore, this study sought to investigate on students and teachers' perception towards WAPASA Application for e-Learning in Harare. The study was guided by two research questions:

1. What is the teachers' perception of the e-learning application?
2. What is the students' perception towards the use of WAPASA e-learning application?

Literature Review

According to a study by Al-Fahad and N-Fahad (2009) in Saud Arabia which analysed factors crucial in overcoming the possible hindrance of mobile learning implementation in higher education, student perception of mobile-learning may be influenced by specific individual variables like gender, course of study and attitudes towards new technology. The study established that students had a positive perception towards mobile technology and regarded it as an effective tool in improving communication and learning in schools. The study further established that the majority of the students perceived mobile learning as appealing since it granted them the freedom to learn whenever and wherever they wanted.

In Thailand, Watson (2020) in his study on teachers` perceptions of the shift from the Classroom to Online Teaching due to the outbreak of COVID-19 pandemic found out that teachers were ambivalent about the benefits of online teaching citing practical advantages but also highlighting difficulties in achieving some English language objectives and in gauging student reactions as some of the students had barriers in understanding and interpreting English to their local languages. The study also introduced the gap of failing to address the difficulties learners had in understanding some of the concepts using English language as compared to when the teaching is done using their local language during online lessons, which led to the carrying out of this study in order to determine if local educational applications would increase much understanding to pupils of grade 1 in the learning processes.

In a cross-sectional web-based survey done in Kentucky and Tennessee by Babbie (2012), where the purpose of the study was to explore teachers' perceptions on the use of mobile phones in the classrooms, most of the teachers agreed that a mobile phone can be used for school related work such as accessing social media sites and internet when researching, which increases academic knowledge to the students. That study relates to the current study in that, it also measured perception of

teachers on the issue of e-learning and electronic gadgets which the current study sought to determine through measuring the perception of teachers and learners toward the WAPASA application.

In Zimbabwe, Ruzivo was the most popular mobile application for education, which was launched by Econet Wireless in 2017. Their main aim was to improve Zimbabwe's Ordinary Level pass rate, which was reported to be 29.16% for the November 2016 examinations. The system had a demo option where testing is free for two months for starters (Ruzivo Econet (2020). The application allows learners to test themselves through examination coaching and also it allows teachers to interact with learners online. However, the application does not focus more on teaching; it focuses more on examination coaching thereby leaving an educational gap on the learning processes to non-examination classes. Furthermore, the ShonaApp was developed by Russel Kanyera in May 2016. Shona App is a useful tool for parents who want to help their children with Shona homework in the areas where the subject is covered. This application requires one to pay via Eco Cash, Tele Cash or Net Cash for it to be activated. It also eliminates other subjects of concern to students, hence a major weakness.

Most of educational application studies were developed at University levels in Asian countries such as Saudi Arabia. Applications developed in Zimbabwe were mainly focusing on examination writing classes, which are Grade 7, Advanced Secondary (Form 6) and Ordinary Secondary (Form 4) levels. There were no educational e-learning applications which were developed for Early Childhood Development (ECD) pupils which led to the carrying out of this study.

Methodology
Design
This study employed the descriptive design which the researchers chose since it clearly described the phenomenon under investigation in terms of what the respondents said about the WAPASA application.

Population and Sampling
The study employed the purposive sampling of three private primary schools in Harare City which were equipped for easy demonstration of the WAPASA application. Out of those schools, a sample of 210 was picked from the total population of 460 grade one pupils through stratified sampling whereby 196 responded. Likewise, 12 out of 55 teachers were sampled through purposive approach and eight of them responded.

Research Instruments
For data collection, there were two sets of questionnaires, one for teachers and the other one for pupils. The teachers filled in questionnaire on their own. Teachers and one of the researchers guided the pupils to fill in their questionnaires; they would interpret the questions to the pupils for better understanding of the actual requirements of the questions.

Table 1: Instruments' Reliability

Variables	Items	Cronbach's α
Perception – Pupils	PS1	.871
	PS2	.894
	Overall Perception-Pupils Score	**.883**
Perception – Teachers	PT1	.854
	PT2	.798
	PT3	.954
	PT4	.862
	PT5	.846
	Overall Perception - Teachers Score	**.863**
	Average Score	**.873**

Validity and Reliability
The instruments were drafted in a simple language to ensure maximum understanding by respondents. Furthermore, items were drafted in line with the research questions so that the results would be consistent. Cronbach's alphas of at least 0.7 indicated acceptable reliability (George and Mallery, 2016) as shown in table 1.

Ethical Considerations

Ethical consideration steps were employed by the researchers during the course of this study. The researchers got an approval letter from the Ministry of Primary and Secondary Education in Zimbabwe through which they requested for permission from specific school authorities. Sampled pupils were given indemnity forms which were signed by their parents.

Findings and Discussion

Demographic Characteristics of Respondents

A total of 210 questionnaires were distributed to sampled pupils and 196 were returned, thus giving a response rate of 93%. Twelve questionnaires were distributed to teachers and eight (66.6%) responded.

There were 90 (45.9%) male and 106 (54%) female pupils in the survey. For teachers, 3 (37.5%) were males and 5 (62.5%) were females. Most of the teachers were in the range of 45-50 years with 62.5%, followed by 30-40 years with 25% and the least was 50-60 years with 12.5%. Therefore, most of the teachers for grade 1 pupils were of middle age.

Research Question 1: What is the students' perception towards the use of WAPASA e-learning application?

Whether WAPASA is Fun

As seen in table 2, when pupils were asked if WAPASA App is fun, 112 (57%) strongly agreed, 52 (26.5%) agreed, 15 (7.7%) were neutral, 10 (5%) disagreed and 7 (3.8%) strongly disagreed. Hence 83.5% generally agreed and 8.8% disagreed that WAPASA App is fun.

Table 2: Perception of WAPASA App by Pupils (n=196)

Response	Number of Respondents	Percentage (%)
Strongly Agree	112	57%
Agree	52	26.5%
Neutral	15	7.7%
Disagree	10	5%
Strongly Disagree	7	3.8%
Total	**196**	**100**

Table 3: Whether WAPASA App Improves the Learning Experience (n=196)

Response	Number of Respondents	Percentage (%)
Strongly Agree	108	55%
Agree	57	29%
Neutral	15	7.7%
Disagree	11	5.6%
Strongly Disagree	5	2.7%
Total	**196**	**100**

These results showed that pupils had a positive perception towards the WAPASA application as the majority of them agreed that the app is fun and it was easier for them to understand concepts during online lessons since it was designed in their mother tongue. Likewise, in a study in Saudi Arabia, Al-Fahad and N-Fahad (2009) found out that students changed from passive learners to truly engaged learners who are behaviorally, intellectually and emotionally involved in their learning tasks and that wireless networks increased the flexibility of access to resources in learning at any given time, thus improving the quality of learning.

WAPASA App and Learning Experience

As seen in table 3, when pupils were asked if WAPASA App improved their learning experience,

out of 196 participants, 108 (55%) strongly agreed, 57 (29%) agreed, 15 (7.7%) were neutral, 11 (5.6%) disagreed and 5 (2.7%) strongly disagreed. Hence 84% generally agreed and 8.3% disagreed that WAPASA App improves their learning experience. This suggests that, if clearly introduced to the curriculum and syllabus by the Ministry of Education, the WAPASA app may increase positive outcomes of learning.

Al-Adwan and Smedley (2013) in their study also found similar results that 75% of the teachers were happy that the online learning applications improved the learning experiences and outcomes which boosted pass rates. Furthermore, more than 84 % (n=157) of learners strongly felt that mobile

devices allowed them to be connected and to collaborate in the learning process.

Furthermore, according to Suleiman (2011) by using e-resources in teaching and learning process learners feel good and confident about themselves. Ring and Kelley (2002) contend that with the access to e-resources and the internet, learners completed their schoolwork more quickly and their assignments were drawn from up-to-date sources.

Research Question 2: What is the teachers' perception of the e-learning application?

Table 4 shows that 37.5% strongly agreed and 25% agreed that the App can be used to enhance learning. The table also indicates that 12.5% were neutral, 12.5% disagreed and 12.5 strongly disagreed. Therefore, the majority of the teachers strongly agreed that WAPASA App can be used to enhance learning.

The table also shows that 62.5% strongly agreed and 12.5% agreed that they were happy to use WAPASA App, 12% were neutral, 12.5 disagreed and 12.5 strongly disagreed. Therefore, the majority of the teachers were happy to use the application in the teaching and learning process. Similarly, Albirini (2006) explored the attitudes of English as Foreign Language (EFL) teachers in Syrian high schools towards the use of technology in education and found that most teachers possessed positive attitudes towards the use of Information and Communication Technologies (ICT) for educational purposes.

Table 4: Teachers' Perception of WAPASA App

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
WAPASA App can be used to enhance learning	37.5%	25%	12.5%	12.5%	12.5%
I am happy to use WAPASA App	62.5%	12.5%	12.5%	12.5%	12.5%
WAPASA App is easy to use	50%	25%	0%	12.5%	12.5%
I enjoyed using WAPASA App with my class	50%	25%	0%	12.5%	12.5%
I recommend other teachers to use WAPASA App	37.5%	37.5%	12.5%	12.5%	0%

In the same vein, Mollaei and Riasati (2013) found that teachers in Iran had positive attitudes toward using technology to develop learning through a computer–oriented instruction. This clearly shows that use of technology on teaching is useful as it is easier for teachers to give instructions to learners.

The table further indicates that 50% strongly agreed and 25% agreed that WAPASA App is easy to use, 12.5% disagreed and 12.5 strongly disagreed with the statement. Furthermore, 50% strongly agreed and 25% agreed that they would recommend the App to other teachers, 12.5% were neutral and 12.5% disagreed. According to Nursalina and Fitrawati (2021), most teachers in Indonesia admitted that using online learning strategies is more comfortable than using face-to-face approaches because they managed their time with flexibility. More than half of the teachers admitted that online learning activities help teachers think innovatively and creatively. Kamal and Ferdousi (2009) argue that teachers' attitudes have a significant impact on their decisions about if, when, and how they would use e-learning system in the teaching and learning process.

Conclusions and Recommendations

Due to positive attitude of teachers and learner, it is concluded that WAPASA App is very useful for teaching and learning as it was perceived to be fun and interesting to use. Therefore, it can be used to support and enhance learning. If properly incorporated into the teaching and learning process, e-learning will play an important role for learning effectiveness.

Therefore, it is recommended that, teachers should use the WAPASA App for maximized learning effectiveness. The Ministry of Education as well as directors of schools should provide in-service professional development workshops for teachers so that they may gain more knowledge on how to use the application.

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