Evaluating Secondary Schools Students Perceptions of Computer – Based Testing (CBT) Towards the Creation of Credible Information for Improving Academic Assessments in Benin City

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Abstract
The study is an evaluation of the use of Information and Communication Technology (ICT) in computer-based examinations (CBT) among secondary school students in Benin City metropolis, Edo State, Nigeria. The main purpose of the study was to generate veritable information for the effective conduct of CBT examinations. Four specific objectives were raised to guide the study. Thus, four corresponding research questions and hypotheses were set up. These were directed at finding the perceptions of the level of digital literacy among students for CBT, the administration, effectiveness and challenges of CBT examinations in Benin City metropolis. The descriptive survey design was employed. The population of study was the senior secondary school students in Benin metropolis. A total of 101 students were selected using stratified random sampling technique from ten public secondary schools in the city as the sample for the study. A structured questionnaire containing 20 items was used to obtain responses from the sampled students, Findings revealed that the respondents were not sure that students: have adequate training on how to use ICT tools for exams or have regular practice with ICT learning materials. They agreed with the positions that ICT- based examinations in Benin City: are faster and more efficient than paper-based exams, gives immediate and accurate results, and motivates students to improve their computer skills. They however disagreed with the positions that ICT- based examinations in Benin City: are well organized, conducted without technical hitches and exams platforms are easy to navigate. They acknowledged significant challenges such as poor internet connectivity and inadequate infrastructure. Statistical analysis confirmed significant differences in perceptions in almost all the indicators ($p < 0.05$). The study recommended investments in ICT infrastructure, targeted digital training for students, and improved technical support to improve the implementation of ICT-based assessments in secondary education in Benin metropolis

Keywords: *Digital literacy, CBT, Administration, Effectiveness, Challenges*

INTRODUCTION

Background to the Study

The use of information and communication technology (ICT) is driving dynamic changes in societies. ICT is influencing all aspects of life. The Integration of ICT into the entire teaching, -learning, process has improved efficiency, accessibility, and reliability in academic evaluations considerably. ICT-based examinations have attained global recognition as credible alternative to traditional system of assessments. Digital examinations allow instant grading, minimize measurement errors, with improved security against sharp practices (UNESCO, 2015). ICT has changed the narrative of education, especially in developing nations where advancements in

technology have created inclusive learning environments significantly Ololube (2015, Adegbija, M. V., & Fakomogbon, M. A. 2012). The application of digital assessments is now the vogue in secondary schools, and tertiary institutions ensuring the latest trend in academic processes (Omodara, O. D., & Adu, E. O. 2014).

The shift towards ICT-based assessment stems from its ability to provide standardized testing, reduce administrative costs, and eliminate biases often associated with human grading (Pelgrum & Law, 2003). In recent times, countries have invested significantly in ICT. The use of ICT in education and training has become strategic issue in many developing countries Nigeria inclusive. In the last decade, progress may have been unstable; ICT has had a significant impact on the educational processes, including organizational plans, teaching, and learning methods (UNESCO, 2015).

According to Yusuf, M. O., & Balogun, M. R. (2011), ICT is an electronic technology used for accessing, processing, gathering, manipulating, presenting, and communicating information. and when it is employed in education, it accelerates, enriches, and deepens basic skills in reading, writing, arithmetic, and the sciences besides promoting higher learning. Furthermore, ICT is a vital aspect of academic practices of today's world, encouraging students' active learning, supporting innovative teaching-learning processes, and enabling students and teachers to become more active researchers and learners, respectively. ICT-based assessments also create interactive learning environments where students can develop their cognitive and analytical skills through immediate feedback and performance analytics (Pelgrum & Law, 2003).

According to Pelgrum & Law (2003), computers and the internet, as vita components of ICT, have immensely assisted students and teachers to ask and answer questions, post materials online, and submit assignments with ease. Furthermore, ICT tools also facilitate distance learning, enable students from rural areas to access educational materials, participate in online assessments, and interact with teachers through virtual platforms (Pelgrum & Law, 2003). With the rise of digital classrooms, ICT-based examination is leverage to globally competitive education system. The use of ICT in secondary schools also encourages individualized teaching and learning, as students can learn at their own pace using online resources and educational software. Teachers can deploy multimedia resources, virtual simulations, and online assessments to improve the teaching and learning process (UNESCO, 2015).

Previous research in literature has shown that ICT does not only serve as an educational tool but also as an instrument for socio-economic development, especially within the global economy (UNESCO, 2015). In Nigeria, the implimentation of ICT-based examinations is gradually expanding, with institutions incorporating Computer-Based Testing (CBT) for standardized assessments such as the Unified Tertiary Matriculation Examination (UTME). The Joint Admissions and Matriculation Board (JAMB) transitioned from paper-based exams to CBT in 2013, marking a significant milestone in Nigeria's education sector (JAMB, 2013).

Governments and educational policymakers have emphasized the importance of digital literacy, allocating resources to improve access to ICT infrastructure in schools (UNESCO, 2015). However, despite these efforts, disparities in ICT adoption remain, with urban schools having more access to technology than rural schools. The transition was intended to curb exam malpractices, enhance efficiency, and improve the accuracy of results processing. However, the implementation has faced several setbacks, including inadequate computer literacy among students, technical glitches during examinations, and concerns about server reliability (Adegbija, M. V., & Fakomogbon, M. A. 2012). They revealed that students from low-income backgrounds

often struggle with computer-based assessments due to inadequate exposure to technology. Many students rely on traditional learning methods and lack the technical skills necessary to navigate digital test platforms. Additionally, infrastructure limitations, such as erratic power supply and poor internet connectivity, pose significant obstacles to the widespread adoption of ICT-based examinations in Nigeria. This aligns with the position of (Eze, P. I., & Adu, E. O. 2021) that issues such as erratic power supply, inadequate ICT infrastructure, and internet connectivity problems pose significant challenges to the adoption of digital assessments. Moreover, some students perceive ICT-based examinations as complex and unreliable due to fears of system failures, login errors, and difficulties in navigating computerized interfaces. Others, however, view them as efficient and stress-free due to automatic grading and faster feedback mechanisms (Pelgrum & Law, 2003).

To maximize the benefits of ICT, secondary schools must invest in modern infrastructure, provide adequate training for teachers, and encourage students to embrace digital learning (UNESCO, 2015). Secondary schools should be equipped with ICT tools such as projectors, computers, tape recorders, filmstrips, and photocopiers to create an interactive learning environment. ICT enables students to explore vast information resources, conduct research, and develop critical thinking skills. It enhances communication, collaboration, and creativity, allowing students to adapt to the evolving digital world (Pelgrum & Law, 2003).

Studies have shown that students who receive prior training on computer-based testing perform better and exhibit higher confidence levels than those with minimal exposure to digital exams. Some students perceive digital exams as efficient and user-friendly, while others struggle with adaptability due to insufficient exposure to computers and related technologies.

Statement of the Problem

The shift from traditional paper-based assessments to ICT-based examinations represents a major development in the education sector (UNESCO, 2015). While ICT-based exams offer numerous advantages, their successful implementation depends on students' readiness and perception of digital assessments (Pelgrum & Law, 2003). Many secondary school students in Benin City may have limited exposure to ICT tools, which may affect their confidence in taking computer-based exams. Additionally, issues such as epileptic power supply, poor ICT infrastructure, and internet connectivity concerns may pose significant challenges to the adoption of digital assessments.

Some students may perceive ICT-based examinations as difficult and challenging due to fears of system failures, the problem of login, and difficulties in navigating the platform.

These sensitive concerns create a need to investigate how secondary school students perceive ICT-based examinations and given the increasing shift towards digital assessments, and paucity of information on this issue in Benin City it is essential as UNESCO, (2015). timely advised that students' perceptions, challenges, and readiness to embrace ICT-based examinations need to be investigated to ensure successful implementation

Purpose of the Study

The purpose of this study therefore is to investigate the perceptions of ICT-based examinations among secondary school students in Benin City. Specifically, the study seeks to:

1. Assess the perception of the level of Digital Literacy of students for ICT- based examination among secondary schools in Benin metropolis
2. Examine the perception of the administration of ICT- based examination among secondary schools students in Benin metropolis

3. Investigate the perception of the effectiveness of ICT- based examination among secondary schools students in Benin metropolis
4. Examine the perception of the Challenges of ICT- based examination among secondary schools students in Benin metropolis

Research Questions

1. What is the perception of the level of digital literacy for ICT- based examination among secondary schools students in Benin metropolis?
2. What is the perception of the administration of ICT- based examination among secondary schools students in Benin metropolis?
3. What is the perception of the effectiveness of ICT- based examination among secondary schools students in Benin metropolis?
4. What is the perception of the challenges of ICT- based examination among secondary schools students in Benin metropolis?

Hypotheses

1. The responses on the level of digital literacy for ICT- based examination among secondary schools students in Benin metropolis are not significantly different
2. The responses of the administration of ICT- based examination among secondary schools students in Benin metropolis are not significantly different
3. The responses on the effectiveness of ICT- based examination among secondary schools students in Benin metropolis are not significantly different
4. The responses on the challenges of ICT- based examination among secondary schools students in Benin metropolis are not significantly different

Significance of the Study

This study is significant as it provides valuable insights into the perception of ICT-based examinations among secondary school students in Benin City (Pelgrum & Law, 2003; Adebayo & Toyin, 2018). The findings will provide valuable insights for educators, policymakers, and school administrators in designing strategies to enhance digital examination systems in secondary education. The findings will benefit various stakeholders, as follows:

The understanding of the benefits and challenges of ICT-based examinations will enable students to prepare better for digital assessments and improve their adaptability to technological advancements in education The study will help educators identify gaps in ICT adoption, allowing them to design effective training programs and provide necessary digital resources.

The findings will serve as a reference for policymakers in making informed decisions regarding ICT integration in secondary school examinations (UNESCO, 2015).

This study will contribute to existing literature on ICT-based assessments and serve as a foundation for further research on improving digital examination systems.

Methodology

Research Design

This study adopts a descriptive survey research design to explore students' perceptions of ICT-based examinations in secondary schools in Benin City. The survey method allows for the collection of quantitative data on students' experiences, attitudes, challenges, and preparedness (Ololube, 2015).

Population of the Study

The target population consists of secondary school students in Benin City, Edo State, Nigeria. The study focuses on both public and private schools to ensure a comprehensive understanding of students' perceptions across different educational settings.

Sample Size and Sampling Technique

The sample size consisted of approximately 101students. A stratified random sampling technique was used to select students from different schools, in Benin City ensuring gender representation. Diversity in the sample provided diversity in responses

Instrument for Data Collection

The primary instrument for data collection is a structured questionnaire based on a 5-point Likert scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree). The questionnaire is divided into four sections:

Section A is on perception of the administration process of ICT-based examinations. Section B covers the perceptions on the impact of ICT-based examinations on students' performance. Section C: is based on the challenges in adopting ICT-based examinations. Section D: Preparedness in terms of digital literacy and accessibility

Method of Data Collection

The questionnaire was distributed physically to selected students. Participants were given sufficient time under confidentiality to ensure honesty and their responses were collected on the spot

Method of Data Analysis

The study adopted the descriptive statistics for non -parametric analysis comprising mode, median and skewness to categorize the answers to the research questions. In this vein the five response options were categorized as SD = 1, D = 2, N = 0, A = 3, SA = 4 and this scale was used for determining the central and hence representative category of the responses such that if for instance the median response for an item is 2 and the distribution of the responses is positively skewed then it was inferred that the respondents numerically disagreed with the item. The level of skewness is the level of confidence for answers to the research questions. The One – Sample Chi-square test was used to test the null hypotheses at 0.05 alpha level that there was no significant difference between the categories of the responses (SD = D = N = A = SA)

Results

Research Question 1

What is the perception of the level of digital Literacy for ICT- based examinations among secondary school students in Benin metropolis?

Table 4: The Responses on the level of Digital Literacy for ICT- Based Examination among Secondary School Students in Benin Metropolis

SN	Item	N	Mode	Median	Skewness	Remark
1	Adequate training on how to use ICT tools	101	3.00	0.00	-.233	Not Sure
2	Can personally operate a computer for exam purpose	101	3.00	3.00	-.431	Agree
3	Conversant with ICT facilities	101	1.00	2.00	.303	Disagree
4	Regular practice with ICT learning materials	101	3.00	0.00	-.080	Not Sure
5	ICT training will improve academic performance	101	3.00	0.00	.240	Not Sure

Table 4 statistics showed that the modal response category of the sampled students from secondary schools in Benin metropolis on digital literacy for ICT- Based Examination for items 1, 4 and 5 are 4.00 with the medians as 0.00 and skewness as -.233, -.080 and .240 respectively. . These showed that the sampled students were not sure that students: have adequate training on how to use ICT tools, for exams, have regular practice with ICT learning materials, and will have higher academic performance even with training on the use of ICT for exams. Although the respondents agreed with the position that students can personally operate a computer for exam purpose (mod = 3, med = 3 sk =-.431) while disagreeing with the position that students are conversant with ICT facilities (mo =1 med = 2, sk =.303)

Research Question 2

What is the perception of the administration of ICT- based examinations among secondary school students in Benin metropolis?

Table 2: The Responses on the Administration of ICT- based Examination among Secondary Schools Students in Benin Metropolis

SN	Item	N	Mode	Median	Skewness	Remark
1	ICT based exams are well organized	101	1.00	2.00	.224	Disagree
2	ICT based exams are conducted without technical hitches	101	1.00	2.00	.661	Disagree
3	Clear instruction are given before the commencement of ICT – based exams	101	3.00	3.00	-.873	Agree
4	ICT exams platforms are easy to navigate	101	1.00	2.00	.269	Disagree
5	Invigilators provide adequate support during exam	101	1.00	0.00	.240	Not Sure

Table 2 statistics showed that the modal perceptions of the sampled students from secondary schools in Benin metropolis ranges for items 1, 2 and 4 are 1.00 with skewness as .224, .661 and .269 respectively. These showed that the sampled students from secondary schools in Benin metropolis disagreed with the positions that ICT- based examinations in Benin City: are well organized, conducted without technical hitches and exams platforms are easy to navigate. Respondents agreed with the position that invigilators give clear instructions before the

commencement of exams (mo = 3, med = 3, sk =-.873). They were however not sure whether invigilators provide adequate support during exams (mo = 1, med = 0, sk = .240)

Research Question 3
What is the perception of the effectiveness of ICT- based examination among secondary schools students in Benin metropolis?

Table 1: The Perception of the Effectiveness of ICT- Based Examination among Secondary Schools Students in Benin Metropolis

SN	Item	N	Mode	Median	Skewness	Remark
1	It improves academic performance	101	3	0.00	-.090	Not Sure
2	Faster and more efficient than paper based exams	101	3	3.00	-.361	Agree
3	It gives immediate and accurate results	101	3	3	-.663	Agree
4	It reduces exams malpractices	101	1	0	.124	Not Sure
5	It motives students to improve their computer skills	101	3	3	-.621	Agree

Table 1 statistics showed that the modal perceptions of the sampled students from secondary schools in Benin metropolis for items 2, 3 and 5 are 4 with median values as 4. The skewness are -.361, -.661 and -.621 respectively. These showed that the sampled students from secondary schools in Benin metropolis agreed with the positions that ICT- based examination in Benin City: are faster and more efficient than paper-based exams, gives immediate and accurate results, and motives students to improve their computer skills. They were however not sure that ICT-based exams improves academic performance (mo =3, med = 0. Sk = -.090) and that it reduces exams malpractices (mo =1, med =3, sk =.124)

Research Question 4
What is the perception of the challenges of ICT- based examination among secondary schools students in Benin metropolis?

Table 3: The Responses on the Challenges of ICT- Based Examination among Secondary Schools students in Benin metropolis

SN	Item	N	Mode	Median	Skewness	Remark
1	Lack of ICT tools	101	4.00	3.00	-.743	Agree
2	Poor internet connectivity	100	4.00	4.00	-1.48	Strongly Agree
3	Frequent power outages	101	4.00	3.00	-1.05	Agree
4	High cost of facility for students	101	4.00	3.00	-.536	Agree
5	Poor technical manpower	101	4.00	3.00	-.986	Agree

Table 3 statistics showed that the modal perceptions of the sampled students from secondary schools in Benin metropolis for items 1, 3, 4 and 5 are 5 while the corresponding median values are 3 with skewness ranging from -1.05 to -.986. These showed that the sampled students agreed that ICT- based examinations in Benin City: lack ICT tools, have frequent power outages that the cost of facility for students is high and that technical manpower is poor. And the respondents

strongly agreed that ICT – based exams have poor internet connectivity (mo = 4, med = 4 sk =-1.48),

Summary of the Test of the Hypotheses

The summary of the test of the hypotheses are presented in the following section

Hypothesis 1

The responses on the level of digital literacy for ICT- based examination among secondary schools students in Benin metropolis are not significantly different.

Table 5: One Sample Chi-Square test of the Difference between the Categories of Responses on the Level of Digital Literacy for ICT- Based examination among Secondary Schools Students in Benin Metropolis

SN	Items	N	Test Stat	df	Sig. (2-sided)	Decision
1	Adequate training on how to use ICT tools	101	12.119	4	.016	Significant
2	Can personally operate a computer for exam purpose	101	30.109	4	<.001	Significant
3	Conversant with ICT facilities	101	33.673	4	<.001	Significant
4	Regular practice with ICT learning materials	101	30.228	4	<.001	Significant
5	ICT training will improve performance	101	29.634	4	<.001	Significant

Table 8 figures showed that the test statistics of the difference between the categories of responses on digital literacy for ICT- based examinations range from 12.119 to 33.673. And the corresponding p –values are < 0.001 for items 2 to 5 while the p –value for item 1 is .016. Thus the null hypothesis is rejected at 0.05 alpha level. Therefore the categories of responses on the level of Digital Literacy for ICT- based examination are significantly different.

Hypothesis 2

The responses on the administration of ICT- based examination among secondary schools students in Benin metropolis are not significantly different

Table 6: One Chi-Square Test of the difference between the Categories of Responses on the Administration of ICT- Based Examination among Secondary School Students in Benin Metropolis

SN	Item	N	Chi-square stat	df	Sig(2-sided test)	Decision
1	ICT based exams are well organized	101	3.604	4	.462	Not Significant
2	ICT based exams are conducted without technical hitches	101	29.0400	4	<.001	Significant

3	Received clear instruction before the commencement of ICT – based exams	46.030	4	<.001	Significant
4	ICT exams platforms are easy to navigate	38.901	4	<.001	Significant
5	Invigilators provide adequate support during exam	38.950	4	<.001	Significant

Table 8 figures showed that the test statistics of the difference between the categories of responses on the effectiveness of ICT range from 3.604 to 46.030. And the corresponding p – values for items 2 to 5 are < 0.001 while for item 1 is .462. Thus, the null hypothesis is rejected at 0.05 alpha level for 2 to 5 while for item 1 the null hypothesis is retained. Therefore, the categories of responses on the administration of ICT based exams are significantly different except the responses on item 1 (ICT based exams are well organized)

Hypothesis 3

The responses on the effectiveness of ICT- based examination among secondary schools students in Benin metropolis are not significantly different

Table 5: One- Sample Chi-Square Test of the difference between the Categories of Responses on the Effectiveness of ICT- Based Examination among Secondary Schools Students in Benin Metropolis

SN	Items	N	Chi-square stat	df	Sig (2-sided test)	Decision
1	It improves academic performance	101	34.030	4	<.001	Significant
2	Faster and more efficient than paper-based exams	101	27.960	4	<.001	Significant
3	It gives immediate and accurate results	101	59.050	4	<.001	Significant
4	It reduces exams malpractices	101	43.178	4	<.001	Significant
5	It motives students to improve their computer skills	101	10.337	4	<.001	Significant

Table 8 figures showed that the test statistics of the difference between the categories of responses on the effectiveness of ICT – base examinations range from 10.34 to 59.05. And the corresponding p –values are < 0.001. Thus the null hypothesis is rejected at 0.05 alpha level. Therefore the categories of responses on the effectiveness of ICT – based examinations are significantly different.

Hypothesis 4

The responses on the challenges of ICT- based examination among secondary schools students in Benin metropolis are not significantly different

Table 7: One Sample Chi – Square test of the difference between the Categories of Responses on the Challenges of ICT- Based Examination among Secondary School Students in Benin Metropolis

SN	Items	N	Chi-Square Stat	df	Sig(2sided test)	Decision
1	Lack of ICT tools	101	54.00	4	<.001	Significant
2	Poor internet connectivity	100	129.00	4	.000	Significant
3	Frequent power outages	101	58.653	4	<.001	Significant
4	High cost of facility for students	101	24.792	4	<.001	Significant
5	Poor technical manpower	101	81.079	4	<.001	Significant

Table 8 figures showed that the chi-square statistic of the difference between the categories of responses on the challenges of ICT – based exams range from 24.79 to 129.00. And the corresponding p –values are 0.000 or < 0.001. Thus, the null hypothesis is rejected at 0.05 alpha level. Therefore, the categories of responses on the challenges of ICT are significantly different.

Summary of Findings

1. The study showed that the sampled students were not sure that students: have adequate training on how to use ICT tools for exams, have regular practice with ICT learning materials, and will have higher academic performance even with ICT training. Although the respondents agreed with the position that students can personally operate a computer for exam purpose (mod =3, med = 3 sk =-.431) while disagreeing with the position that students are conversant with ICT facilities (mo =1 med = 2, sk =.303). The categories of the responses on the level of digital literacy for ICT based examinations among students were significantly different.
2. The study showed that the sampled students from secondary schools in Benin metropolis disagreed with the positions that ICT- based examinations in Benin City: are well organized, conducted without technical hitches and exams platforms are easy to navigate. Respondents agreed with the position that invigilators give clear instructions before the commencement of exams (mo = 3, med = 3, sk =-.873). They were however not sure whether invigilators provide adequate support during exams (mo = 1, med = 3, sk = .240). The categories of responses on the administration of ICT based exams were significantly different except the responses on the stance that ICT based exams are well organized.
3. The study showed that the sampled students from secondary schools in Benin metropolis agreed with the positions that ICT- based examination in Benin City: are faster and more efficient than paper-based exams, gives immediate and accurate results, and motives students to improve their computer skills. They were however not sure that ICT- based exams improves academic performance (mo =3, med = 0. Sk = -.090) and that it reduces exams malpractices (mo =1, med =3, sk =.124). The categories of responses on the administration of ICT- based examination were significantly different
4. Finally, the study showed that the sampled students agreed that ICT- based examinations in Benin City: lack ICT tools, have frequent power outages, that the cost of facility for students is high and have poor technical manpower. And the respondents strongly agreed

that ICT – based exams have poor internet connectivity (mo = 4, med = 4 sk =-1.48), The categories of responses on the administration of ICT- based examination were significantly different.

Discussion of Findings

The study showed that although the respondents agreed with the position that students can personally operate a computer for exam purpose but they disagreed with the position that students are conversant with ICT facilities and so were not sure that students: have adequate training on how to use ICT tools for exams or have regular practice with ICT learning materials. These findings are similar to the position of Adebayo & Toyin, (2018) that while some students perceive digital exams as efficient and user-friendly, some students from low socio –economic background struggle with adaptability due to insufficient exposure to computers and related technologies and such students rely on traditional learning methods and lack the technical skills necessary to navigate digital test platforms.

Respondents were not sure also that, students will have higher academic performance even with training on the use of ICT materials. This position might be based on the fact that the mere proficiency in the use of computers without sufficient grounding on the subject matter will not guarantee success in the examination. Nevertheless, studies have shown that students who receive prior training on computer-based testing perform better and exhibit higher confidence levels than those with minimal exposure to digital exams (Chua, Chen, & Wong, 1999)

The study showed that the sampled students from secondary schools in Benin metropolis disagreed with the positions that ICT- based examinations in Benin City: are well organized, conducted without technical hitches and exams platforms are easy to navigate. Although respondents agreed with the position that invigilators give clear instructions before the commencement of exams, they were however not sure whether invigilators provide adequate support during exams. These positions are also supported by Adebayo & Toyin, (2018) when they affirmed that the implementation of ICT- based examinations has faced several setbacks, including inadequate computer literacy among students, technical glitches during examinations, and concerns about server reliability

The study showed that the sampled students from secondary schools in Benin metropolis agreed with the positions that ICT- based examination in Benin City: are faster and more efficient than paper-based exams, gives immediate and accurate results, and motivates students to improve their computer skills. This finding agrees with the position of Pelgrum & Law, (2003) that some students however, view them as efficient and stress-free due to automatic grading and faster feedback mechanisms The sampled students from secondary schools in Benin metropolis were however not sure that ICT- based examinations improve academic performance and that it reduces exams malpractices.

Finally, the study showed that the sampled students agreed that ICT- based examinations in Benin City: lack ICT tools, have frequent power outages, that the cost of facility for students is high and poor technical manpower. And the respondents strongly agreed that ICT – based exams have poor internet connectivity. These positions are supported by the findings of Adebayo & Toyin, (2018) that ICT-based examinations are constraint by infrastructure limitations, such as

erratic power supply and poor internet connectivity These problems according to them pose significant obstacles to the widespread adoption of ICT-based examinations in Nigeria. These positions also corroborate Yusuf's assertion that, problems such as erratic power supply, inadequate ICT infrastructure, and internet connectivity pose significant challenges to the adoption of digital assessments (Yusuf, 2007).

Implications

There is uncertainty among students about the benefits and usability of ICT-based exams.
Despite this, the challenges faced are real and recognized, especially in areas like poor internet, infrastructure issues, and lack of digital training.
The data suggest that ICT integration is not yet fully optimized or well-supported in Benin City secondary schools.

Recommendations

1. Improved ICT infrastructure (tools, connectivity, power backup).
2. Better planning and communication during exams.
3. Regular digital training and hands-on sessions for students.
4. Monitoring and support systems to reduce technical hitches.

REFERENCES

Adegbija, M. V., & Fakomogbon, M. A. (2012). An assessment of ICT competence among secondary school students in Nigeria. Educational Research and Review, 7(23), 503-508. https://doi.org/10.5897/ERR12.002

Ayo, C. K., Akinyemi, I. O., Adebiyi, A. A., & Ekong, O. U. (2007). The prospects of e-examinations implementation in Nigeria. Turkish Online Journal of Distance Education, 8(4), 125-134.

Eze, P. I., & Adu, E. O. (2021). Perception and attitude of students towards ICT-based learning in secondary schools. International Journal of Educational Technology, 18(2), 45-58.

Joint Admissions and Matriculation Board (JAMB). (2015). Adoption of Computer-Based Testing (CBT) for UTME examinations in Nigeria. Journal of Educational Policy and Administration, 10(1), 33-47.

Omodara, O. D., & Adu, E. O. (2014). The role of ICT in the teaching and learning process in Nigerian secondary schools. Journal of Educational Research and Development, 3(2), 67-75.

Pelgrum, W. J., & Law, N. (2003). **ICT in Education around the World: Trends, Problems and Prospects**. Paris: UNESCO.

UNESCO. (2015). ICT in education: A global perspective. UNESCO Digital Learning Report. Retrieved from https://www.unesco.org

Yusuf, M. O., & Balogun, M. R. (2011). Student's perception of e-examinations in Nigerian universities. International Journal of Emerging Technologies in Learning, 6(2), 30-35.