

Assessment of KwaraLearn Computer Managed Instruction in Kwara State Basic Schools

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Abstract

Certain irregularities have been observed by the researchers in recent years in the areas of punctuality among teachers; differences in course content covered by different teachers at different schools in lower basic secondary schools specifically in Kwara State which suggest ineffectiveness among the teachers. It was against this background that the study assess KwaraLEARN computer managed instruction in Kwara State basic schools. The objectives of the study were to: (i) ascertain the extent to which computer managed instruction, KwaraLEARN, has influenced teachers' punctuality in basic schools, Kwara State; and (ii) investigate the extent to which computer managed instruction, KwaraLEARN, has influenced teachers' course content coverage in basic schools, Kwara State. A survey type of descriptive research design was adopted. One thousand, five hundred and seventy-eight headmasters/headmistresses in lower basic schools Kwara State was the population while three hundred and nineteen headmaster/headmistress were sampled using multi-stage random sampling technique. A questionnaire titled "Computer-Managed Instruction on Teachers' Effectiveness Questionnaire" (CMITEQ) was used to obtain data from the headmaster/headmistress. Reliability coefficient of 0.79 was obtained was obtained. Mean was used to answer the research questions. Introduction of KwaraLEARN technology has: positively influenced teachers' punctuality; and positively influence course content coverage were the findings. Grounded on the findings of the study, it was suggested that efforts should be made by the school administrator to sustain the level at which teachers arrive school on time.

Keywords: KwaraLEARN, Computer managed instruction, Teacher effectiveness, Teachers' punctuality, Content coverage

Introduction

It has become an increasingly vital aspect of educational reform worldwide, particularly with the integration of Computer-Managed Instruction (CMI) systems into basic education, which comprises the use of computer systems to manage and track the delivery of educational content, assessments, and students' progress. This integration of CMI has been seen not only to promote inclusiveness but also to facilitate efficient and effective instructional delivery which gears towards the achievement of the overall quality education sought.

At the basic education level, which includes primary and junior secondary schools, CMI has been identified as a tool that could significantly improve educational outcomes. (Ojo & Adewole, 2018) noted that teachers can use data from CMI systems to identify students' strengths and weaknesses, enabling them to provide more focused support. With CMI, students can receive tailored learning experiences that cater for their pace and understanding, making education more inclusive. The potential of CMI to enhance both teaching and learning makes it a valuable tool in the ongoing reform of Nigeria's educational system.

Over the past few decades, the integration of digital technology within Nigeria's education system has gained traction, mirroring global trends in education modernization. In the 1990s, Nigerian schools began introducing computers, initially for administrative tasks, with limited access in urban areas (Ahmed, 2023). In recent years, several Nigerian States have adopted computer-managed instruction (CMI) systems to address specific educational needs and improve teaching effectiveness.

In Lagos State, the Eko Excel program has been instrumental in advancing digitalized instructional management, providing teachers with tablet-based lesson plans, automated attendance tracking, and real-time feedback to facilitate efficient lesson delivery (Adeniran et al., 2021). Similarly, Osadolor (2019) noted that in Edo State, the EdoBEST initiative employs CMI tools to enhance primary education through digital lesson planning, teacher monitoring, and an online portal for tracking attendance and classroom activities. These initiatives illustrate a growing commitment among Nigerian states to leverage digitalisation for educational transformation, aiming to improve teaching quality and learning outcomes.

In a similar trend, the Kwara State Government launched KwaraLEARN (Leading Education Achievement and Reform Now), a digital education initiative, designed to address the specific challenges faced by teachers and students in the state. KwaraLEARN provides a suite of CMI tools that streamline classroom tasks, support lesson planning, and foster overall teacher effectiveness. The KwaraLEARN initiative is designed to enhance teacher effectiveness through a structured, technology-driven approach, focusing on key indicators that directly impact student outcomes.

Oluwole and Adebayo (2021) saw teachers' effectiveness as the consistent demonstration of professional qualities that support optimal learning environments, including punctuality, regular attendance, and timely classroom instruction. According to Adebola and Adedoyin (2016), teachers' effectiveness could be measured in terms of their mastery of subject matter, punctuality in class, teachers' commitments and subordination of personal interest. Oluwole and Adebayo (2021) emphasised that effective teachers are committed, well-prepared, and capable of maintaining a healthy psychological state, allowing them to engage students fully and foster academic achievement. Considering the deficiency in teacher effectiveness in basic schools as noted in the study carried out by Obiageli, Badamasi and Olatunji (2020) which revealed that teachers' performance was low, KwaraLEARN could provide a comprehensive computer-managed instruction (CMI) system aimed at addressing issues of punctuality, attendance, promptness in classroom teaching, readiness, and psychological well-being.

Punctuality, as an indicator of teachers being effective, is a cornerstone of effective teaching, reflecting not only a teacher's professionalism and commitment but also their respect for students' learning time. Okeke and Onuka (2022) noted that in educational settings, punctuality is more than just about starting classes on time; it sets a tone for discipline, responsibility, and mutual respect in the classroom. However, in many Nigerian schools, including those in Kwara State specifically, teacher tardiness and irregular attendance have been persistent challenges as observed by the researcher. Through real-time monitoring function of KwaraLEARN, this punctuality challenge is likely to be addressed through its digital scheduling and reminder tools, offering a modern solution to an age-old problem. In addition, these tools empower teachers to better manage their time, ensuring that they are punctual for their classes and remain accountable for their professional duties.

By incorporating technology into time management practices, KwaraLEARN is not only likely to enhance teachers' punctuality but also promotes a culture of punctuality across schools in the state. According to the Kwara State Ministry of Education (2023), schools that have adopted KwaraLEARN have seen a significant reduction in tardiness, with a 20% improvement in punctuality rates over the past years. The impact of KwaraLEARN could also extend beyond merely improving punctuality, it could also contribute to increased attendance, commitment and as well complementing teachers' preparation and readiness for teaching (Kwara State Ministry of Education, 2023). It is based on this background that the study assesses of KwaraLEARN computer managed instruction in Kwara State basic schools.

Statement of the Problem

The importance of teachers' effectiveness in the attainment of educational goals at any level of education cannot be overstressed. This is because teachers are central in instructional delivery as they are responsible for the implementation of the designed curriculum. This suggests that for there to be improvement in students' performance, teachers have to be effective and effectiveness of teachers could be improved in number of ways including digitization of teachers' activities where teachers' activities and progress could be monitored in real-time.

Certain irregularities have been observed by the researchers in recent years in the areas of punctuality among teachers; differences in course content covered by different teachers at different schools as well as non-completion of course content among the teachers in lower basic secondary schools specifically in Kwara State which suggest ineffectiveness among the teachers. This is in congruent with the assertion of Festus, Valentine, and Esther (2019) who noted that displaying behaviours such as non-coverage of syllabus and tardiness among educators indicates that teachers are not effective in their roles and lack seriousness regarding their instructional responsibilities. This observation is well supported by the empirical findings of the study carried out by Obiageli, Badamasi and Olatunji (2020) which showed that that teachers' effectiveness in their instructional strategies was low in Ilorin West.

Abdulazeez et al. (2024) carried out a study on digitisation of primary schools through computer managed instruction programme in the teaching of science in Ilorin Metropolis. Similar study was carried out by Alutu (2024) on the impacts of computer-managed instruction in basic technology education in

junior secondary schools in Anambra State. Also, Abdullahi and Tijani (2019) carried out a study on digitisation in education system and management of early childhood care education in Nigeria. Examining these studies among others, it was discovered that many studies carried out specifically in the context of Kwara State have not investigated the challenges of KwaraLEARN, how students react to teaching using computer managed instruction, KwaraLEARN, as well as, the influence of KwaraLEARN on the effectiveness of teachers since its adoption creating a variable and knowledge gaps. The observed gaps are what motivate the researcher; hence, the study focused on the assessment of KwaraLEARN computer managed instruction in Kwara State basic schools.

Objectives of the Study

The main objective of the study was to assess KwaraLEARN computer managed instruction in Kwara State basic schools. Specifically, the study:

1. ascertained the extent to which computer managed instruction, KwaraLEARN, has influenced teachers' punctuality in basic schools, Kwara State; and
2. examined the extent to which computer managed instruction, KwaraLEARN, has influenced teachers' course content coverage in basic schools, Kwara State.

Research Questions

The following research questions were raised to guide the study

1. To what extent has computer managed instruction, KwaraLEARN, influenced teachers' punctuality?
2. How has computer managed instruction, KwaraLEARN, influenced teachers' course content coverage?

Methodology

A study-based descriptive research design was utilised for this study to gather pertinent data. The study's population consisted of 1,578 headmasters and headmistress in lower basic schools located in Kwara State. Employing a multistage random sampling technique in accordance with Taro Yamane's formulas, a sample size of 319 headmasters and headmistress was selected for

the research. An adapted questionnaire tagged “Computer-Managed Instruction on Teachers’ Effectiveness Questionnaire” (CMITEQ) from the studies of AbdulAzeez et al. (2024) and Alutu (2024) was used to illicit information from the participants on the extent to which KwaraLEARN has influenced various aspects of teacher effectiveness.

To ensure the instrument’s validity, it was presented to experts in the Department of Educational Management, Faculty of Education, University of Ilorin, Ilorin, for evaluation of both face and content validity. The experts’ suggestions and recommendations were integrated into the final draft of the instrument. To determine the reliability. To determine the reliability of the questionnaire copies were distributed a selected group of headmasters who were not included in the study sample. Their responses were analysed using Cronbach’s Alpha measure of internal consistency via SPSS, resulting in a reliability coefficient of .79. Mean was used to answer the two research questions raised. The mean score for each items were computed to determine the average level of influence perceived by respondents. The following decision rule guided the interpretation of the mean scores: 3.50–4.00 indicates a High Extent, 2.50–3.49 indicates a Moderate Extent, 1.50–2.49 indicates a Low Extent, and 1.00–1.49 indicates a Very Low or No Extent. However, 319 questionnaires were administered but 306 were returned for analysis, which indicate 95.9% retrieval level.

Results

Research Question One: To what extent has computer managed instruction, KwaraLEARN, influenced teachers' punctuality in basic schools, Kwara State?

Table 1: KwaraLEARN Technology on Teachers' Punctuality

S/N	Items	HE F (%)	ME F (%)	LE F (%)	VLE F (%)	\bar{X}
	To what extent has KwaraLEARN improved the arrival of teachers?	218 (71.2)	77 (25.2)	11 (3.6)	-	3.67
	To what extent has KwaraLEARN influenced teachers to be more time-conscious during class presentations?	156 (51)	131 (42.8)	19 (6.2)	-	3.44
	To what extent has KwaraLEARN helped teachers keep to time when going for their lessons?	189 (61.8)	96 (31.4)	14 (4.6)	7 (2.3)	3.52
	To what extent has KwaraLEARN influenced teachers to turn in their exam questions and results on	132 (43.1)	106 (34.6)	47 (15.4)	21 (6.9)	3.14

time?	
Grand Mean	3.51

The results on table 1 showed the opinion of headmaster/headmistress on the influence of KwaraLEARN technology on teachers' punctuality. Based on the responses from the headmaster/headmistress, it was shown that the introduction of KwaraLEARN technology has positively influence teachers' punctuality with a mean score of 3.51. Specifically, the respondents rated the contribution of KwaraLEARN on how teachers often arrive at school on time having to high extent with 218 participants representing 71.2%. In the same vein, 156 representing 51% and 189 representing 61.8% rated contribution of KwaraLEARN in helping teachers to be more time-conscious during class presentations and helping teachers keep to time when going for their lessons respectively to a high extent.

Research Question Two: How has computer managed instruction, KwaraLEARN, influenced teachers' course content coverage in basic schools, Kwara State?

Table 2: KwaraLEARN Technology on Course Content Coverage

S/N	Items	HE F (%)	ME F (%)	LE F (%)	VLE F (%)	\bar{X}
	To what extent has the time allotted by KwaraLEARN allowed teachers to cover the course content?	146 (47.7)	133 (43.5)	25 (8.2)	2 (.7)	3.38
	To what extent has the wide syllabus under KwaraLEARN made teachers work harder to cover course outlines?	137 (44.8)	133 (43.5)	34 (11.1)	2 (.7)	3.32
	To what extent has KwaraLEARN led teachers to assign take-home tasks?	160 (52.3)	121 (39.5)	23 (7.5)	2 (.7)	3.43
	To what extent has teachers' workload under KwaraLEARN affected lesson coverage?	132 (43.1)	106 (34.6)	47 (15.4)	21 (6.9)	3.14
	Grand Mean					3.32

The result on table 2 revealed the opinion of headmaster/headmistress on how computer managed instruction, KwaraLEARN, has influenced teachers' course content coverage in basic schools, Kwara State. Based on the responses from the school administrators, it was shown that the introduction of KwaraLEARN technology has positively influence course content coverage with a mean score of 3.32. Specifically, the respondents rated the contribution of how KwaraLEARN led teachers to assign take-home tasks to a high extent with 51.9% of the respondents rating the item very high extent.

Discussion

One of the findings of the study revealed the influence of KwaraLEARN technology on teachers' punctuality. Based on the responses from the headmaster/headmistress, it was shown that the introduction of KwaraLEARN technology has positively influence teachers' punctuality. Specifically, the respondents rated the contribution of KwaraLEARN on how teachers often arrive at school on time having to high extent. In the same vein, it was revealed that the contribution of KwaraLEARN in helping teachers to be more time-conscious during class presentations and helping teachers keep to time when going for their lessons respectively to a high extent. The result of this study implies that KwaraLEARN technology has been able to influence teachers' punctuality on number of ways. Based on the analysis in the findings of the study, it was observed that KwaraLEARN technology have immensely improve how often teachers arrive at school on time, influenced teachers to be more time-conscious during class presentations and helped teachers keep to time when going for their lessons to a high extent while influencing how teachers to turn in their exam questions and results on time to a moderate extent. Findings of the study align with Adebayo and Yusuf (2021) which revealed that KwaraLEARN has impact on teachers' punctuality.

Also, one of the findings of the study revealed that the introduction of KwaraLEARN technology has influenced the level of teachers' course content coverage in basic schools, Kwara State. This finding showed that the respondent agreed that the time allotted by the technology has allowed teachers to cover their content to a higher extent. Similarly, the result of the study suggested that the introduced technology has motivated the teachers to work harder to cover wide syllabus and also motivate the teachers to give assignments to students to make up for the uncovered areas in the syllabus. The result suggested that not only has the introduction of KwarLEARN technology has motivated teachers to cover their syllabus but get them to critically think on several means that could be used to ensure that their course content is covered. This finding aligns with Sam-Ekeke (2021) which indicated that CMI significantly enhances the teaching and learning process, showing that students who engaged with CMI learned more quickly and effectively than their peers who did not.

Conclusion

Based on the findings which stemmed from the data collected and analyzed with the results obtained, it could be concluded that, the introduction of KwaraLEARN technology in Kwara State basic school has positively influenced teacher' punctuality and content coverage overall effective teaching and learning in schools.

Recommendations

Based on the findings, the following recommendations were made:

3. efforts should be made by the school administrator to sustain the level at which teachers arrive school on time and integrate some functions on KwaraLEARN that will ensure that teachers turn in their exam questions and results on time; and
4. teachers should be encouraged to critically think on several means that could be used to ensure that their course content is being covered.

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