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TEACHERS' PERCEPTION ON THE USE OF ICT FOR INSTRUCTIONAL DELIVERY OF ECONOMICS IN ONITSHA SOUTH LGA ANAMBRA STATE

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Abstract
This study aimed at examing teachers' perception on the use of ICT for instructional delivery of Economics in Onitsha south LGA, Anambra state, Nigeria. Survey research design was adopted for the study. The population comprised of all the 11 Economics teachers in the six secondary schools in Onitsha South LGA. They was not sampled. Five research questions guided the study. A 61-item structured questionnaire was used to collect data from the respondents. The instrument was validated by three experts from the Faculty of Education, Nnamdi Azikiwe University, Awka. Cronbachs' Alpha was used to test for reliability which gave a coefficient reliability of 0.73. Data were analyzed using mean and standard deviation. The findings revealed that the overall extent of integration of ICT in teaching and learning of Economics is low, among others. It was recommended that school authorities should equip schools with modern ICT tools, reliable internet access, and alternative power sources, among others.
Keywords: Economics, Instructional delivery, ICT, Economics teacher.

Introduction

Economics teachers in secondary schools are professionally trained educators who have acquired knowledge and teaching qualifications from recognized universities or degree-awarding institutions in Nigeria. Their primary role is to equip senior secondary school students with theoretical knowledge and practical skills that enable them to excel in examinations and apply economic principles to real-life situations. The teaching of Economics in secondary schools involves both mathematical and theoretical aspects, delivered progressively from Senior Secondary One (SS1) to Senior Secondary Three (SS3).

Traditionally, teachers have relied on instructional materials such as charts, textbooks, meter rules, set squares, and other improvised tools to aid teaching and learning. However, the emergence of Information and Communication Technology (ICT) has revolutionized instructional delivery. ICT encompasses communication devices and applications, including computers, radios, televisions, mobile phones, and the internet, as well as services like video conferencing and distance learning. These tools have the potential to improve content delivery, enhance student engagement, and create a more interactive learning environment.

Through the use of ICT tools, teaching can be made effective. According to Shah (2022), ICT tools enhance teaching effectiveness by making lessons more engaging, stimulating interest, and promoting sustained attention among students. Similarly, Sumitra *et al* (2021); Sahikh and Abbasi (2023); Poza and Letzel (2023) and Lee and Jeon (2024) emphasized that ICT contributes to expanding access to education, improving teaching quality, and promoting efficiency in instructional delivery. The Federal Government of Nigeria's National Policy on Education (2004) highlights the importance of ICT in modern education, advocating for its integration at all levels of the school system. In response to the global push for ICT integration, Nigeria introduced the National Policy on Computer Education in 1988 and the National Policy on Information Technology (2001), aimed at embedding ICT in educational practices. Initiatives like SchoolNet (2006) and NEPAD’s e-School Program (2003) sought to equip schools with ICT infrastructure, including computers, radios, and internet connectivity. These initiatives aimed to develop ICT skills among young learners and enrich education through technology.

Research indicates that ICT integration in teaching enhances instructional outcomes. Sarker *et al* (2019) found that ICT improves problem-solving skills, fosters collaboration, boosts confidence, and enhances student attitudes toward learning. Umar (2017) further highlighted key benefits of ICT, including improved

visual learning, simplified delivery of complex concepts, and increased student participation in lessons. Arif *et al* (2023) posited that the introduction of ICT, usage, integration and diffusion has initiated as new age in education methodologies, thus it has radically enhanced traditional method of information delivery and usage patterns in the domain as well as offering contemporary learning experience for both instructors and students. Riyanto *et al* (2021) stated that various technologies deliver different kind of content and serve different purposes in classroom. Word processing and email encourage communication skills; data base and spreadsheet programmes promote organizational skills and modeling software promotes the understanding of science and mathematical concept. Teachers' perception plays a critical role in the adoption and effective use of ICT in instructional delivery. Perception refers to how teachers interpret and respond to ICT tools, influenced by their experiences, beliefs, and exposure to technology. As Ngwoke (2010) noted, perception shapes how educators interact with their teaching environment and adopt tools for improved learning outcomes. It can hinder the benefits of ICT adoption in teaching.

Furthermore, Saripudin *et al* (2020) identified challenges such as limited access to ICT hardware, lack of technical support, inadequate teacher training, poor infrastructure, unreliable power supply, and overcrowded school timetables. Problems such as poor project implementation strategies and poor information infrastructure has limited the effects geared towards the integration of ICT into secondary school instruction. These barriers may hinder the effective integration of ICT in teaching and learning of Economics.

However, these barriers can be ameliorated using certain strategies. Arif *et al* (2023) advocated strategies like: teachers being given enough time to learn how to use ICT in class; teacher training institutions giving teachers the proper and necessary support to integrate ICT into the curriculum; institutions providing

teaching facilities like computers, internet among others. These strategies will promote effective integration of ICTs in teaching and learning of Economics.

Empirical studies by Rita and Angie (2011), Rachmawati (2019) and Riyanto *et al* (2021) suggest that despite the proven benefits of ICT in instructional delivery, its adoption by Economics teachers remains limited. Rachmawati (2019) and Saripudin *et al* (2020) shows that ICT integration in secondary schools has not produced significant result in the teaching and learning of economics as their findings indicates that teachers virtually do not involve the use of ICT in their teaching and learning of economics in secondary schools. These studies also reveal gaps in understanding teachers' perceptions regarding the benefits, challenges, and strategies for ICT integration in Economics instruction. Addressing these gaps, this study aims to explore teachers' perceptions of the benefits, constraints, and strategies for effective ICT integration in teaching Economics in secondary schools in Onitsha South Local Government Area, Anambra State.

The adoption and use of ICTs in schools have positive impact on teaching, learning and research. Despite the role ICTs play in education, secondary school teachers in Onitsha South LGA Anambra state, Nigeria seem not to have extensively adapted them for teaching and learning even where the ICT facilities seem to be readily available. It becomes worrisome as to whether teachers actually understand the relevance of the use of ICT for Instructional Delivery of Economics in Onitsha South LGA Anambra state and the extent to which they use such. Hence, the present study.

Purpose of the Study

This study sought to determine teachers' perception on the use of ICT for instructional delivery of Economics in Onitsha south LGA. Specifically, the study sought to determine Economics teachers' perception on the following:

1. Benefits of integration of ICT into teaching and learning of economics in Onitsha south LGA.
2. Extent to which economics teachers use ICT in teaching and learning of Economics in Onitsha south LGA.
3. Constraints that hinder the effective integration of ICTs into senior secondary school Economics in Onitsha south LGA.
4. Strategies for enhancing ICT integration into teaching and learning of Economics in Onitsha south LGA.

Research Questions

The following research questions were posed to guide the study.

1. What are the benefits of integrating ICT into teaching and learning of Economics in Onitsha south LGA?
2. To what extent do Economics teachers use ICT in teaching and learning of Economics in Onitsha south LGA?
3. What are the barriers that hinder the effective integration of ICTs into teaching and learning of Economics in Onitsha south LGA?
4. What are the strategies for enhancing ICT integration into teaching and learning of Economics in Onitsha south LGA?

Research Method

A descriptive survey design was adopted for the study. This was done by seeking the opinions of Economics teachers on the problem of the study. The study was carried out in six secondary schools in Onitsha South LGA, Anambra state. The population is made up of 11 Economics teachers. The whole population was used because the size was manageable, hence, no sampling and sampling technique.

The instrument for data collection was a questionnaire constructed by the researcher based on the research questions. The questionnaire was made up of 61 items and was divided into four parts 1, 2, 3, and 4. Part 1 with 13 items to elicit

information on knowledge level of Economics teachers on the integration of ICT into teaching and learning of Economics in Onitsha south LGA; part 2 has 12 items which covered the benefits of integrating ICT into teaching and learning of Economics in Onitsha south LGA; part 3 with 12 items covered extent do Economics teachers use ICT in teaching and learning of Economics in Onitsha south LGA; part 4 has 12 items which covered barriers that hinder the effective integration of ICTs into teaching and learning of Economics in Onitsha south LGA and part 5 with 12 items covered strategies for enhancing ICT integration into teaching and learning of Economics in Onitsha south LGA. The instrument was validated by three experts from the Faculty of Education, Nnamdi Azikiwe University, Awka. The instrument was pilot tested to ensure its reliability and the data collected was analyzed using Cronbachs' Alpha. This gave a coefficient reliability of 0.73. The questionnaire was administered by the researchers using direct administration method. All the 11 copies of questionnaires distributed were collected and duly filled. They were all used for analysis.

The data obtained were analyzed using mean based on the 4-point scale. For research question one, any item with a mean response of 2.50 and above was considered 'high level' while anyone with a mean response below 2.50 was considered 'low level'. Any item with a mean response of 2.50 and above was considered 'agreed' while anyone with a mean response below 2.50 was considered 'disagreed' for research questions two, four and five. For research question three, any item with a mean response of 2.50 and above was considered 'high extent' while items with a mean response below 2.50 was considered 'low extent'.

Results

Research Question One: What are the benefits of integrating ICT into teaching and learning of economics in Onitsha south LGA?

Table 2: Mean Responses of Respondents on the Benefits of Integrating ICT into Teaching and Learning of Economics in Onitsha South LGA

		Teachers N = 178		
S/N	**ITEMS**	**Mean**	**SD**	**Remark**
1	Makes lessons more engaging and interactive through multimedia tools like videos, animations, and simulations	2.95	.71	Agreed
2	Complex economic theories and concepts can be simplified and visualized for better understanding	3.13	.62	Agreed
3	Interactive tools and digital platforms encourage active participation from students	3.12	.53	Agreed
4	ICT allows teachers and students to connect with peers and experts worldwide	3.02	.77	Agreed
5	Teachers and students can access a wide range of online materials, including e-books, academic journals, and case studies	3.02	.57	Agreed
6	Students can learn at their own pace through recorded lectures, e-learning platforms, and digital resources.	3. 31	. 78	Agreed
7	Remote learning opportunities become possible through virtual classrooms and online tutorials	3.59	.70	Agreed
9	ICT facilitates seamless communication between teachers and students via email, virtual meetings, and online forums	3.40	.71	Agreed
10	Collaborative tools like Google Docs and virtual whiteboards promote group work and peer learning	3.24	.70	Agreed
11	Teachers can use ICT tools to create automated tests and quizzes	2.95	.59	Agreed
12	Lesson planning, content delivery, and assessment become more streamlined and time-efficient with ICT tools	3. 40	. 68	Agreed
	Cluster mean	**3.02**	**.77**	**Agreed**

Results in Table 1 shows the benefits of integrating ICT into teaching and learning of economics in Onitsha south LGA, Anambra state. The aggregate cluster mean and standard deviation of 3.02 and .77 indicates that all the twelve items are the benefits of integrating ICT into teaching and learning of economics in Onitsha south LGA, Anambra state.

Research Question Two: To what extent do Economics teachers use ICT into teaching and learning of economics in Onitsha south LGA?

Table 2: Mean Responses of Respondents on Extent Economics Teachers Use ICT into Teaching and Learning of Economics in Onitsha South LGA

S/N	ITEMS	Mean	SD	Remark
1	Teachers use ICT tools such as Microsoft Word, Google Docs, and educational software to prepare lesson plans.	2.45	.71	Low Extent
2	Teachers use multimedia tools like projectors, PowerPoint presentations, and interactive whiteboards to deliver lessons	2.09	.64	Low Extent
3	Online videos, simulations, and animations are incorporated to explain complex economic concepts	2.40	.69	Low Extent
4	ICT is used to design quizzes, assignments, and tests using platforms like Google Forms and Kahoot	2.46	.71	Low Extent
5	Teachers use email, instant messaging apps, and online discussion forums to communicate with students outside the classroom	3.09	.64	Low Extent
6	Teachers access online resources, academic journals, and open educational resources (OER) to enrich their content	2.89	.67	Low Extent
7	Digital tools like online quizzes, games, and simulations are used to make lessons more engaging	2.07	.62	Low Extent
9	Teachers use spreadsheets and school management software to track student performance, attendance, and grades	2.44	.70	Low Extent
10	Digital platforms are used to collect feedback from students about the teaching process	2.48	.67	Low Extent
11	Teachers use case studies, digital tools, and online simulations to connect economic theories with real-life scenarios	2.07	.62	Low Extent
12	Teachers encourage students to use ICT tools for self-paced learning	2.41	.69	Low Extent
	Cluster mean	**2.41**	**.69**	**Low Extent**

Results in Table 2 shows the extent Economics teachers use ICT in teaching and learning of economics in Onitsha south LGA. The aggregate cluster mean and

standard deviation of 2.41 and .69 indicates that Economics teachers use ICT in teaching and learning of economics in Onitsha south LGA to a low extent.

Research Question Three: What are the barriers that hinder the effective integration of ICTs into teaching and learning of Economics in Onitsha south LGA?

Table 3 Mean Responses of Respondents on the Barriers that Hinder the Effective Integration Of ICTs into Teaching and Learning of Economics in Onitsha South LGA

S/N	ITEMS	Mean	SD	Remark
1	Insufficient availability of computers, projectors, and other ICT tools in schools	3. 30	. 80	Agreed
2	Poor internet connectivity and lack of Wi-Fi access in classrooms	3. 30	. 80	Agreed
3	Outdated hardware and software that hinder smooth operation	3. 38	. 73	Agreed
4	Insufficient training programs for teachers on ICT integration	3. 39	. 73	Agreed
5	Limited digital literacy among teachers, making it difficult to effectively use ICT tools	3. 36	. 72	Agreed
6	Frequent power outages disrupt ICT-based teaching and learning sessions	3. 35	. 76	Agreed
7	Restricted access to quality digital content and educational software	3. 29	. 77	Agreed
9	Insufficient time allocated for ICT-based lessons within the school timetable	3. 31	. 80	Agreed
10	Teachers feel pressured to complete the syllabus, leaving little room for ICT integration	3. 27	. 83	Agreed
11	Lack of trained ICT support staff to address Technical issues	3. 25	. 88	Agreed
12	Some teachers and administrators perceive ICT tools as unnecessary or burdensome	3. 11	. 92	Agreed
	Cluster mean	**2.56**	**.92**	**Agreed**

Results in Table 3 shows the barriers that hinder the effective integration of ICTs into teaching and learning of Economics in Onitsha south LGA. The aggregate cluster mean and standard deviation of 2.56 and .92 indicates that all those items are barriers that hinder the effective integration of ICTs into teaching and learning of Economics in Onitsha south LGA

Research Question Four: What are the strategies for enhancing ICT integration into teaching and learning of Economics in Onitsha south LGA?

Table 4 Mean Responses of Respondents on the Strategies for Enhancing ICT Integration into Teaching And Learning of Economics In Onitsha South LGA

S/N	ITEMS	Mean	SD	Remark
1	Equip schools with sufficient computers, projectors, and other ICT tools	2.88	.80	Agreed
2	Ensure reliable internet connectivity and access to digital platforms in classrooms	2.76	.80	Agreed
3	Regularly upgrade and maintain ICT equipment	2.79	.73	Agreed
4	Provide hands-on training for teachers to build confidence in using ICT tools.	3.03	.73	Agreed
5	Install alternative power sources such as solar panels or inverters in schools	2.94	.72	Agreed
6	Create and provide localized digital content aligned with the Economics curriculum	2.53	.76	Agreed
7	Advocate for increased budg*et al*location for ICT facilities in schools	3.07	.77	Agreed
9	Employ trained ICT support staff to address technical challenges	2.75	.80	Agreed
10	Promote awareness campaigns on the benefits of ICT integration	2.90	.83	Agreed
11	Recognize and reward teachers who excel in ICT integration	3.10	.88	Agreed
12	Ensure equal access to ICT tools for all students, regardless of socio-economic status.	2.88	.92	Agreed
	Cluster mean	**2.76**	**.92**	**Agreed**

Results in Table 4 shows the strategies for enhancing ICT integration into teaching and learning of Economics in Onitsha south LGA. The aggregate cluster mean and standard deviation of 2.76 and .92 indicates that all those items are strategies for enhancing ICT integration into teaching and learning of Economics in Onitsha south LGA.

Discussion of Findings

The respondents acknowledged the significant benefits of integrating ICT into Economics instruction. ICT tools simplify complex economic theories, make lessons more interactive, and provide opportunities for personalized and remote learning. Moreover, tools such as multimedia resources, simulations, and online collaboration platforms enhance student engagement and participation. The use of ICT for assessment, tracking student progress, and managing digital records also improves efficiency in classroom management. This finding align with Sumitra *et al* (2021) that ICT integration is beneficial in the instructional process.

Findings revealed that the overall extent of integration of ICT in teaching and learning of Economics is low. Tools like PowerPoint, simulations, and online quizzes are employed sporadically, and there is limited use of advanced platforms such as Moodle and Google Classroom for organizing coursework. Furthermore, teachers rarely exploit collaborative tools or encourage students to use ICT for self-paced learning. Factors such as limited training, lack of confidence, and technical challenges contribute to this limited usage. This finding is in line with the submissions of Rita and Angie (2011), Rachmawati (2019) and Riyanto *et al* (2021) that despite the proven benefits of ICT in instructional delivery, its adoption by Economics teachers remains limited.

The study identified several barriers hindering the effective integration of ICT into Economics teaching. These include inadequate ICT infrastructure, poor internet connectivity, frequent power outages, and limited access to modern devices and educational software. Insufficient teacher training and digital literacy, alongside resistance to change traditional teaching methods, also pose significant challenges. Furthermore, inadequate funding, lack of ICT support staff, and weak administrative support exacerbate these barriers. This corroborates Saripudin *et al* (2020) who identified challenges such as limited access to ICT hardware, lack of technical

support, inadequate teacher training, poor infrastructure, unreliable power supply, and overcrowded school timetables.

To address these challenges, the respondents suggested various strategies. These include improving ICT infrastructure, ensuring reliable power supply, providing teacher training and professional development programs, and increasing government funding. The development of localized digital content, integration of ICT into the school curriculum, and hiring technical support staff were also emphasized. Additionally, incentives for teachers, cybersecurity training, and collaboration with stakeholders such as NGOs and technology companies were highlighted as essential measures for sustainable ICT integration. This supports the submission of Arif *et al* (2023) that teachers be given enough time to learn how to use ICT in class.

Conclusion

This study examined the teachers' perception on the use of ICT for instructional delivery of Economics in Onitsha south LGA. While the benefits of ICT integration are widely recognized, multiple barriers, including insufficient infrastructure, poor digital literacy, and lack of institutional support, continue to hinder progress. However, with the adoption of well-structured strategies such as teacher training, improved infrastructure, policy enforcement, and stakeholder collaboration, these challenges can be effectively addressed.

Ultimately, the integration of ICT into Economics education is not just a necessity but an essential step towards building a technologically proficient and globally competitive generation of students.

Recommendations

Based on the findings, the following were recommended:

1. School authorities should equip schools with modern ICT tools, reliable internet access, and alternative power sources.

2. Ensure regular maintenance and upgrades of ICT equipment should be done regularly by school authorities.
3. School administrator should organize regular workshops on ICT integration.
4. School authorities should develop and enforce clear policies on ICT integration.
5. School management should ensure regular monitoring and evaluation of ICT programs in schools is done.

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