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EDUCATORS' PERCEPTION OF SANDWICH STUDENTS' PERFORMANCE IN ONLINE TEACHING AND LEARNING AT NNAMDI AZIKIWE UNIVERSITY, AWKA

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ABSTRACT

The paper investigated the effectiveness of online teaching and learning for sandwich students at Nnamdi Azikiwe University, Awka, and the challenges they face. Four research questions and two null hypotheses guided the study. A descriptive survey research design was used, involving 346 lecturers teaching sandwich students. Questionnaire was the instrument for data collection. Data was analyzed using descriptive and inferential statistics such as mean to answer the research questions and t-test to test the null hypotheses. The results showed that educators generally perceive online teaching and learning as effective in enhancing academic performance. However, students face challenges such as technical difficulties, lack of face-to-face interaction, and time management issues. There was no significant difference in the perceptions of male and female educators regarding the effectiveness of online teaching or the challenges faced by sandwich students. The paper concludes that addressing these challenges is crucial for the effectiveness of online teaching. The paper suggests that improvements in technological infrastructure, adequate support services and educators to be provided with adequate and regular training, among others, could enhance online teaching skills.

Keywords: Sandwich Students' Performance, Online Teaching, Learning.

Introduction

The increasing adoption of online teaching and learning (OTL) in universities worldwide has ushered in a new era of educational delivery. While OTL boasts numerous advantages, its effectiveness for diverse students cohort remains a subject of ongoing research and exploration. At Nnamdi Azikiwe University (UNIZIK), the unique case of sandwich students presents a

compelling area of investigation within the context of OTL.

Sandwich programme is a programme organized during school vocations to give opportunity to teachers working full time to advance academically and to improve in their profession. It is a part-time programme meant to increase the quantity and quality of teachers. The programme accommodates other categories of students who desire to either qualify as teachers or improve their competencies in the teaching profession. Nwagwa cited in (Obasi and Nwakaire, 2015) noted that a sandwich programme is a type of in-service programme that enables working adults to obtain higher certificate diplomas or professional qualifications. Sandwich students, as adult learners, are self-directed, autonomous, and self -spaced learners that need online teaching to encourage their self- spaced learning. It seems that, the intensive nature of the programme and lack of ICT skills by some of the learners jeopardizes the actualization of its objectives and also makes the programme to be stressful to the learners.

Online teaching and learning refers to education that takes place over the internet. It is simply put, the type of teaching and learning where the student and the educator are not physically present in a conventional classroom environment. Rather, instruction is disseminated through technological tools such as discussion boards, video conferencing, and virtual assessments (Hodges et al, 2020). This is learning experience in synchronous and asynchronous environments using different devices such as mobile phones, computers, projectors, cameras, video conferencing, among others. Ugwoke, Edeh, and Ezemma (2019) noted that advancement in ICT has revolutionized teaching and learning environment in different ways. Lecturers and students can easily access wealth of knowledge online, collaborate with one another and share information. However, researchers have shown that effective learning takes place through interactive and collaborative learning approaches using ICT integrated learning environment such as LMS (Felder, 2002; Martherly & Burney, 2013). Online teaching and learning helps one to study independently and conveniently.

In other word, despite the advantages of online teaching and learning, the challenges are numerous. Some of these challenges are: epileptic power supply, lack of internet facilities, poor ICT skills by both educators and learners, among others. In a study conducted by Alebiosu, (2015) revealed that sandwich students engage in intensive learning blocks interspersed with periods of work or other commitments. This compressed schedule can challenge their regular online participation, active engagement, and completion of coursework within OTL settings. Brew (2007) stressed that there is discrepancies in learning styles and preference with online teaching for sandwich students. Many sandwich students might possess distinct learning styles and preferences influenced by their varied commitments and life experiences. OTL platforms and content may not adequately cater to these diverse needs, hindering

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learning outcomes when compared with the traditional face to face teaching. With the introduction of online teaching and learning for sandwich students in most institutions like Nnamdi Azikwe University, Awka, The question there is; how competent are the students in adopting online teaching and learning?

By delving into educators' perceptions of sandwich students' performance in OTL at UNIZIK, this research has the potential to make significant contributions to both the theoretical understanding of this unique student cohort and the practical implementation of strategies to optimize their learning experience in other to enhance students' academic performance within the university's OTL environment. Academic performance is defined as the extent of individuals' educational outcomes accomplished successfully as a result of leaning at school (Soohyun, 2015). In the context of this paper, academic performance refers to the extent to which sandwich students have achieved their educational goals. Hence, this paper aimed at determining educators' perception of Sandwich Students' performance in online teaching and learning at Nnamdi Azikiwe Universiy, Awka.

Theoretical Framework

Self-Directed Learning (SDL) Theory forms the theoretical foundation of this paper. The theory was propounded by Malcolm Knowles in 1980. This theory focuses on learners taking initiative and responsibility for their learning journey. Online learning environments often provide opportunities for students to work independently, manage their time, and explore learning materials at their own pace. Knowles believes that effective online teaching strategies can scaffold this independent learning by providing clear instructions, diverse resources, and opportunities for self-assessment, ultimately improving student outcomes. This theory is relevant to the study because sandwich students who are adult learners are expected to work independently, motivated to learn and also make use of their prior knowledge and experience in order to excel in their study, and all these are characteristics of self-directed learning. The learners manage their time effectively and are responsible for their learning, hence, online learning inherently requires a greater degree of self-directness from the learner.

Empirical Review

Okonkwo and Umeh (2023) examined the influence of online teaching strategies on academic achievement among secondary school students in Awka North, Nigeria. Employing a survey method, they gathered data from 254 teachers (40% sample) across 29 schools. The study revealed a positive correlation between online teaching strategies and student academic performance. This finding underscores the need for equipping teachers with proper training to effectively leverage online learning platforms. Ugwoke, Edeh, and Ezemma (2019) investigated business education lecturers' perception of LMS for effective instructional delivery in universities in South-East, Nigeria and found that many

barriers to LMS use for instructional delivery of accounting courses in business education include lack of technical support for effective take-off, poor internet connectivity, poor power supply, among others.

In another study, Dogondaji1, Maccido, and Dogondaji (2023) investigated the Perception of University Lecturers on the Effectiveness of the Remote Learning Technique for Teaching Educational Courses during the COVID-19 pandemic in the Northwestern Region of Nigeria. The findings of the study revealed that lecturers were aware of the Remote learning model but they were not utilizing the Remote learning model effectively in teaching their courses during covid-19 pandemic. Similarly, the majority of the lecturers encountered different challenges in utilizing the Remote learning model for teaching where by lack of constant electricity supply was one of the major challenges. Moreover, the findings showed that there was no significant difference between lecturers' awareness and unawareness of remote learning. Despite the extant literature by scholars on OTL, to the best of the researchers' knowledge, there is a paucity of empirical evidence that brings insight on educator's perception of sandwich students' performance in OTL particularly in Unizik. This study therefore, intends to fill the existing gap.

Statement of the Problem

At Nnamdi Azikiwe University (UNIZIK), the growth of online teaching and learning (OTL) presents distinct challenges and opportunities for educators and learners alike. This is particularly true for sandwich students, whose unique academic journey characterized by intensive learning blocks interspersed with work or other commitments, necessitates a nuanced understanding of their specific needs and performance within OTL environments. It has been observed that Unizik's OTL platform and content may not adequately take cognizance of some of the learners with little or no ICT skills, as well as the compressed schedules and demanding workloads of the students, potentially leading to disengagement and lower performance. Investigating educators' perceptions of sandwich students' performance in OTL at Unizik is crucial to optimize the online learning experience and ensure their academic success, hence, the need for this study.

Objectives of the Study

The study determines the educators' perceptions of sandwich students' performance in online teaching and learning at Nnamdi Azikiwe University, Awka. Specifically, the study determine :

1. Educators perceptions of the effectiveness of online teaching and learning for sandwich students in enhancing their academic performance
2. The challenges face by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka
3. The differences in the mean ratings of male and female educators on perceptions of the effectiveness of online teaching and learning for sandwich students in enhancing their academic performance

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4. The differences in the mean ratings of male and female educators on the challenges face by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka.

Research Questions

The following research questions guided the study:

1. How do educators perceive the effectiveness of online teaching and learning in enhancing the academic performance of sandwich students at Nnamdi Azikiwe University, Awka?
2. What are the challenges face by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka?
3. What are the differences in the mean ratings of male and female educators on perceptions of the effectiveness of online teaching and learning for sandwich students in enhancing their academic performance?
4. What are the differences in the mean ratings of male and female educators on the challenges faced by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka?

Hypotheses

1. Male and female educators do not differ significantly in their perceptions on the effectiveness of online teaching and learning in enhancing the academic performance of sandwich students at Nnamdi Azikiwe Univerity, Awka.
2. There is no significant difference in the mean ratings of male and female educators on the challenges faced by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka.

Method

Descriptive survey research design was adopted for the study. The participants of the study were all the lecturers teaching sandwich students at Nnamdi Azikiwe University, Awka, totaled, 346. Purposive sampling technique was used for the study. This is because, only lecturers involved in sandwich teaching were used for the study. Questionnaire was the instrument for data collection which was validated by three experts at Nnamdi Azikiwe University, Awka and Federal University Wukari, respectively. The inputs of the experts were used to modify the instrument as some items were removed and some replaced. The reliability of the instrument was obtained through pilot testing and the result was analysed using Statistical Package for the Social Sciences (SPSS) and Cronbach's alpha value of 0.79 was obtained which confirm the reliability of the instrument. The instrument was administered through Google form. Only 342 questionnaire were rightly filled, and the responses were analysed using descriptive and inferential statistics such as mean to answer the research questions and t-test to test the null hypotheses.

Results

Research Question One: What are the educators' perceptions on the

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effectiveness of online teaching and learning in enhancing the academic performance of sandwich students at Nnamdi Azikiwe University, Awka?

Table 1: Educators' perceptions on the effectiveness of online teaching and learning in enhancing the academic performance of sandwich students at Nnamdi Azikiwe University, Awka.

N = 342

S/N	Items Statement	$\bar{X}$	SD	Decision
1	The user-friendly and accessible online learning platform empowers sandwich students to manage their studies effectively, potentially leading to improved academic performance.	2.75	.9902	Agreed
2	Online assessments effectively measure the learning outcomes of sandwich students and enhances their academic performance	2.25	.8838	Agreed
3	Online communication tools enhance students' academic performance by facilitating effective interaction and collaboration among sandwich students and educators.	2.55	1.0198	Agreed
4	OTL enhances the critical thinking and self-directed learning skills of sandwich students thereby improving their academic performance.	2.51	.9182	Agreed
5	OTL contributes to improved academic performance of sandwich students compared to traditional classroom teaching.	2.15	.9597	Agreed
6	Online teaching materials are well-suited for the needs of sandwich students and enhances their academic performance	2.35	.9060	Agreed
7	Students perform better in examinations with online method than face to face.	2.50	.9182	Agreed
	Grand Mean (x)	**2.44**	**0.9423**	**Agreed**

Table 1 shows the grand mean of educators' perceptions on the effectiveness of online teaching and learning in enhancing the academic performance of sandwich students at Nnamdi Azikiwe University, Awka was 2.44, indicating agreement with the level of the effectiveness of online teaching and learning in enhancing the academic performance of sandwich students at Nnamdi Azikiwe University, Awka.

Research Question Two: What are the challenges face by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka?

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Table 2: Challenges faced by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka? N = 342

S/N	Items Statement	X	SD	Decision
1	Effective time management is a critical challenge for sandwich students engaged in OTL programs.	3.15	.8518	Agreed
2	Access to reliable internet is a significant obstacle for some sandwich students.	3.60	.4913	Agreed
3	Access to learning resources is an obstacle for some sandwich students.	3.10	.7670	Agreed
4	The students face difficulty maintaining focus in online learning environment	3.19	.9305	Agreed
5	Engaging effectively with online learning materials and activities is challenging for sandwich students due to limited face-to-face interaction.	3.04	.8670	Agreed
6	Sandwich students experience higher levels of stress and anxiety with OTL	2.75	.8299	Agreed
7	Lack of ICT skills by some sandwich students	3.45	.7397	Agreed
8	Poor power supply is a challenge	3.55	.4985	Agreed
9	Lack of training on how to use the current OTL (LMS).	3.25	.8863	Agreed
10	Inadequate computer skills for effective manipulation of the current OTL platform.	3.25	.6975	Agreed
11	Lack of fund to buy data for the OTL.	3.30	.8990	Agreed
12	**Grand Mean (x)**	**3.24**	**0.7690**	**Agreed**

Table 2 shows that the grand mean of challenges faced by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka was 3.24, indicating there are challenges faced by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka.

Hypotheses Testing

$H0_1$ Male and female educators do not differ significantly in their perceptions on the effectiveness of online teaching and learning in enhancing the academic performance of sandwich students at Nnamdi Azikiwe University, Awka.

Table 3: t-test results for difference in the mean ratings of male and female educators on the effectiveness of online teaching and learning in enhancing the academic performance of sandwich students at Nnamdi Azikiwe University, Awka.

Variables	N	Mean	SD	Df	t-Cal	P-value	Decision
Male	171	2.4010	.87986				
				340	.026	.979	Accepted
Female	171	2.3985	.87820				

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The mean responses for the males and females were 2.40 and 2.40 respectively. The t-cal .026, p>0.05 (two tailed) revealed that male and female educators do not differ significantly in their perceptions on the effectiveness of online teaching and learning in enhancing the academic performance of sandwich students at Nnamdi Azikiwe University, Awka. Thus, the null hypothesis was not rejected. Since p-value of 0.979 is greater than our chosen significance level α = 0.05, we can accept the null hypothesis, and conclude that male and female educators do not differ significantly in their perceptions on the effectiveness of online teaching and learning in enhancing the academic performance of sandwich students at Nnamdi Azikiwe University, Awka.

$H0_2$ There is no significant difference in the mean ratings of male and female educators on the challenges faced by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka.

Table 4: t-test results for difference in the mean ratings of male and female educators on the challenges faced by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka.

Variables	N	Mean	SD	Df	t-Cal	P-value	Decision
Male	171	3.2754	.69929	340	.983	.326	Accepted
Female	171	3.2004	.71070				

The mean responses for the males and females were 3.28 and 3.20 respectively. The t-cal .983, p>0.05 (two tailed) revealed that male and female educators do not differ significantly in their perceptions on the challenges faced by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka. In favour of the male educators. Thus, the null hypothesis was not rejected. Since p-value of .326 is greater than our chosen significance level α = 0.05, we can accept the null hypothesis, and conclude that male and female educators do not differ significantly in their perceptions on the challenges faced by sandwich students with online teaching and learning at Nnamdi Azikiwe University, Awka.

Discussion

The first finding of the study revealed that educators at Nnamdi Azikiwe University, Awka, generally perceive online teaching and learning to be effective in enhancing the academic performance of sandwich students. This study aligns with previous research by Okonkwo and Umeh (2023), which demonstrated a positive correlation between online teaching strategies and student academic performance. This suggests that when educators are equipped with proper training and effectively utilize online learning platforms, they can significantly enhance student outcomes.

The second finding also revealed that sandwich students at Nnamdi Azikiwe University, Awka, face various challenges

with online teaching and learning. The challenges faced by sandwich students in this study corroborate with the findings of Ugwoke et al. (2019), who identified barriers such as lack of technical support, poor internet connectivity, and poor power supply as significant obstacles to the effective use of Learning Management Systems (LMS) in Nigerian universities. It is also important to note that Dogondaji et al. (2023) found that many university lecturers in Nigeria were not utilizing remote learning techniques during the COVID-19 pandemic due to various challenges, including lack of electricity supply. This suggests that the adoption of online learning may still be in its early stages in some regions of Nigeria. These challenges highlight the need for universities to invest in improving their technological infrastructure to support online learning.

The study found no significant differences in the perceptions of male and female educators regarding the effectiveness of online teaching or the challenges faced by sandwich students. This suggests that gender does not play a significant role in educators' views on online learning. This study provides valuable insights into educators' perceptions of online teaching and learning for sandwich students at Nnamdi Azikiwe University, Awka. It highlights the potential benefits of online learning but also emphasizes the importance of addressing the challenges faced by students and educators.

Conclusion

The study suggests that online teaching and learning can significantly improve the academic performance of sandwich students at Nnamdi Azikiwe University, Awka. Online teaching offers flexible learning options, interactive opportunities, and facilitates access to educational resources and support services. However, the effectiveness of online teaching depends on the quality of instructional materials and the skills of educators. Well-designed online courses and experienced instructors can significantly improve student learning outcomes.

However, the study also highlights the importance of addressing technical difficulties such as internet connectivity, device access, and software compatibility. Online learning can limit face-to-face interaction, which is crucial for building relationships and receiving support. Time management and self-discipline are also essential for online students. Additionally, digital literacy is crucial for students to navigate online learning platforms effectively.

By addressing these challenges and leveraging the potential benefits of online teaching and learning, Nnamdi Azikiwe University can provide a high-quality educational experience for its sandwich students.

Recommendations

The following recommendations are made based on the findings of the study:

1. The university should invest in robust and reliable internet connectivity, as well as provide students with access to necessary technological devices and software to

ensure seamless participation in online classes.

2. Educators should be provided with training and support to develop effective online teaching strategies that cater to the diverse needs of sandwich students. This includes incorporating interactive teaching methods, providing timely feedback, and offering flexible learning options.
3. The university should establish a dedicated technical support team to promptly address any technical issues students encounter during online learning. This could involve providing troubleshooting assistance, organizing workshops, and offering technical support hotlines.
4. The university should offer comprehensive support services to sandwich students, including academic counseling, peer mentoring, and mental health support. These services can help students navigate the challenges of online learning and ensure their academic success.
5. Additional research should be conducted to explore the long-term impacts of online teaching and learning on sandwich students' academic performance, as well as to identify strategies for addressing specific challenges faced by different student groups.

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