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Digital Technologies and Academic Integrity of Technological Students in Gateway ICT Polytechnic Saapade Ogun State

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Abstract
The study examined the impact of digital technologies on the academic integrity of technological students in Gateway ICT Polytechnic, Saapade, Ogun State. A descriptive research design was employed for the conduct of the study. Two hundred (200) students were randomly drawn from Gateway ICT Polytechnic, Saapade, Ogun State. Mean and standard deviation statistics were employed to answer the research questions raised in the study. The result, however, revealed the importance of digital technologies in influencing the academic integrity of technological students. Moreso, the study revealed various types of academic dishonesty among technological students which include plagiarism, fabrication, deception, cheating, bribery and paid services, sabotage, and/ or impersonation as well as difficulties and challenges associated with digital technology and its impact on the academic integrity of technological students. It is recommended that, educational initiatives should be developed to raise awareness about the different types of academic dishonesty and their consequences, fostering a culture of academic integrity. Technological security measures should be implemented to minimize the potential negative impact of digital technologies on academic integrity and there should be continuous monitoring of academic integrity issues, incorporating feedback loops to adapt strategies based on emerging challenges.
Keywords: *Digital technologies, Academic Integrity, Academic dishonesty, plagiarism*

1.1 Introduction

Digital technologies have become an integral part of higher education, especially for students studying science, technology, engineering, and mathematics (STEM). These tools' incorporation into educational environments has improved students' access to knowledge and promoted creativity and teamwork. Digital technologies are electronic tools, devices, systems, and resources which generate, store or process data. Digital tools include social media, mobile phones, online games, and multimedia (Westland, 2014). Digital technologies have opened up new channels for academic misconduct, such as plagiarism and online cheating, which presents serious problems for educational institutions.

According to the International Center for Academic Integrity (ICAI, 2021),

Academic integrity is a commitment to six fundamental values which are: honesty, trust, fairness, respect, responsibility, and courage. Breaching academic integrity is also known as 'academic misconduct' or 'academic dishonesty (Davidson, 2015). Academic dishonesty is any kind of deception associated with the performance of tests, essays, exams, the performance of abstracts, term papers, theses, research papers, etc. However there are worries concerning academic integrity as a result of the growing usage of digital media. The way students access and engage with academic content has been completely transformed by the quick development of digital technology.

Even though there isn't any concrete proof that technology is to blame for the decrease in academic integrity, it is undeniable that the widespread use of new technologies like smartphones and wearable smart devices, along with the growth of social media and online information, has changed the landscape of academic integrity. Hence, this study will investigate impact of digital technologies on the academic integrity of technological students in Gateway ICT Polytechnic, Saapade, Ogun State.

1.2 Statement of the Problem

A lack of academic integrity, also known as academic dishonesty or cheating is perceived to be an ongoing problem among students in higher education for many years. As technological students, many of them may engage in unethical technological behaviors because of their exposure and technological literacy. In today's digital age where information is easily accessible online, the importance of academic integrity has never been more pronounced. Digital technologies may have contributed to the prevalence of academic dishonesty thereby making their academic integrity level very minimal. Both students and faculty may not adhere to rigorous standards of academic honesty to uphold the integrity of education and research. Lack of plagiarism software use, non-implementation of honor codes, inadequate supervision, poor and inadequate reward for academic integrity, poor policy implementation, frequent closure of schools, examination malpractices among peers, and corruption may be assumed to be the root cause and motivation behind this menace. This paper therefore seeks to investigate the impact of digital technologies on the academic integrity of technological students in Gateway ICT Polytechnic, Saapade, Ogun State.

1.3 Objectives of the Study

The general objective of this study is to examine the impact of digital technologies on the academic integrity of technological students in Gateway ICT Polytechnic, Saapade, Ogun State. Specifically, the study would examine

1. Types of Academic dishonesty prevalent among technological students in Gateway ICT Polytechnic, Saapade, Ogun State.
2. How technology affects the academic integrity of technological students in Gateway ICT Polytechnic, Saapade, Ogun State.
3. Measures and strategies of combating the menace of academic dishonesty among technological students in Gateway ICT Polytechnic, Saapade, Ogun State.

1.4 Research Questions

The following research questions will be raised:

1. What are the types of academic dishonesty prevalent among technological students in Gateway ICT Polytechnic, Saapade, Ogun State?
2. To what extent does technology affect the academic integrity of technological students in Gateway ICT Polytechnic, Saapade, Ogun State?
3. What are the measures and strategies for combating academic dishonesty among technological students in Gateway ICT

Polytechnic, Saapade, Ogun State?

2.1Literature Review

Although there are many educational advantages to these developments, academic dishonesty has also been made easier. The growing accessibility of academic content and online resources has made it simpler for students to engage in plagiarism, according to research by Rohmana et al. (2022). According to the study, students are more likely to copy and paste content without giving due credit because they frequently rely on the extensive amount of information that is available online. Moreover, although helpful, plagiarism detection software isn't always able to spot more complex types of academic dishonesty, like paraphrasing or masking copied content with translation software. In the digital age, contract cheating has become a growing concern in addition to plagiarism.

According to Wang (2024), students now find it simpler to out source their assignments due to the growth of online platforms that provide essay-writing services. Because these services frequently pose as authentic tutoring or academic support, it can be challenging for educators to identify contract cheating. The growth of ghostwriting services designed especially for tech students who might find it difficult to write but thrive on technical tasks was another finding of Wang's study. Digital technologies have also compromised online assessments, which are a common feature of technological programs. Students in technology-related fields are more likely to use unauthorised tools, like coding platforms, virtual machines, and browser extensions that make cheating easier, during online exams, according to a study by Söylemez (2023). According to the study, these students frequently have the technical know-how to get around monitoring systems, which makes it challenging for educational institutions to guarantee the accuracy of online tests.

Digital technologies have been incorporated into Nigeria's educational system more and more in recent years, particularly in technological institutions. The COVID-19 pandemic has further accelerated this shift, with many universities implementing e-learning platforms, online assessments, and digital resources to ensure continuity in education (Ramos Salazar et al., 2022). These tools offer many advantages, including increased access to knowledge, flexibility in learning, and opportunities for collaboration across geographical boundaries, but they also come with significant challenges. The ease with which vast amounts of information can be accessed online, combined with the availability of tools that can encourage academic dishonesty, has sparked concerns about how digital technologies affect academic integrity (Rohmana et al., 2022).

Additionally, technological students are often skilled in using software tools that can be manipulated for cheating during online assessments. Tools like coding platforms, virtual machines, and web browsers can be exploited to search for answers or collaborate with peers in real-time during exams, bypassing traditional monitoring methods (Rohmah & Bukhori, 2021). This growing trend of "tech-savvy" cheating has raised concerns among educators about how to maintain the integrity of assessments in a digital environment. A 2022 study by Söylemez (2023) highlights the increasing tendency of students in higher education to engage in academic dishonesty, particularly in online learning environments. The study identifies key factors contributing to this trend, such as the anonymity provided by online platforms, the perceived low risk of being caught, and the pressure to meet academic expectations in a competitive environment.

3.1 Research Methodology

The research is a descriptive survey study. A questionnaire was used to collect data

from the students (respondents). This study's population consists of all Gateway ICT Polytechnic Saapade, Ogun State students. 200 (Two hundred) ICT students were randomly selected from ND 1 and 2, i.e., 20 students, from each department in Gateway ICT Polytechnic Saapade, Ogun State.

The instrument adopted for this study was a well-designed Likert scale questionnaire with four models Strongly Agreed (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD) was used. The validity of the instrument developed by the researcher was done by a professional in the field of librarianship for proper modification and necessary corrections. Copies of the questionnaires were administered and collected back from the students of the Polytechnic immediately after they were filled. Data collected were analyzed using mean standard deviation and ranking statistics which was found to be more appropriate. Demographic data of the respondents was analyzed using tables and figures to interpret the data based on gender, age, and module.

4.1 Results and Discussion

The interpretation of the result of data collected was done on all raised questions one after the other. In data analysis, tables and mean were used to analyze each variable and answer each research question.

Research question 1: What are the types of academic dishonesty prevalent among technological students in Gateway ICT Polytechnic, Saapade, Ogun State?

Table 1: Mean Responses on research question one

S/N	ITEMS	SA	A	D	SD	MEAN	DECISION
1.	Plagiarism is prevalent among my colleagues	46	56	64	34	2.57	Agreed
2.	Cheating in examination is prevalent among my colleagues	79	69	31	21	3.03	Agreed
3.	Deception in the performance of test, essay, and research works is prevalent among my colleagues	54	86	35	25	2.65	Agreed
4.	Cheating in an online course or test with the use of cell phones is prevalent among my colleagues	59	54	43	44	2.64	Agreed
5.	I have once used information without proper referencing	90	46	35	29	2.99	Agreed

N= 200 Grand Mean= 2.78,Decision rule = 2.50

Table 5 above shows the responses on the academic dishonesty types among technological students in Gateway ICT Polytechnic, Saapade, Ogun State. It was observed that the means of items 1 to 5 were all higher than the decision mean which indicates that all the items were accepted by the respondents. It was also observed that the grand mean for the five items which was 2.78 was found to be higher than that of the decision mean which was 2.50 i.e. (2.78> 2.50). This means that all the stated items are the types of academic dishonesty prevalent among technological students in Gateway ICT Polytechnic, Saapade, Ogun State

Research question Two: To what extent does technology affect the academic integrity of technological students in Gateway ICT Polytechnic, Saapade, Ogun State?

Table 2: Mean Responses on research question two

S/N	ITEMS	SA	A	D	SD	MEAN	DECISION
1.	The proliferation of technology has resulted in increased incidences of academic dishonesty	15	78	63	34	2.97	Agreed
2.	The rapid adoption of computer testing technology has substantially altered the testing environment and increased the opportunities for cheating	46	54	54	36	2.60	Agreed
3	Advent of new technology has paved way for unserious attitude among students	38	72	46	44	2.52	Agreed

N= 200 Grand mean 2.69 decision rule 2.50

Table 7 above shows the responses on the extent technology affects academic integrity of technological students in Gateway ICT Polytechnic, Saapade, Ogun State. It was observed that the means of items 1 to 3 were all higher that the decision mean which indicates that all the items were accepted by the respondents. It was also observed that the grand mean for the three items which was 2.69 was found to be higher than that of the decision mean which was 2.50 (2.69> 2.50). This means that all the stated items are the extent does technology affect academic integrity of technological students in Gateway ICT Polytechnic, Saapade, Ogun State

Research question three: What are the measures and strategies for combating academic dishonesty among technological students in Gateway ICT Polytechnic, Saapade, Ogun State?

Table 3: Mean Responses on research question three

S/N	ITEMS	SA	A	D	SD	MEAN	DECISION
1.	Creating and using new exam questions, cases and assignments every year to control academic dishonesty	49	70	49	32	2.68	Agreed
2.	For greater effectiveness, assessment should be designed such that student responses are unique	62	62	56	20	2.83	Agreed
3.	Creating an*Anti-Cheating* Pledge	43	74	52	31	2.65	Agreed
4.	Educating students on academic dishonesty and the need to have academic integrity	32	73	65	30	2.54	Agreed
5	Teaching digital responsibility	32	73	65	30	2.54	Agreed

N= 200 Grand mean 2.65 Decision Rule 2.50

Table 3 above shows the responses on the measures and strategies of combating the menace of academic dishonesty among technological students in Gateway ICT Polytechnic, Saapade, Ogun State. It was observed that the means of items 1 to 5 were all higher than the decision mean which indicates that all the items were accepted by the respondents. It was also observed that the grand mean for the five items which was 2.65 was found to be higher than that of the decision mean which was 2.50 (2.65> 2.50). This means that all the stated items are the measures and strategies of combating the menace of academic dishonesty among technological students in Gateway ICT Polytechnic, Saapade, Ogun State.

Conclusion

The study concludes that technological students at Gateway ICT Polytechnic, Saapade, Ogun State, recognized the importance of digital technologies in shaping their academic integrity. The acceptance of various items related to academic dishonesty types, challenges posed by digital technology, the extent of technology's impact on academic integrity, and effective measures to combat dishonesty collectively highlight the complex relationship between technology and academic integrity. The findings align with existing literature, supporting the assumption that digital technologies play a crucial role in shaping academic behaviors.

Recommendations

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

1. Implementation of programs to enhance students' digital literacy skills, ensuring they are equipped to navigate the challenges posed by digital technologies.
2. Educational Initiatives should be developed to raise awareness about different types of academic dishonesty and their consequences, fostering a culture of academic integrity.
3. Technological Security Measures should be implemented to minimize the potential negative impact of digital technologies on academic integrity.
4. There should be continuous monitoring of academic integrity issues, incorporating feedback loops to adapt strategies based on emerging challenges.
5. Integration of ethical considerations into the curriculum, promoting responsible and ethical use of technology among technological students.

References

Davidson, J. R. (2015). Facebook as integrated blended learning tool in technology and livelihood education. *International Journal of Educational Technology*, 5(2), 19–25.

International Center for Academic Integrity (ICAI). (2021). Fundamental values of academic integrity. https://academicintegrity.org/fundamental-values

Ramos Salazar, L., Garcia, N., Huntington, H., & Brooks, M. E. (2022). The mediating effects of social comparison on faculty burnout, teaching anxiety, and satisfaction among faculty who taught during the COVID-19 pandemic. *Trends in Psychology*, 1-22.

Rohmah, N., & Bukhori, M. A. (2021). Writing anxiety in academic writing practice: Insights from EFL learners' perspectives. https://doi.org/10.2991/ assehr.k. 210427.053

Rohmana, W. M., Kamal, S., Amani, N., & As-Samawi, T. A. (2022). Academic dishonesty in online English as a Foreign Language classrooms: A qualitative study. *Language and Education*, 36(3), 234-247. https://doi .org/10.1080/095 00782.2022.2035565

Söylemez, B. (2023). Academic dishonesty tendencies in higher education: A mixed-method study. *Educational Psychology Review*, 35(1), 68-82. https://doi.org/10.1007/s11092-023-09313-x

Wang, X. (2024). Understanding workload creep and its impact on academic staff. *Journal of Higher Education Research*, 45(2), 185–200.

Westland, M. F. (2014). 'Truth,' interrupted: Leveraging digital media for culturally sustaining education. *Multicultural Learning and Teaching*, *12*(2). https://doi.org/10.1515/mlt-2015-0001.