



THE FUTURE OF BUSINESS EDUCATION IN NIGERIAN UNIVERSITIES: EXPLORING HYBRID TEACHING MODEL AND AI TECHNOLOGY FOR ENHANCED SKILLS DEVELOPMENT OF STUDENTS

Onyeneke, Euphemia Nkiruka PhD, Paul-Mgbeafulike, Vivian Stella PhD & Ikpeama, Frednora
Uchenna PhD

Department of Business Education, Faculty of Technology and Vocational Education,
Nnamdi Azikiwe University, Awka, Nigeria

[1en.onyeneke@unizik.edu.ng](mailto:en.onyeneke@unizik.edu.ng) [2vs.paul-mgbeafulike@unizik.edu.ng](mailto:vs.paul-mgbeafulike@unizik.edu.ng) [3fu.ikpeama@unizik.edu.ng](mailto:fu.ikpeama@unizik.edu.ng)

Abstract

The future of business education in Nigerian universities is increasingly shaped by technological advancements and innovative teaching models. This study explored the role of the hybrid teaching model and artificial intelligence (AI) technology in enhancing students' skills development in South-East Nigerian Universities. Two research questions and two null hypotheses guided the study. Using a survey research design, data were collected from 92 business educators across universities in South East Nigeria that offer business education programme. There was no sampling. The instrument for data collection was a 26-item structured questionnaire titled "Adoption of Hybrid Learning Models and AI Technology for Enhanced Skills Development (AHLMAITESD). The face validity of the instrument was ascertained by three experts in the field of education. Pilot testing method as used in determining the reliability of the instrument, and data analyzed using the Cronbach alpha formula resulted in correlation coefficient values of .88 and .79 for clusters B1 to B2 respectively, with an overall coefficient index of .84 obtained. Data were collected from business educators across universities by the researcher with the help of six research assistants. Statistical mean, standard deviation and independent t-test were used for data analysis. Findings reveal that while business educators agree on the influence of hybrid teaching model in improving students' skills development, they disagree on their adoption of AI-powered hybrid teaching model for enhancing skills development of their students. Based on the findings of this study, the researcher concluded that that business educators are not overly adopting AI-powered hybrid teaching model in enhancing skills development of students. It was recommended among others that; **Heads of department of** business education programmes in South-East Nigerian universities should organize regular workshops and training programmes to equip business educators with the necessary skills and knowledge to effectively integrate AI-powered hybrid teaching model. This will improve its adoption by business educators in enhancing skills development of their students.

Keywords: *Business Education, Hybrid Teaching Model, Artificial Intelligence, Skills Development*

Introduction

To improve student performance, educational institutions use a variety of teaching models, such as web-based learning, blended learning, hybrid learning, open distance learning, and e-learning. With a computer and an e-learning application, students may learn in these cutting-edge settings at any time and from any location. One worldwide teaching model created in reaction to the COVID-19 epidemic is the hybrid teaching model (Eliveria et al., 2019). It provides fresh educational opportunities with the goal of improving teaching and learning. In order to guarantee fair access to high-quality education, it is extensively utilized in universities across the globe, especially in industrialized countries (Gu, Lockett & Jiang, 2024). This model is a calculated decision to give pupils 21st-century skills for global competition, not a last-ditch or emergency teaching method.

The hybrid teaching model is an instructional strategy that combines traditional face-to-face instruction with online educational practices to enhance students' active engagement, flexibility, and learning outcomes. Kaing (2022) defined it as an online learning complement to face-to-face instructional method. Gao (2023) asserted that hybrid teaching model is often characterized by a combination of

“online + offline” and “in-class + extra-curricular” activities. It provides learning interactions and experiences from different places at once, and uses digital tools to complement traditional classroom methods, allows students to gain access to education resources and interact with lecturers both synchronously (in real-time) and asynchronously (self-paced learning). Kaing (2022) opined that hybrid teaching model is more than integrating technology into teaching and learning, it requires knowledge of mediatization, mediation and technopedagogy. The process of creating, manufacturing, and deploying media communication tools is known as mediatization. Conversely, mediation is the process of changing human behavior and understanding through encounters with tangible things. The art of using technology to enhance learning outcomes through the design of teaching and learning experiences is known as technopedagogy (Kaing, 2022). Hybrid teaching model as noted by Gyamfi and Boateng (2020) is particularly fitted to teaching courses in business education, where practical application, collaborative learning and access to real-world scenarios are critical.

Business education is a crucial skill-oriented programme in Nigeria providing students with essential skills for paid jobs or self-employment. It equips students with innovativeness, creativity, and self-awareness for the digital business environment (Seyi & Folashade, 2022). It is offered in universities and colleges of education with specialized courses in Accounting, Office Technology and Management, Distributive/Marketing, and Entrepreneurship. The Federal Republic of Nigeria (FRN) (2013) revealed that the aims of business education are among others to; provide business knowledge and vocational skills for industrial, commercial, and economic development, train manpower in applied technology and commerce, and enable young people to apply scientific knowledge to economic and environmental problems. To achieve these goals, business education programme in Nigerian universities must be dynamic, and technology-driven. It must incorporate new business principles, financial literacy, digital competencies, and innovative problem-solving strategies. This is in line with the Core Curriculum Minimum Academic Standards (CCMAS), published in 2022 by the National University Commission (NUC) (NUC, 2022). CCMAS standardizes academic programmes in business education. The curriculum consists of 70% core courses and 30% innovative courses, allowing students to carry between 30 and 48 credit units per session. CCMAS incorporates AI and modern skills to align Nigerian graduates with global competencies (Ogunode, Olaoye & Yakubu, 2023).

Presently, traditional teaching methods are insufficient for developing 21st-century skills of university students. This necessitates the adoption of hybrid teaching models and emerging technologies like AI tools (Gordon & Gabriel, 2021). The new reality in business education programme worldwide is the adoption of **hybrid teaching model** to enhance accessibility and flexibility in learning (Garrison & Vaughan, 2019). Hybrid teaching model, according to Ntim (2022), offers a more dynamic, adaptable and engaging learning environment than traditional teaching methods. Hrastinski (2019) acknowledged the importance of hybrid teaching model in business education such as pedagogical diversity, educational equity, and the acceleration of acquisition of digital skills. In addition, it can enhance business education students' lesson attendance, learning motivation, skills development, access to materials, flexible teaching and lesson time and diverse course activities (Linder, 2017). Furthermore, business education students could become self-paced learners, assess credible online information, use online resources, and utilize new technologies. They can easily take on new roles as topic contributors thus improving their communication, critical thinking, teamwork, and problem-solving skills. Kaing (2022) reported that adoption of hybrid teaching model in teaching develop 7Cs skills of 21st-century namely - Critical thinking and problem solving - Creativity and innovation - Collaboration, teamwork, and leadership - Cross-cultural understanding - Communications, information, and media literacy - Computing and ICT literacy - Career and learning self-reliance.

As hybrid teaching model becomes more prevalent in universities, the role of AI in transforming this model cannot be overlooked. AI is a branch of research concerned with developing computers and machines that can reason, learn, and behave in ways that would ordinarily need human intelligence, or that involve data on a scale that humans cannot handle. Yadav et al. (2017) defined AI as an emerging branch of computer science aims to create intelligent machines capable of performing various tasks. Elaine (2017) viewed it as a simulation of the human brain, aims at developing machines that respond to simulations in the same way as humans. The integration of AI and hybrid teaching model can provide flexibility, personalization, and better teaching and learning results for business educators and students.



UNESCO-IBE (2021) stated that proactive application of AI can improve knowledge production, circulation, and dissemination across boundaries. AI, with a humanistic and ethical viewpoint, promotes individualized solutions and new projects, enabling educators and students to combine a wide range of ideas, knowledge and resources. It can also improve tailored learning experiences, automate grading, provide real-time feedback, and increase engagement (Goodrich, 2024). AI-powered chatbots offer real-time assistance and gamification, while content creation and virtual collaboration tools make communication easier in both in-person and distant environments.

In Nigeria, despite the potential benefits of hybrid learning, many educators (business educators inclusive) and universities face obstacles in transitioning from traditional teaching methods to a more flexible hybrid model. Issues such as varying levels of access to technologies, differences in teaching and learning styles, and the need for robust support systems appear prevalent. Eze, Chinedu-Eze and Bello (2018) reported that traditional teaching methods in Nigerian universities hinder educators from adopting hybrid teaching model. Eze et al. noted that there was a lack of standardized frameworks in Nigerian universities to guide educators in designing and implementing hybrid curriculum that promote equitable learning opportunities for all students. Chisomawodi, and Wordu (2023) and Bubou and Job (2021) found that many universities in Nigeria face challenges in transitioning to hybrid teaching model due to limited resources, technical issues, resistance to change, and poor lecturers' competency. Gu et al. (2024) observed that hybrid teaching model has been extensively studied in developed countries. However, while growing rapidly in importance, there has been little research into hybrid teaching model in Nigerian universities.

Years of experience could influence the adoption of hybrid teaching model and AI tools by business educators. Less experienced business educators (below 10 years' experience) may be more adaptable and open to experimentation with hybrid teaching model and AI technologies in instructional delivery, while experienced (10 years and above experience) educators may exhibit resistance to change, over reliance on traditional teaching methods, and lack of familiarity with new technologies. Baxter and Hainey (2020) and Rienties et al. (2017) found that years of teaching experience influenced the adoption of hybrid teaching models and AI technology integration in education. It is against this background that this study ascertained the integration of hybrid teaching model and AI technology in business education for enhanced skills development of students in South-East Nigerian universities.

Statement of the Problem

Currently, conventional teaching models are losing their appeal among education stakeholders due to changing learners' needs and quest to acquire 21st-century skills. This necessitates business educators to find ideal methodologies to improve learning and employability skills. Hybrid teaching model, influenced by AI technology, are increasingly used by universities in developed nations, allowing for better students' learning experiences and skills development. In Nigeria, universities are struggling to adapt to global educational trends and evolving workforce demands. The integration of AI and hybrid teaching model into course deliveries in many Nigerian universities appears to be inadequate, raising concerns about the effectiveness of current teaching models. More specifically, business education lecturers in Nigerian universities seem to be slow in incorporating AI-driven hybrid teaching model, leaving their students at a future competitive disadvantage in the labour market upon graduation. Also, the lack of structured policies, funding, and technical expertise further exacerbates this issue. The skills gap between Nigerian business education graduates and skills required by employers in the digital economy is widening. Therefore, there is need to carry out a comprehensive study on the integration of hybrid teaching model and AI technology in business education for enhanced skills development of students in South-East Nigerian universities.

Purpose of the Study

The main purpose of this study was to ascertain the extent of integration of hybrid teaching model and AI technology in business education for enhanced skills development of students in South-East Nigerian universities. Specifically, this study;

1. Identified the influence of business educators' adoption of hybrid teaching model on skills development of students in South-East Nigerian universities.
2. Determined the adoption of AI-enhanced hybrid teaching model by business educators for enhanced skills development of students in South-East Nigerian universities.

Research Questions

The following research questions guided the study;

1. What influence does business educators' adoption of hybrid teaching model have on skills development of students in South-East Nigerian universities?
2. What AI-powered hybrid teaching model is adopted by business educators for enhanced skills development of students in South-East Nigerian universities?

Null Hypotheses

The following null hypotheses were tested at 0.05 level of significance;

1. There is no significant difference in the mean ratings of business educators on the influence of hybrid teaching model adoption on skills development of students in South-East Nigerian universities based on years of experience.
2. There is no significant difference in the mean ratings of business educators on the adoption of AI-powered hybrid teaching model for enhanced skills development of students in South-East Nigerian universities based on years of experience.

Methods

This study adopted survey research design. It was carried out in South-East Nigeria. The study surveyed 92 business educators in both federal and state universities in South East, Nigeria that offer business education programme. There are four Federal Universities with 61 business educators and four State universities with 31 business educators (Source: Heads of Departments of Business Education Departments in all the universities studied as at January, 26th, 2025). There was no sampling. The instrument for data collection was a 26-item structured questionnaire titled "Adoption of Hybrid Learning Models and AI Technology for Enhanced Skills Development (AHLMAITESD)". The instrument was in two sections; A and B. Section A contained one item on demographic information of the respondents such as years of experience while section B was divided into two clusters B1 to B2 structured four points rating scale of Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2 and Strongly Disagree (SD) = 1. The instrument's face validity was verified by three experts, two from business education and one from measurement and evaluation. Reliability was ascertained through pilot testing method, and data was analyzed using the Cronbach alpha formula, resulting in correlation coefficient values of .88 and .79 for clusters B1 to B2 respectively, with an overall coefficient index of .84 obtained. The researcher administered copies of the questionnaire to business educators in their offices, with the help of six research assistants who were well-informed about methods of administration and collection. Out of 92 copies distributed, 88 (96%) were correctly filled and returned for data analysis. Statistical mean and standard deviation were used to answer the research questions and determine the homogeneity of respondents' mean ratings. An independent t-test was used to test the null hypotheses at a 0.05 level of significance. If the p-value was less than 0.05, the null hypothesis was rejected, otherwise, it was accepted. Data analysis was conducted using SPSS version 25.0.

Table 1: *Respondents' Mean Ratings and Standard Deviation on influence of Hybrid Teaching Model on Skills Development of Students*

S/N	Influence of Hybrid Teaching Model	X	SD	Remarks
1	Use of online and face-to-face teaching strategies improve students' problem-solving skills	3.55	.83	Strongly Agree
2	Use of Google Classroom to support hybrid learning improve students' teamwork skills	3.76	.77	Strongly Agree
3	Engaging in online and face-to-face discussion with my students improve their communication skills	2.73	.69	Agree
4	Hybrid teaching provides business education students with better adaptability to technological changes in the business world.	2.61	.68	Agree



5	The combination of online and face-to-face learning enhances business education students' presentation skills.	3.04	.57	Agree
6	Combination of online assessments and physical classroom tests in evaluating my students improves their understanding of course contents	3.52	.81	Strongly Agree
7	Initiating online and offline group projects among students improves their collaborative skills	3.21	.74	Agree
8	Adopting hybrid teaching in business education course delivery promotes critical thinking skills among students.	2.88	.66	Agree
9	The integration of AI tools in hybrid teaching improves students' analytical and decision-making skills.	3.61	.80	Strongly Agree
10	Adopting hybrid teaching model in instructional delivery make students more employable in a technology-driven workplaces upon graduation	3.33	.85	Agree
11	Adoption of hybrid teaching model improves students' ability to apply theoretical knowledge in practical situations.	3.72	.68	Strongly Agree
12	Adopting hybrid teaching in course delivery enhances students' entrepreneurial skills	2.56	.59	Agree
13	Adopting hybrid teaching model in course delivery improves students' digital literacy skills.	3.41	.78	Agree
Cluster Mean		3.23	.73	Agree

Table 1 shows that five of the 13 items on influence of adoption of hybrid teaching model on skills development of students listed have mean scores ranging from 3.52 to 3.76 which mean that respondents strongly agree that they enhance skills development of students. The remaining seven items have mean scores ranging from 2.56 to 3.41 showing that respondents agree that they enhance skills development of students. The cluster mean score of 3.23 indicates that on the whole, business educators agree that adoption of hybrid teaching model enhance skills development of students in South East, Nigerian universities. Standard deviations for all the items are within the same range showing that the respondents are not wide apart in their mean perceptions.

Table 2: Respondents' Mean and Standard Deviation on Adoption of AI-powered Hybrid Teaching Model for Enhanced Skills Development of Students

S/N	Adoption of AI-powered Hybrid Teaching Model I adopt;	\bar{X}	SD	Remarks
14	AI-powered hybrid teaching in teaching business education courses	1.55	.71	Disagree
15	Learning Management Systems (LMS) with Moodle, Blackboard into business education course delivery	1.36	.67	Strongly Disagree
16	I use automated grading in my hybrid teaching activities	1.73	.59	Disagree
17	AI chatbots virtual teaching assistant to support my students' learning	1.61	.73	Disagree
18	AI-based content recommendation systems to personalize my students' learning	2.04	.85	Disagree
19	Zoom with AI transcription to support classroom instructional delivery	2.52	.83	Agree
20	Turnitin AI-powered plagiarism detection tool to ensure my students produce original academic work	3.41	.64	Agree
21	Coursera adaptive learning platform to support the teaching of business education courses	2.48	.66	Disagree

22	AI-powered data analytics to track students' progress and performance in hybrid teaching	1.50	.70	Disagree
23	Microsoft Teams to support classroom instructional delivery	2.33	.82	Disagree
24	Udemy AI-driven courses to support the teaching of business education courses	1.42	.68	Strongly Disagree
25	Grammarly AI-powered plagiarism detection tool to ensure my students produce original academic work	3.02	.80	Agree
26	automated feedback systems to support students in hybrid learning	2.01	.69	Disagree
Cluster Mean		2.08	.72	Disagree

Table 2 shows that three of the 13 items on adoption of AI-powered hybrid teaching model for enhanced skills development of students listed have mean scores ranging from 2.52 to 3.41 which mean that business educators agree that they adopt them to enhance skills development of students. Eight items have mean scores ranging from 1.50 to 2.48 which mean that respondents disagree that they adopt them while the remaining two items with mean scores of 1.36 and 1.42 mean that respondents strongly disagree that adopt them. The cluster mean score of 2.08 indicates that on the whole, business educators disagree that they adopt majority of AI-powered hybrid teaching model for enhancing skills development of students in South East, Nigerian universities. Standard deviations for all the items are within the same range showing that the respondents are not wide apart in their ratings perceptions.

Table 3: Summary of t-test Analysis of Significant Difference in the Mean Ratings of Business educators on Influence of Hybrid Teaching Model for Enhancing Skills Development of Students Based on Years of Experience

Years of Working Experience	N	\bar{X}	SD	df	t-value	P-value	Decision
10 Years and Above	58	3.29	.76	86	1.26	.18	Not Significant
Below 10 Years	30	3.15	.69				

Table 3 shows that the t - value is 1.26 with 86 degree of freedom and p-value of .18 which is greater than .05 level of significance. Since the p-value is greater than the significance value (P-value = .18 > .05), the null hypothesis is therefore accepted. This means that there is no significant difference in the mean ratings of business educators on the influence of hybrid teaching model adoption on skills development of students in South-East Nigerian universities based on years of experience.

Table 4: Summary of t-test Analysis of Significant Difference in the Mean Ratings of Business educators on the Adoption of AI-powered Hybrid Teaching Model for Enhancing Skills Development of Students Based on Years of Experience

Years of Working Experience	N	\bar{X}	SD	df	t-value	P-value	Decision
10 Years and Above	58	2.19	.76	86	2.16	.31	Not Significant
Below 10 Years	30	2.00	.68				

Table 4 shows that the t - value is 2.16 with 86 degree of freedom and p-value of .31 which is greater than .05 level of significance. Since the p-value is greater than the significance value (P-value = .31 > .05), the null hypothesis is therefore accepted. This means that there is no significant difference in the mean ratings of business educators on the adoption of AI-powered hybrid teaching model for enhanced skills development of students in South-East Nigerian universities based on years of experience.

Discussion

Findings of the study revealed that business educators agree that adoption of hybrid teaching model enhance skills development of their students in South East, Nigerian universities. The findings of



this study agree with that of Hrastinski (2019), which revealed that lecturers acknowledged the importance of hybrid teaching model in students' acquisition of employability skills. Linder (2017) reported that hybrid teaching model enhance students' skills development. Kaing (2022) found that hybrid teaching model helps students to develop 21st century skills. This agreement is rooted in the recognition of the flexibility, accessibility, and technological advancements that hybrid teaching model offers to business education students. Adebija and Fakomogbon (2021) disclosed that lecturers in Nigerian universities were aware of the roles of hybrid teaching model in enhancing students' employability skills. In agreement, Eze et al. (2022) noted that adoption of hybrid teaching model enhances students' development of problem-solving skills, critical thinking, and technology adaptability skills. Findings of the study revealed that there was no significant difference in the mean ratings of business educators on the influence of hybrid teaching model adoption on skills development of students in South-East Nigerian universities based on years of experience. This implies an agreement among business educators, both new and experienced, about the benefits of hybrid teaching styles. Ekoh-Nweke's (2020) study revealed a widespread consensus on the benefits of hybrid teaching approaches in skill development, spanning years of experience.

Findings of the study revealed that business educators disagree that they adopt majority of AI-powered hybrid teaching model for enhancing skills development of students in South East, Nigerian universities. The findings align with the debate among business educators regarding the adoption of AI-powered hybrid teaching models due to a lack of familiarity with AI technologies. While hybrid teaching combines traditional face-to-face learning with online components, the integration of AI tools is still evolving in developing countries (Kukulska-Huime, 2020). Eze et al. (2018) reported that traditional teaching methods in Nigerian universities hinder educators from adopting hybrid teaching model. Eze et al. noted that there was a lack of standardized frameworks in Nigerian universities to guide educators in designing and implementing hybrid curriculum that promote equitable learning opportunities for all students. Chisomawodi, and Wordu (2023) and Bubou and Job (2021) found that many universities in Nigeria face challenges in transitioning to hybrid teaching model due to limited resources, technical issues, resistance to change, and poor lecturers' competency. Findings of the study revealed that there is no significant difference in the mean ratings of business educators on the adoption of AI-powered hybrid teaching model for enhanced skills development of students in South-East Nigerian universities based on years of experience. The findings contrast those of Baxter and Hainey (2020) and Rienties et al. (2017), which found that years of teaching experience influenced the integration of AI-powered hybrid teaching model in education.

Conclusion

The findings suggest that while business educators in South East Nigerian universities recognize the benefits of adopting a hybrid teaching model for enhancing students' skills development, they do not extensively adopt AI-powered hybrid teaching model. The researcher therefore concludes that business educators are not overly adopting AI-powered hybrid teaching model in enhancing skills development of students in South-East Nigerian universities.

Recommendations

Based on the findings of this study, the researcher makes the following recommendations;

1. **Heads of department of** business education programmes in South-East Nigerian universities should organize regular workshops and training programmes to equip business educators with the necessary skills and knowledge to effectively integrate AI-powered hybrid teaching model. This will improve its adoption by business educators in enhancing skills development of their students.
2. **University administrations** in South East Nigeria should invest in AI-driven Learning Management Systems (LMS) and smart educational technologies to facilitate hybrid teaching and learning. This will help to improve students' active participation in learning and acquisition of employability skills.

References

- Baxter, G. D., & Hainey, M. (2020). Barriers and enablers to AI adoption in higher education: The role of faculty experience. *Computers & Education*, 159, 104007.
- Bonk, C. J., & Graham, C. R. (2020). *The Handbook of Blended Learning: Global Perspectives, Local Designs*. Wiley.
- Bubou, G., & Job, G. (2021). Benefits, challenges and prospects of integrating e-learning into Nigerian tertiary institutions: A mini review. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 17(3), 6–18.
- Chisomawodi, J., & Wordu, J. A. (2023). Hybrid learning: A tool for bridging higher education gap in Nigeria in a changing world. *Rivers State University Faculty of Education Conference Journal*, 3(1), 162–181.
- EDUCAUSE. (2020). *7 things you should know about the HYFLEX Course Model*. <https://library.educause.edu/-/media/files/library/2010/11/eli7066-pdf>
- Ekoh-Nweke, A. C., Ezeabii, I. C., & Ikpeama, F. U. (2022). Digital skills strategies for teaching business education in the new normal by educators in universities in South East Nigeria. *Nigerian Journal of Business Education (NIGJBED)*, 9(1), 193-202.
- Elaine, R. (2017). Overview of AI and its application area; 2000. <http://members.90n.at/frankstein/frankeinstein-novelhtm>
- Eliveria, A., Serami, L., Famorca, L. P., & Cruz, J. D. (2019). Investigating students' engagement in a hybrid learning environment. *IOP Conference Series: Materials Science and Engineering*, 482, 1–7. <https://doi.org/10.1088/1757-899X/482/1/012011>
- Eze, S. C., Chinedu-Eze, V. C., & Bello, A. O. (2018). The utilization of e-learning facilities in the educational delivery system of Nigeria: A study of M-University. *International Journal of Educational Technology in Higher Education*, 15(34). <https://doi.org/10.1186/s41239-018-0116-z>
- Federal Republic of Nigeria (2013). *National policy on education*. Lagos: NERDC Publishers.
- Gao, W. (2021). On hybrid teaching model in ideological and political course in colleges and universities. *Advances in Educational technology and psychology*, 5, 13-17.
- Garrison, D. R., & Vaughan, N. D. (2019). *Blended Learning in Higher Education: Framework, Principles, and Guidelines*. Jossey-Bass.
- Gu, L., Lockett, M. & Jiang, Y. (2024). The rapid growth of hybrid learning fueled by the pandemic. Global focus. <https://www.globalfocusmagazine.com/the-rapid-growth-of-hybrid-learning-fueled-by-the-pandemic/>
- Goodrich, M. (2024, October 4). AI and the future of hybrid learning: Revolutionizing education through intelligent technology. *Hybrid Learning*. <https://sites.psu.edu/hybridlearning/2024/10/04/ai-and-the-future-of-hybrid-learning-revolutionizing-education-through-intelligent-technology/>
- Gordon, B. & Gabriel, J. (2021). Benefits, challenges and prospects of integrating E-Learning into Nigerian tertiary institutions: A mini review. *International Journal of Education and Development using Information and Communication Technology* 17(3), 6-8.
- Hrastinski, S. (2019). What do we mean by blended learning? *TechTrends*, 63(5), 564-569.
- Kaing, S. (2022). *Implementing conditions of hybrid teaching and learning environment in Cambodian higher education and its effects on students' 21st century learning skills: A case study on early adopters* (Doctoral dissertation, Université de Fribourg).
- Kukulka-Hulme, A. (2020). Artificial intelligence in education. *Innovations in Science and Technology Education*, 23(1), 1-15.



- Linder, K. E. (2017). Fundamentals of hybrid teaching and learning. *New directions for teaching and learning*, 2017(149), 11–18. <https://doi.org/10.1002/tl.20222>
- Musa, O. S. (2020). Objectives of business education for national development. *Journal of The Business of Education (JTBE)*, 3(1), 247–254.
- National Universities Commission (NUC). (2022). Core Curriculum and Minimum Academic Standards (CCMAS): Education. Abuja, Nigeria: NUC.
- Ntim, A. (2022). Hybrid education policy in Ghana: Challenges and opportunities. *Higher Education in Africa*, 12(3), 19-32.
- Ogunode, N., J., Mshelizam, I., & Mohammed, A. (2024). Implementation of Core Curriculum and Minimum Academic Standards (CCMAS) in Nigerian Universities: Problems and Prospects. *Journal of Geometry, Mathematical and Quantum Physics* 1(1), 12-24
- Rienties, B., Brouwer, N., & Lygo-Baker, S. (2017). The role of academic experience in the adoption of blended learning. *British Journal of Educational Technology*, 44(6), 983-997.
- Seyi, D., & Folashade, A. R. (2024). Business education curriculum and skills acquisition in digital marketing era. *Nigerian Journal of Business Education (NIGJBED)*, 9(3), 145–154.
- Ussif; R. & Agarwal, E. (2024). Business higher education in Ghana and hybrid teaching and learning. *International Journal of Social Science Research and Review*. 7(12), 192-205.
- Yadav, A., Gupta. V., Sahu, H. & Shrimal, S. (2017). Artificial intelligence – new era. *International Journal of New Technology and Research*, 3(3), 30-33.