

Adoption of Artificial Intelligence (AI) Components to Improve Entrepreneurship Study in Oyo State Tertiary Institutions, Oyo State, Nigeria

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ABSTRACT

Studying entrepreneurship imparts a significant role for self-development, self-reliance, self-employment among others for every individual including people with special needs. Extant studies largely focused on factors influencing entrepreneurship study, with little consideration for adaptation of AI components to improve entrepreneurship study. The purpose of this study was to adopt AI components to improve entrepreneurship study. The study used descriptive of survey type as research design. The target population was undergraduate study in Oyo State Tertiary Institutions, Oyo State, Nigeria. A purposive sampling technique was used to select 1250 undergraduate students used in the study. The instruments used were standardized scales named Entrepreneurship Studies Questionnaire ($r=.86$), AI Checklist instrument, and Questionnaire of AI use Motives ($r=.81$). Four research questions were raised and answered. Data were analyzed using frequency count, simple percentage and t-test tested at 0.05 level of significant. Findings showed significant high influence of teaching and learning of entrepreneurship study with average mean (3.88) and standard deviation (0.75) while some items had no significant high mean scores. The result revealed that planning and scheduling 898(71.8%) is the most component of AI use in teaching and learning entrepreneurship study followed by knowledge representation 741 (59.3%)

INTRODUCTION

Entrepreneurship has been a viable avenue for students in the higher institution for self-development and job creation for others most especially institutions in the developing countries who have found a niche market in global trade, whereas, the requirements for entrepreneurs and their entrepreneurship activities are numerous, but it is not feasible to establish an exclusive set of attributes to everyone acknowledges and understanding. The significance of this point lies in the positive outcomes achieved by entrepreneurs. It should not be forgotten that the characteristics that should be in entrepreneurs while study entrepreneurship will be shaped in parallel with the social and economic expectations of the society that required tertiary institutions education interventions, skills, techniques and strategies. Invariably, entrepreneurship is important in order to provide social welfare after determining the needs of the society economic growth and development. Engaging into entrepreneurship study will be possible to increase the employment and income level of the people in parallel with the investments made after the entrepreneurial activities (Dinçel, 2023).

In addition, entrepreneurship study is to provide competitive advantage towards building chain of national sectors including education, economic, agricultural, power among others to capacity of meeting world adventure. Significantly, entrepreneurship study in tertiary institutions has been demonstrating a positive role in the development of students' cognitive and psychomotor domain with aim of yielding positive learning outcomes (Gish, 2022). Indeed, this is not prominent only in creating self-employment, skill acquisition but showcase crucial role in development of country's economy with aid of investing in technology such as Artificial Intelligence (AI) that creating entrepreneurial innovation hub, enhancing entrepreneurship skills, entrepreneurship intention and interest, entrepreneurship researches among tertiary institutions. Furthermore, entrepreneurial study has become more common in higher education institutions due to its nature, but it is less prevalent at other levels of education, where entrepreneurship study should be a priority of education stakeholders, policy maker at the earlier stages of child education by infuse entrepreneurship study into primary and secondary schools curriculum.

This will aid and boost the study represents a fundamental aspect of both industrial and educational policy to mediate level of unemployment in the country and reduce seeking for white collar job and be self-independent. Therefore, it is necessary for entrepreneurs to have a different perspective than the typical person not engage with entrepreneurship in any ramifications like a manager and subordinates in a business can differ, entrepreneurs should have some characteristics that differentiate each other from the general human profile. Among these traits are creativity, willingness to take risks and determination. In spite of these features being a common trait amongst entrepreneurs, it will not be enough to satisfy someone to be a good entrepreneur (Dinçel, 2019). It requires a process to put the investment projects planned in entrepreneurial spirit into action at early stages of students transiting from one class of learning to another.

Consequently, the field of entrepreneurship study is highly fragmented, and there is a lack of agreement on core concepts and definitions of key constructs on fact establishing entrepreneurship study. Integrating the scientific evidence in entrepreneurship research for smooth and adequate study among students in the tertiary institutions requires balancing contributions from alternative research strategies (Low, 2021). To account for the diversity of approaches and methodologies used in teaching or facilitating entrepreneurship study, like area of evidence-based entrepreneurship that focusing and accumulating the knowledge that has become available from qualitative case study research. Specifically, this will help increase in the body of knowledge to inculcate and adapt to the review introduces the systematic synthesis of qualitative entrepreneurship study and describe techniques to synthesize qualitative research systematically on the magnitude of entrepreneurship study.

Nowadays, entrepreneurship study has gained access through the technology advancement of Artificial intelligence (AI) in teaching and researching about the development with well-connected entrepreneurs around the world and is attracting ever-greater attention in scholarly journals, college, health, classrooms, and public affairs (Torres and Godinho, 2022). After several decades of scholarly inquiry (Jennings and Brush, 2014), entrepreneurship now comes across as a confident, self-assured and fertile discipline. According to Wiklund, Davidsson, Audretsch, and Karlsson (2021) noted, entrepreneurship study “has emerged as one of the most vital, dynamic, and relevant” fields in management and the broader social sciences. Several factors have contributed to the flourishing of entrepreneurship study and research, including the fact that scholarship in this area nowadays exhibits far greater methodological diversity and introducing AI and it’s components, the attached attitudes towards entrepreneurship study than in the past (Streb and Gupta, 2021). Findings from body stream of research suggest that people with vocational intention and interest are attracted to entrepreneurship study as self-occupation development and engage in lucrative career with the knowledge based of engaging in entrepreneurial endeavours in the school (Wurth, Stam, and Spigel, 2022) and that they may even perform well in entrepreneurship study (Yu, Tang, Chau, Nazar, Ali, and Iqbal, 2021).

Entrepreneurship study offers unique opportunities for studying the health and well-being effects of work in the future due to its entrepreneurial study characteristics. The work of entrepreneurs marked by increased uncertainty, dynamically changing work demands, blurred lines between work and personal responsibilities. The study on the well-being of entrepreneurs, which emphasizes the importance of new stressors and resources in contrast to occupational health research, is uniquely suited to provide insights into both the bright side and the obscure side of the future of work, including both contentment and struggle. Also, entrepreneurship highlights the trade-off between well-being and stress levels, leading to an intimately connected relationship between success and strain. During this time, entrepreneurs are at the forefront of shaping the future of work.

Flowing from this, students' attitudes towards entrepreneurship study can vary depending on factors such as cultural background, personal experiences, and educational environment. However, here are some common attitudes towards entrepreneurship study such as positive attitudes that is entrepreneurship as a key driver of innovation and economic growth, seeing entrepreneurship as a viable career option, belief in the importance of entrepreneurship education, emphasis on entrepreneurship as a means to create social impact. The negative attitudes towards entrepreneurship study includes, perception of entrepreneurship as risky or unstable, skepticism about the feasibility of entrepreneurial ventures, limited understanding of entrepreneurship and its benefits, fear of failure or uncertainty; also, neutral attitudes categorized as seeing entrepreneurship as just one of many career options, lack of knowledge or exposure to entrepreneurship, uncertainty about the relevance of entrepreneurship education.

Lastly, entrepreneurial mindset set for embracing creativity, innovation, and calculated risk-taking, viewing challenges as opportunities for growth and belief in self-efficacy and adaptability. Entrepreneurship research represents its antipode, perhaps, an attitude of students towards entrepreneurship study categorized as "anything goes" characterizes the field of learning and acquire of skills with features of self-independent and creation of jobs for others (Wiklund, Davidsson, Audretsch, and Karlsson, 2021). There are few institutions adopting and utilizing technology of AI, innovation methods, and classical theories towards the entrepreneurship study in Nigeria tertiary institutions likewise in Oyo state. Adaptation of AI towards increasing level of teaching and learning of entrepreneurship in tertiary institutions will motivate the interest and intention of students to participate with enthusiasm mode.

LITERATURE REVIEW

Increasingly, AI adopted by countries around the world to drive business growth and innovation. This report highlights some of the country's leading the way in AI adoption and the sectors where AI is used. AI is transforming the way businesses conduct transactions. Many governments worldwide have placed AI as a strategic priority. Additionally, data is crucial in the field of artificial intelligence since AI applications heavily rely on machine learning techniques that utilize data for training and validation. Ahmed, Khalil, Chowdhury, Haque, Senathirajah, and Omar (2022) unveiled that educators deem factors such as concern for others' opinions, acquisition of academic incentives, and an intrinsic desire to succeed as pivotal for motivation in utilizing AI within educational settings. AI-powered solutions are increasing efficiency, accuracy, and security in various transactional processes. This report explores the current state of AI in business transactions and highlights the benefits, challenges, and future directions (Yurt and Kasarci, 2024). At present, AI has become an integral part of our lives due to its ability to make autonomous decisions and actively participate in our daily routines. It has become essential to understand the factors that influence people's preferences for AI applications. Succinctly, AI has been seen

as a branch of computer science that focuses on simulating intelligent behaviour in computers (Naqvi, 2020).

AI has a transformative impact on our perception of information and services, which is a constantly evolving and growing area of technology. In a time where AI has cognitive capabilities, such as learning, reasoning, and autonomous decision-making, it is essential to comprehend how people determine their preferences for AI applications (Gökçearsan, 2024). A paradigm shift in educational tools brought about by the integration of AI and chatbots, as stated by Karaman and Göksu (2024), with many transformative applications. Notably, this multifaceted incorporation of AI in entrepreneurship study underscores its capacity to revolutionize traditional teaching methods and enhance the overall learning ecosystem (Mabuan, 2024). While it exerts a significant influence in the fields of science, engineering, and technology, it also makes its presence felt in education through machine learning systems and algorithmic advancements (Naqvi, 2020). Although thoughts about AI may not be at the forefront of our daily considerations, it consistently influences various aspects of our lives as we routinely interact with AI applications.

AI has become a prominent presence in academia and education, leveraging technology as a substantial and advantageous component for accessing an importance (Giray, 2024). With the use of leveraging effect of AI applications like ChatGPT, creation of tailored personalized learning environments for individual students becomes achievable which enables them to navigate and structure the course content in alignment with their specific academic tasks (Karaman and Göksu, 2024). Personalized learning systems designed to enhance students' learning experiences, automated assessment systems aiding teachers in evaluating students' knowledge, and facial recognition systems offering insights into learners' behaviours can be viewed as various algorithmic applications of artificial intelligence in education, all aimed at improving students' learning experiences (Remian, 2019). As the use of artificial intelligence in the field of education rapidly expands, there is a growing curiosity about how students' approach the adoption of this innovative technology and what motivates them in this context (Gansser & Reich, 2021; Hmoud, Swaity, Hamad, Karram, & Daher, 2024).

Despite, the growing importance of AI in entrepreneurship studies, there is a lack of comprehensive research on the subject which the present study proposed to fill by looking on AI components to improve entrepreneurship studies, this is as a result of insufficient understanding of AI's impact on entrepreneurial success, limited access to AI tools. The resources for entrepreneurs, difficulty in measuring AI's effectiveness in entrepreneurial ventures, need for tailored frameworks and models for AI-powered entrepreneurship, inadequate addressing of AI-related challenges such as data privacy, security, and accountability, and limited understanding of the interplay between human entrepreneurs. AI systems, inadequate preparation of entrepreneurs to effectively utilize AI in their ventures, limited research on the ethical implications of AI in entrepreneurship, inadequate support systems for AI-powered startups, complexity of AI concepts, financial constraint and others.

Despite the profound benefits of entrepreneurship study, it still not fully blown in Nigeria. The problems that hinder the development of entrepreneurship education in Nigeria include the following; entrepreneurial intention and attitude, economic pressure, inadequate equipment and technology, inadequate infrastructural facilities, research and linkages, cultural barriers, education optimism, and quality of life among others. There is need to provide adequate solution to underutilization of AI components in teaching and learning of entrepreneurship studies to reduce most problems facing in teaching and learning of entrepreneurship in Oyo State Tertiary Institutions, which the present study, aimed to justify and to add to existing literature by adopting AI components. These knowledge gaps and challenges hinder the potential of AI to revolutionize entrepreneurship education, provide rapid economy growth and necessitate further research and investigation. This statement highlights the main issues that need to address, to solve immediate problem, and to advance entrepreneurship studies on AI in improving entrepreneurship studies in Oyo State Tertiary Institutions.

Objectives of the Study

The main objective of the study is to adopt AI components to improve entrepreneurship studies in Oyo State Tertiary Institutions, Oyo State, Nigeria. Specifically, the objective includes to:

- Ascertain the significant of teaching and learning of entrepreneurship studies
- Determine the potent importance of AI component in enhancing good entrepreneurship study
- Assess the major AI components utilizing in learning entrepreneurship study
- Show the significance difference between male mean score and female mean score on entrepreneurship study

METHODOLOGY

The descriptive research design of survey type was utilized for this study. The population of this study comprises of undergraduate students in Oyo State Tertiary Institutions. The study used purposive sampling techniques to select five (5) Tertiary Institutions domiciled in Oyo State. These institutions were selected due to availability of facilities, competent facilitators and instructors, standard curriculum in teaching and learning entrepreneurship study as a means of filling of questionnaire used in the study to a certain point.

Instrumentation

The following standardized research instrument used in this study

Entrepreneurship Studies Questionnaire (ESQ)

This was self-developed to elicit information form the targeted respondents as a means of assessing students' improvement towards learning entrepreneurship study. This questionnaire used to measure undergraduate students experience with entrepreneurship studies. The questionnaire comprises ten (10) items rated on 4-Likert point format instrument ranging from 4= SA to 1=SD. Examples of the items are: "I became more conscious of entrepreneurial

environment after taking the entrepreneurship study; Entrepreneurship study offered gives me better understanding of the qualities that must be possessed to become an entrepreneur?”. However, the instrument was validated and new reliability coefficient ($r=.86$) obtained using Cronbach alpha.

Questionnaire of AI Use Motives (QAIUM)

This questionnaire is a self-motivation to use AI applications developed by Yurt & Kasarci (2024). The questionnaire originally derived from General Attitudes to Artificial Intelligence Scale (GAAIS). This questionnaire consists of nine (9) with a 4-Likert point format instrument ranging from 4= SA to 1=SD measure uses of AI of an individual. Examples of the items; “I can learn the skills that enable effective use of artificial intelligence applications.”, “I am better than most of my peers in effectively using artificial intelligence applications.” and “The ability to effectively use artificial intelligence is important to me.”. However, the adapted version of the instrument was pilot tested and Cronbach alpha of .84 obtained.

AI Checklist Instrument

A checklist instrument developed based on the generated AI components on the AI application. AI component generated 10 items as the components of AI to improve entrepreneurship studies such as; Machine Learning (ML), Natural Language Processing (NLP), Computer Vision, Reasoning and Problem-Solving, Knowledge Representation, Robotics, Expert Systems, Neural Networks, and Deep Learning. The instrument administered to determine the level of students’ familiarities and utilization of AI towards improvement of entrepreneurship studies.

Data Analysis

Data were collected, collated and analyzed using descriptive and inferential statistical tools with aid of Statistical Packages for Social Sciences (SPSS, IBM 20 Version). Descriptive statistic of frequency distribution and simple percent was used for demographic information and to answer research question 1 to 3 while inferential statistical tool of t-test was used to answer research question 4 at 0.05 level of significance.

RESULTS

Respondents' Demographic Information

Table 1. Summary of Frequency Distribution and Simple Percentage on Respondents' Demographic Information

Source	Identification	Frequency	Percentage
Gender	Male	571	45.68
	Female	679	54.32
Total		1250	100.0
Age	Below 20 years	486	38.88
	21-24 years	368	29.44
	25-29 years	262	20.96
	30years and above	134	10.72
Total		1250	100.0
Tribe	Yoruba	721	57.68
	Hausa	145	11.6
	Igbo	294	23.52
	Others	90	7.2
Total		1250	100.0

Result from table 1 reveals that out of 1250 respondents used in the study, 571 (45.68%) of the respondents are males while 697(54.32%) of the respondents are females, it means females respondents are more than males respondents. Out of 1250 respondents, 486 (38.88) of the respondents are below 20 years, 368 (29.44%) of the respondents are 21-24 years interval, 262 (20.96%) of the respondents are 25-29 years interval while 134 (10.72%) of the respondents are 30 years and above interval. 721(57.68%) of the respondents are Yoruba by tribe, 145 (11.6) of the respondents are Hausa by tribe, 294 (23.52%) of the respondents are Igbo by tribe while 90 (7.2%) of the respondents are belong to other tribes.

Research Question One

What is the significant of teaching and learning of entrepreneurship study?

Table 2. Summary of Frequency Distribution and Simple Percentage on Teaching and Learning of Entrepreneurship Study

Items	SA	A	D	SD	Mean	SD	mark
I became more conscious of entrepreneurial environment after taking the entrepreneurship study	674 53.9%	501 40.1%	60 4.8%	15 1.2%	3.94	.68	High
To me, entrepreneurship study adds to my knowledge of business	583 46.6%	373 29.8%	93 7.5%	201 16.1%	3.76	.80	Low
Entrepreneurship study offered gives me better understanding of the qualities that must be possessed to become an entrepreneur	487 39.0%	511 40.9%	103 8.2%	149 11.9%	3.89	.72	High
I understand the applications taught in entrepreneurship study	271 21.7%	197 15.8%	438 35.0%	344 27.5%	3.89	.74	High
The applications and approaches given leads me to create a new business innovation	192 15.4%	106 8.5%	324 25.9%	628 50.2%	3.87	.75	Low

The entrepreneurship studies material taught contains the latest developments in the business hub	89 7.1%	104 8.3%	426 34.1%	631 50.5%	3.91	.69	High
The learning method used is more interactive, making it easier for me to understand business plan	49 3.9%	77 6.2%	683 54.6%	441 35.3%	3.72	.79	Low
At least one successful practicing entrepreneur served as a guest lecturer during the entrepreneurship study	34 2.8%	14 1.1%	378 30.2%	824 65.9%	4.09	.86	High
We often used case studies of successful entrepreneurs during the entrepreneurship study	239 19.1%	178 14.2%	311 24.9%	522 41.8%	3.98	.71	High
I became more familiar with the business environment because of projects/assignments given by facilitator and instructors	421 33.7%	398 31.8%	175 14.0%	256 20.5%	3.92	.74	High
Average mean and SD= 3.88; 0.75							

Table 2 shows the items by item analysis on ten (10) items with regard to the teaching and learning of entrepreneurship study. The average mean and standard deviation are 3.88 and 0.75 respectively. This indicates significant high influence of teaching and learning of entrepreneurship study in Oyo State Tertiary Institutions, Oyo State, Nigeria. While item 2 (3.76;.08), item 5 (3.87; .75) and item 7 (3.72; .79) had no significant high mean scores when compared with average mean score and standard deviation.

Research Question Two

What is the potent importance of AI components in enhancing good entrepreneurship study?

Table 3. Summary of Frequency Distribution and Simple Percentage on Importance of AI Components in Enhancing Entrepreneurship Study

Items	SA	A	D	SA	lean	SD	emark
I can learn the skills that enable effective use of artificial intelligence applications	651 52.0%	427 34.2%	56 4.5%	116 9.3%	4.02	.27	High
My general knowledge about artificial intelligence is more than sufficient compared to other technology	186 14.9%	124 10.0%	459 36.6%	481 38.5%	3.95	.75	High
I am better than most of my peers in effectively using artificial intelligence applications.	165 13.2%	102 8.2%	541 43.3%	442 35.4%	3.92	.67	High
My potential to use artificial intelligence applications surpasses many people in my surroundings effectively.	192 15.4%	131 10.5%	689 55.1%	238 19.0%	3.90	.71	High
The ability to use artificial intelligence is important to me effectively.	532 42.6%	489 39.1%	111 8.9%	118 9.4%	3.88	.70	High
Learning and implementing innovations in artificial intelligence applications are a priority for me.	367 29.4%	298 23.8%	416 33.3%	169 13.5%	3.65	.72	Low

It is important for me to stay updated on developments related to artificial intelligence.	697 55.8%	462 37.0%	98 7.8%	7 .6%	2.52	.88	Low
Artificial Intelligence, benefits me in various subjects and courses	341 27.3%	302 24.2%	411 32.9%	196 15.7%	3.32	.79	Low
Artificial intelligence applications will assist me in becoming a proficient professional.	237 19.0%	198 15.8%	399 31.9%	416 33.3%	4.09	.86	High
Average mean and SD= 3.75; 1.26							

Table 3 reveals the items by item analysis on nine (9) items with the potent importance of AI components in enhancing good entrepreneurship study. The average mean and standard deviation are 3.75 and 1.26 respectively. These high items shows the significant potent of AI components in enhancing good entrepreneurship studies in Oyo State Tertiary Institutions, Oyo State, Nigeria. While item 6, 7, 8 with mean score and standard deviation (3.65; .72), (3.52; .88) and (3.32; .79) had no significant high mean scores when compared with average mean score and standard deviation.

Research Question Three

What are the major AI components utilizing in learning entrepreneurship study?

Table 4. Summary of Frequency Distribution and Simple Percentage on AI Components in Learning Entrepreneurship Study

Components of AI	Response		Rank
	F	%	
Machine Learning (ML)	175	14.0	6 th
Natural Language Processing (NLP)	12	.96	10 th
Computer Vision	417	33.4	4 th
Reasoning and Problem-Solving	671	49.4	3 rd
Knowledge Representation	741	59.3	2 nd
Planning and Scheduling	898	71.8	1 st
Robotics	50	4	9 th
Expert Systems	129	10.3	8 th
Neural Networks	211	16.9	5 th
Deep Learning	172	13.8	7 th

Table 4 indicates the most usable components of AI in teaching and learning entrepreneurship study in Oyo State Tertiary Institutions, Oyo State, Nigeria. The result revealed that planning and scheduling 898(71.8%) is the most component of AI use in teaching and learning entrepreneurship study followed by knowledge representation 741 (59.3%) followed by reasoning and problem-solving 671 (49.4%) followed by computer vision 417 (33.4%) in that order

Research Question Four

What is the significance difference between male mean score and female mean score on entrepreneurship study?

Table 5. Summary of Descriptive Statistics and t-test showing the Difference between Male Mean Score and Female Mean Score on Entrepreneurship Study

Variable	N	Mean	SD	df	t	Sig.	Remark
Male	1250	65.995	15.979	1248	102.903	.000	S
Female	1250	51.346	15.189				

Table 5 indicates the differences between male mean score and female mean score on entrepreneurship study in Oyo State Tertiary Institutions, Nigeria. The results revealed that there is significant relationship between male mean score and female mean score on entrepreneurship study ($t=102.903$, $df=1248$, $p<0.05$). Hence, it was concluded that there was significant difference exist between male mean score and female mean score on entrepreneurship study in Oyo State tertiary institutions, Nigeria.

DISCUSSION

Finding from the information gathered in the present study found that there was positive significant of teaching and learning of entrepreneurship study in Oyo state tertiary institutions where students irrespective of classes engaged in one way or the others in learning to be a good entrepreneur or teaching to be an innovator of entrepreneur. It was also found out that entrepreneurship study increase the consciousness, offered better understanding of the qualities of good entrepreneur, abide to the available applications to be a good entrepreneur were high as applicable to the respondents used in the present study. This finding corroborated with previous studies e.g (Dinçel, 2019; Wiklund, Davidsson, Audretsch, and Karlsson, 2021; Onah, 2004) who they found out that there is good existing in teaching and learning entrepreneurship study that equipped students to be a good entrepreneur, creating and establishing business hub in gear economic instability in the country, be innovative to businesses, creating more jobs for other to benefits and stated associated with teaching and learning entrepreneurship in the tertiary institutions. In another by Odjegba (2005) who found that entrepreneurship study built on vision, focus and determination of elevating economy growth and development of a country through teaching and learning in tertiary institution. The study of Nwangwu (2006) claimed that entrepreneurship is the willingness and the ability of an individual or a firm or an organization to identify an environmental change and exploit such an opportunity to produce goods and services for public consumption.

Another finding from the present study sought for the potent importance of AI components in enhancing good entrepreneurship study and the information gathered from the respondents used in the study found appropriate underutilization of AI components towards teaching and learning of entrepreneurship study in Oyo state tertiary institutions. This result shows that respondents engaged in study understand the importance of AI in learning entrepreneurship study and relevance of it to be a relevant entrepreneur across the globe after passing the assigned training. This is in line with the studies of Ahmed, Khalil, Chowdhury, Haque, Senathirajah, and Omar (2022) who found and

unveiled that entrepreneurship educators and facilitators deem factors such as concern for others' opinions, acquisition of academic incentives, and an intrinsic desire to succeed as pivotal for motivation in utilizing AI within educational settings most especially in the of entrepreneurship education. They further stressed that AI-powered solutions are increasing efficiency, accuracy, and security in various transactional processes of businesses worldwide. Another report explores the current state of AI in business transactions and highlights the benefits, challenges, and future directions of entrepreneurship study in higher institutions (Yurt & Kasarci, 2024). A study by Naqvi (2020) who found out that AI has been seen as a branch of computer science that focuses on simulating intelligent behaviour in computers and that intelligent behavior is based on entrepreneurship study that needs the help of AI. A report from Mabuan (2024) who profound and notably the multifaceted incorporation of AI in entrepreneurship education underscores its capacity to revolutionize traditional teaching methods and enhance the overall learning ecosystem while the finding from the present study found that planning and scheduling as one of the components of AI is the most preferable in teaching and learning entrepreneurship study in higher institutions.

Lastly, the study found a significance differences between male mean score and female mean score on entrepreneurship study. This indicated that there is gender differences perception, knowledge and practice of entrepreneurship study with female favourably in-depth to acquire more knowledge than male counterpart towards learning entrepreneurship studies is. This shows that female students develop positive intention and good attitude towards learning more on entrepreneurship study using AI components than gender counterpart. This supported with previous studies e.g. Suleiman (2006), Low (2021), Streb and Gupta (2021) Torres and Godinho, (2022) found that there was significance difference between male and female towards learning entrepreneurship education of higher institutions.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Adaptation of AI components to improve entrepreneurship study in Oyo state tertiary institution is crucial and found significant important for the growth and development of the country economic. Its role in economic growth of nations especially in the face of the global economic meltdown cannot be underestimated. Entrepreneurship is a central pillar to economic growth and development, as well as employment generation and poverty alleviation. It is therefore necessary that aggressive efforts should be made to see to its full development. Based on the premises of the findings gathered in the study, it therefore concluded that relevance AI components should be provided in our tertiary institutions for teaching and learning of entrepreneurship study. Also, it was found that gender differences should be taken into consideration when utilizing AI applications towards development of entrepreneurship education.

Recommendations

1. There is need to provide opportunities for students to raise funds after schooling to enable them start up, expand their business orientation and knowledge gained to be productive for the betterment of economic growth and development of the country.
2. The government and school management should provide an enabling environment for teaching and learning of entrepreneurship study with relevant technology.
3. Students should be exposed to training in new technology i.e. AI and its components from time to time to enable them be current about trends in the area of entrepreneurship and ways of solving the business problems.
4. There should be efforts by the institutions management to reinforce in students on the concept of risk taking and patience in wealth creation that will instills positive change of entrepreneurial intention and attitude.

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