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**Blended Learning as antecedent to Human Capital Development in Nigeria****L'apprentissage mixte comme préalable au développement du capital humain au Nigéria****By****Dr. Amede Lucky****Faculty of Education,****National Open University of Nigeria, Abuja.****EMAIL [lamede@noun.edu.ng](mailto:lamede@noun.edu.ng), 09099526274; 08023157499.*****Abstract***

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*This paper examined blended learning as a sine qua non to human capital development within the Nigerian context. Blended learning denotes a pattern of learning that embraces online courses in addition to the face-to-face contact. Blended learning is a model of instruction offering both flexibility and convenience to students. It also promotes economic growth and develops student's potentials. As a window for working adults to explore postsecondary degrees and improve on their knowledge and skills, blended learning is a viable option for actualizing human capital development in Nigeria. Quality education as a means of development is ingrained in human capital development considered as very critical to inculcating skills in learners. It is also noteworthy that human capital resource is an important factor of production. Blended learning contributes to national development, Nigeria inclusive, by speeding up the pace of her much needed manpower needs for economic growth. This paper explored blended learning and its contributions to human capital, advantages of blended learning, challenges of blended learning, as well as the influences of blended learning and human capital development in Nigeria. Conclusion was made with useful suggestions including among others, that policy makers in educational sectors in Nigeria should prioritize blended learning to improve her human capital. Stakeholders in education should involve public and private sectors, the communities and the civil society in blended learning. Nigerian universities should be empowered to operate blended learning programmes and that Government should increase funding to universities to enable them purchase necessary tools to implement blended learning programmes.*

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**Keywords:** Blended learning, human resource, human capital development, education

### **Résumé**

*Cet article examine l'apprentissage mixte comme une condition sine qua non du développement du capital humain dans le contexte nigérian. L'apprentissage mixte désigne un modèle d'apprentissage qui englobe des cours en ligne en plus du contact en face à face. L'apprentissage mixte est un modèle d'enseignement offrant à la fois flexibilité et commodité aux étudiants. Il favorise également la croissance économique et développe le potentiel des étudiants. En tant que fenêtre permettant aux adultes qui travaillent d'aspirer à des diplômes postsecondaires et d'améliorer leurs connaissances et leurs compétences, l'apprentissage mixte est une option viable pour actualiser le développement du capital humain au Nigeria. Une éducation de qualité en tant que moyen de développement est ancrée dans le développement du capital humain considéré comme essentiel pour inculquer des compétences aux apprenants. Il convient également de noter que les ressources en capital humain sont un facteur de production important. L'apprentissage mixte contribue au développement national, le Nigeria compris, en accélérant le rythme des besoins en main-d'œuvre indispensables à la croissance économique. Cet article a exploré l'apprentissage mixte et ses contributions au capital humain, les avantages de l'apprentissage mixte, les défis de l'apprentissage mixte, ainsi que les influences de l'apprentissage mixte et du développement du capital humain au Nigeria. Des suggestions utiles ont été faites dans conclusion, il s'agit entre autres de celles indiquant que les décideurs des secteurs de l'éducation au Nigeria devraient donner la priorité à l'apprentissage mixte pour améliorer son capital humain. Les acteurs de l'éducation devraient impliquer les secteurs public et privé, les communautés et la société civile dans l'apprentissage mixte. Les universités nigérianes devraient être habilitées à gérer des programmes d'apprentissage mixte et le gouvernement devrait augmenter le financement alloué aux universités pour leur permettre d'acheter les outils nécessaires à la mise en œuvre des programmes d'apprentissage mixte.*

**Mots -clés:** Apprentissage mixte, ressources humaines, développement du capital humain, éducation

## **Introduction**

Education is the genuine channel through which the vast potentials of youths can be optimistically harnessed for the benefit of the country as a whole (Buhari, 2018). In the past decade, online learning has become the order of the day and extensively utilized in schools all over the world. Blended learning is as formally designed a or non-formal curriculum which constitutes both online or digitized learning and conventional teaching systems. This implies that both teachers and students are to be physically present in the learning environment in association with online media that enable students to extend control over time, place and pace (Friesen, 2012, Knewton, 2013; Strauss. 2012). Blended learning classroom systems require students to attend face to face brick and mortar classes alongside computer based instructions in terms of both content and its delivery. According to Oliver (2005), blended learning leverages internet facilities for personalized students learning with flexibilities in time, pace, place and pathway for learning.

Colis and Moonen (2001) asserted in discussion of blended learning as crossbreeds of the face-to-face with online mode of learning that enhance learning effectiveness. In this situation, online module becomes an extension of traditional classroom learning. The experience results in stout learning achievement that neither the conventional nor wholly virtual instruction can produce the model of blended learning involves series of face-to-face instruction, periodic assessments/ synchronous and asynchronous activities, e-mail exchange with the reactive process coupled with end of instruction examination (Martyn, 2003).

Indeed when computer tools and face to face teaching inform each other as course materials becomes lively to students with changeable learning styles, blended learning is at its best.

The mechanism of blended learning includes instructor-delivered. Instruction, online learning, webinar, conferences, live and virtual sessions with facilitators and use of the Facebook, e-mail, Twitter, YouTube, Skype, blogs, podcasts and web boards (Friesen, 2012). The effectiveness of blended learning very much depends on its explicit implementation and the particular problem it is intended to resolve.

An important building block of the new school system in which students are offered flexibility as well as convenience is in the domain of blended learning. The procedure provides opportunities to students for accessing the school courses materials from isolated locations. In the blended learning system, teachers spend minimal time giving whole class lessons but devote time to students either individually or in small groups. Blended methods also enable schools to effectively teach more students while optimizing cost of instruction and student ease of access to higher education. Students acquire sufficient technological skills and rally in confidence as they regularly utilize digital and online technologies (Ogunleye, 2019). Students could also imbibe the characteristics necessary for acquiring self-discipline. Intrinsic motivation and organizational habits which are needed in later years.

Human capitals refer to approaches that transmit skill acquisition, knowledge and numerous assets to individuals which can result in improved performance, satisfaction and productivity. Rastogi (2000) was of the view that human capital vital resources needed for workers' improvement in the aspect of knowledge, skills and ability. Human capital involves "the knowledge, skills, competencies and attributes acquired by people and which could facilitate effective creation of personal, social and economic well-being (Organization for Economic Co-Operation and Development, 2001).

The emergence of globalization and the downturn of world economy in recent years have given impetus to high demand of human capital development. The ultimate basis for the well-being of any nation lies in human resources as stimulant for development. Every country of the world whether developed or under developed are focusing on human capital development in order to increase production efficiency, ensure economic growth and stimulate industrial development. Quality skills training tends to increase productivity and competitiveness in a knowledge-based economy.

Functional education as a means of development is ingrained in human capital development, an avenue for effective and efficient inculcation of skills in learners. Human capital resource was also to be viewed as a factor of production. Education plays a major role in both the creation of human capacity as well as improvement of human capital to make it relevant to national growth

and economic development. This role is highly acknowledged in national planning and development efforts (Jhingan, 2005). In developing countries, experience in the past decades have shown that dearth of talents and skills have limited development and retarded economic progress (World Bank, 1995). In Nigeria, education cannot be safely left in the hands of individual or private interests, hence educational policies need to be tailored towards the needs of the nation as regards manpower development.

Education is saddled with the cultivation of cognitive, psychomotor and affective domain of the whole individual. It is only the available human resources that determine the nation's wealth, not the physical capital material resources. Blended learning is a vital medium for skills and manpower development especially among those who champion the inculcation of learners' skills.

The decline in human capital development in Nigeria calls for other educational innovations. However, the dawdling pace of adaptation in Nigeria educational system calls for serious concern. Blended learning has been recognized all over the world as a viable means of acquiring educational knowledge as it holds multiple advantages over traditional learning in many perspectives. Blended learning has not been given due priority in Nigerian educational system. National Open University of Nigeria is the only recognized tertiary institutions that are practicing it for now. The proliferation of Blended learning in Nigerian educational system will no doubt facilitate human capital development and improve her quest for development. This paper therefore sought to x-ray blended learning as antecedent to human capital development in Nigeria.

### **Statement of the problem**

Most developing countries, including Nigeria have little input in knowledge economy and by extension poor development of human capital. Nigerian literacy statistics are alarming. Adamu (2017) asserted that Nigeria has about 65 million to 75 million illiterate. It is no surprise that most sensitive job vacancies in Nigeria are filled by foreign experts while 70 percent of our able body youths are unemployed (Nigerian Bureau of Statistics, 2016). Nigeria's population is about 180 million with the staggering statistic of about 50 percent

unemployed. Nigerian economically active population is about 103 million (age 15-64) and labour force of about 75 million available and actively seeking for job. Youth below the age of 35 constituted over 60 percent of Nigerian population and about 80 percent of them are either unemployed or underemployed (Brunus, 2016).

Poor human capital development has resulted in Nigerians suffering from mind boggling poverty, dilapidated infrastructure, low GDP and declining per capita income despite rich natural endowments. Many job vacancies exist but lack of prerequisite skills make most graduate incompatible to fill these vacuum. Blended learning has to be given due preminent in our educational system for this skills deficient trend to change in Nigeria. This deliberation forms the onus of this paper. Specifically, the paper intends to see if blended learning can be used to solve these problems.

### **Theoretical framework of the study**

This study is hinged on the Gestalt theory that was propounded by [Max Wertheimer](#) and two other German psychologists, [Wolfgang Köhler](#) and [Kurt Koffka](#) in 1912 (Heider, 1977). This Gestalt's school of thought believes that any object or scene are observable in their simplest forms. The Law of simplicity in Gestalt's theory states that the entirety of an object or scene is more valuable than its consistent parts. An object in its holistic sense helps to find order in chaos and unity among all the unrelated parts or pieces of information. Knowledge of Gestalt psychology motivates individuals to establish relationships and patterns among different objects. In the context of this paper, brick-and-mortar (face-to-face classroom practices) and blended learning constitute individual parts which must be combined to form a whole which is the resultant human capital development of citizens of Nigeria.

### **Concept of Blended Learning**

Scholars often employ the concept of blended learning, hybridized learning, technology- mediated instruction, web-enhanced instruction and mixed-mode instruction interchangeably (Dream Box Learning, 2014). However, some convergence exist in the conceptualization of blended learning especially in its definition while opinions vary wildly on the concept.

The use of both online and [physical](#) learning modes in combination when teaching students is blended learning in this context. Students attend conventional classroom setting and compliment it with online course. Bothe online and traditional learning experiences parallel and complement one another. Blended learning is not a particular pedagogical approach or framework but has the capacity for supporting student-centred approaches to learning.

Blended learning has numerous merits over traditional face to face or complete online classes (Aigbokhan, Imahe and Ailemen, 2007). Blended learning methods bring about higher academic achievement as it supports individualizes attention. Learners are free to work at their own pace (Dream box learning, 2014). Teachers are opportune to restructure instructional materials which help all the students to assume their full potentials (Garrison, 2004).

Education via blended learning mode facilitates independent and collaborative thinking (Aigbokhan, Imahe & Ailemen 2007). Learners' practical skills and attitude to learning are improved with the use of information and communication technology facilities (Dream box learning, 2014; Ogunleye & Apata, 2018). When technologies are incorporated into class instruction, students are better equipped to use computer based quantitative and qualitative evaluation mode to evaluate their comprehension of course materials (Ogunleye, 2009; Alexender, 2010; Okopi & Ogunleye, 2016)

In terms of cost effectiveness, blended learning is cheaper to deploy than the traditional classroom teaching and learning (HereI Caperton, 2012). Blended learning saves costs by scheduling classrooms in virtual settings and provides access to expensive textbooks via electronic devices which students already have. E-textbooks are therefore accessed digitally and this helps reduce cost of textbook purchase (Garrison, 2004). This cost analysis has shown that blended learning achieves significant cost-savings up to 50% as against the expensive instructor-led learning (Chumley-Jones, Dobbie, Alford, 2002). Reduction of time-on-instruction, less travel and labour costs, decrease in fixed infrastructure and the flexibility of expanding programmes using novel technologies can result in financial savings when blended learning is adopted.

Subscribers to blended learning allude to increased opportunity for data gathering and flexibility of teaching and assessment strategies as two significant strengths of blended learning (Jacob, 2011). Software's for collecting student data and for measuring their academic progress is often utilized in blended learning. In most cases, tests are automatically captured scored while instant feedbacks are provided. Student logins and time-on-tasks are also accounted for (Garrison, 2004; AleksejHeinze & Chris, 2006).

Blended learning affords students the opportunity to work at their pace, making sure they perfectly comprehend the concepts before progressing to new ones (Garrison, 2004). Blended learning environment demands from learners' ability to demonstrate autonomy, self-regulation and independence in the learning process (Gosper, Green, McNeill, Phillips, Preston, & Woo, 2008). Initial orientation given before introducing blended learning strategies by teachers can help students gain confidence running through the different components while at the same time developing a stronger sense of independence (Friesen, 2012).

The flexibility in course designing and delivery which is an attribute of blended learning ensures easy access to learning materials effective learning activities and assessments and a blend of time and place differentials for learning resulting in development of independent learning skills among students. It also provides ample opportunities for course assessment, systematic evaluation and the conveniences of fully online courses with a good dose of face-to-face contact. Blended learning approach is also student centered offering great potentials for learning experience than either of the traditional or the main online learning.

### **Challenges of Blended and Online Learning**

Skepticism about the use of digital and online learning in combination is almost universal largely because most technology enabled educational practices are yet to be tested to determine their educational utility and value (Rastogi, 2002; Oliver, 2005). Some negative disposition to blended learning is its proximity to rote learning and focus on lower-order thinking skills while neglecting more meaningful learning. Criticisms of blended learning also bother on the extent to which students can get personal attention, instructional



guidance and adequate assistance from facilitators. Some students may not have capacity for self-direction, self-disciplined and organization of thought since the strategy lack regular supervision from teachers. However, students use social media most of the time studying in blended learning environment rather than chatting with friends.

Another drawback is inadequate training on blended learning instruction and its effective use as it requires teachers to adopt novel technologies and sophisticated instructional tools. (Ogunlelea & Ogunleye, 2014). Some educators also are concerned that blended learning is merely an avenue of cost reduction through the substitution of technology for teaching staff with possible teacher lay-offs, high student-teacher ratios. Poor students' performance among other adverse consequences (Martyn, 2003; Amede, 2016). Another complicating factor for the use of blended learning is the proliferation of business enterprises supplying digital-learning packages and online-learning softwares to schools at high costs. The tendency therefore, is for the profit-oriented transactions to override the quality of such educational services and products. Another major setback for blended learning is that wholly online courses compared to traditional courses gained more acceptance among tertiary education students who suffer higher attrition rates (Salmi (2001). Hara and Kling (2001) have also reported feelings of isolation as an important stress factor among students who studied mainly online. Anxiety, frustration and anxiety linked to lack of immediate feedback from instructors as well as unclear instructions on the website for instruction.

Heavy dependence on specialized tools driving blended learning may also constitute a serious demerit. For blended learning to impact positively on students learning experience technical tools need to be available and reliable, easy to utilize and should be current (Alexander, 2010). Lack of computer [https://en.wikipedia.org/wiki/Blended\\_learning\\_-\\_cite\\_note-garrison-31\\_literacy](https://en.wikipedia.org/wiki/Blended_learning_-_cite_note-garrison-31_literacy) constitutes serious constraints to students' access to course materials, making it mandatory to seek for of high-quality technical support (Ogunleye, 2010). Group work is also difficult to assemble due to the nature of online setting.

Furthermore, effective feedback often consumes time under blended learning

compared to traditional assessments (Jacob, 2011). Difficulty in assessing network equipment constitutes critical issue in blended system. Incorporating blended learning methodology into our educational pedagogical strategy needs to first determine the internet accessibility by learners (Marc, 2001). This explains why education centers incorporates good wi-fi connections to address internet issues.

Capabilities such as

### **Human Capital Development in Nigeria**

Knowledge acquired, skills, abilities, experience, intelligence, talents, judgment and the wisdom possessed by individuals and the group of people in a population constitute human capital traits. These forms of wealth represent aggregate resources that can be used for the accomplishment of goals of any nation. The process of human capital transformation involves changing raw human resources into highly productive human resources.

Human capital is a multi-dimensional concept that is all-encompassing and cannot be fully described or grasped in a simplistic term. The knowledge, skills, abilities and capabilities of a people constitute human capital. According to Stiglitz and Boadway (1994), human capital refers to an aggregate of skills and competencies that make workers productive. Human Capital is therefore a measure of skills, ability, capacity and education attributes of people which account for their productivity and economic power. (Organization for Economic Co-Operation and Development, 2001). The term can be viewed as the knowledge, skills, competencies and other attributes personified in a certain individuals in their living conditions and are subsequently used for goods and services. Human resource development is a way of ensuring that the workforce continuously inculcates and upgrades skills to meet new challenges of the society. (Yesufu, 2000). The implication is that individuals on a job require requisite retraining job reorientation or skills adaptation to surmount new challenges. Adamu (2003) was of the opinion that this specialized human capability be acquired and sharpened through education, particularly the blended learning setting.

Extracts from Khartoum is 1998 Declaration Alexander (2010) affirm. The desirability of human skills towards economic recovery instead of specially

designed programmes formulated or implemented without having social and human priorities at its base. Indeed, there can be no structural adjustment programme or economic recovery efforts when the human imperative is missing.

### **Blended Learning and Human Capital Development in Nigeria**

The need to improve education in Nigeria has been accorded high priority since 1960. As a developing nation, Nigeria is bedeviled with high rate of illiteracy inspite of several educational policies and programme aimed at revitalizing the sector. Human capital development has been identified as tool to promote the economy (Sanusi, 2002). He opined that the nation's economy must be efficient and competitive among the committee of nations while national frontiers should not allow limitations in human, material, and capital flows. According to him, one of the greatest problems with Nigeria at present is lack of capacity building to propel economic productivity and development. Its significance and relevance through acquisition of skills would also stimulate socio economic transformation (Amede, 2016).

The wealth of every nation rests on individual potential which in turn contribute to national development. Blended learning boosts the literacy level of the populace, improve their human capital potentials and encounter the challenge of sustaining economic growth and development. He opined that quality skills are key in stimulating economic growth and sustainable development process and can make an immense contribution to position Nigerian economy to the path of recovery. Blended Learning can contribute to Nigeria's human capital development in the following ways:

**Quality of employment** - Blended Learning can equip learners with adequate skills needed by modern industries. There is widening gap between low-skilled/low-paid temporary jobs and high-skilled/highly paid workforce. In the modern economy today, high-skilled and creative workers are equipped with skills that guarantee job opportunities and self-actualization..

**Economic growth and productivity** - enduring fiscal growth depends progressively more on improvements in human capital which blended learning can foster. Blended Learning can help learners to attain better education, become innovative and creative lot that can improve productivity and national economic growth.

**Human capital flight** - The epoch of globalization instigates workers' mobility and has empowered skilled workers to migrate from low-income to higher income nations. When developing economies lose their best human capital they experience adverse effects in the long run. Blended Learning can help Nigeria to be in the same trend of globalization through its broad curriculum.

**Economic Sustainability** – By developing human capital, Blended Learning can facilitate economic sustainability in Nigeria. According to United Nation (2012), our responsibilities abdicated and left for future generations even with enough resources of all kinds, is not as helpful as providing them with the opportunities good enough as large as the ones we have had ourselves. [Ibemere](#) (2017) opined that for Nigeria to achieve meaningful sustainable economic growth in the country it must begin to aggressively develop is human capital for which blended is well positioned to achieve.

### **Conclusion**

Education is highly needed for Nigeria to improve her production capacity. Blended education combines classroom and online education in one setting. Surmounting the 21st century issues and beyond and to meet the national human capital development demands that the gaps in the educational system be urgently addressed. Blended learning can fill the yearning if properly planned and implemented This paper explored the concept of blended learning and human capital, advantages of blended learning, challenges of blended learning, human capital development and blended learning and human capital development in Nigeria. It is expected that policy makers in educational sectors in Nigeria should consider the input of this paper and priorities blended learning to improve her human capital.

### **Suggestion**

1. Policy makers in educational sectors in Nigeria should priorities blended learning to improve her human capital needs.
2. Stakeholders in education should involve public and private sectors, the communities and the civil society in blended learning.
3. Nigerian Universities should be empowered to operate blended learning programmes.
4. Government should increase funding to Universities to enable them purchase necessary tools for blended learning programmes.

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