



Available Online at EScience Press
International Journal of Education Foundations
ISSN: 3078-7866 (Online), 3078-7858 (Print)
<https://ijef.esciencepress.net>

RESEARCH ARTICLE

Philosophical Basis of Blended Instructional Materials and Learners' Academic Attainment

Emeka Ategwu

Department of Educational Foundations, Faculty of Education, University of Cross River State, Nigeria.

Corresponding Author

Emeka Ategwu, Email: ategwu2019@gmail.com

Author's Contributions

All authors contributed equally to this research.

Article History

Received: October 12, 2024; Accepted November 23, 2024; Published December 28, 2024.

ABSTRACT

Education no doubt is very necessary for the development of man and the society at large. In view of its importance, government, individuals and corporate organisations are investing so much in it. This is done through various channels to ensure its efficacy and the product therefore, are of high quality. One of such ways is to ensure that the teaching-learning processes are adequately taking care of. Instructional materials are necessary in this wise. Instructional materials are as old as educational system itself, with the advent of scientific breakthrough, some traditional instructional materials are becoming obsolete. In view of this, there is need to incorporate blended instructional materials that is the focus of this work (titled Philosophical Basis of Blended Instructional Material and Learners' Academic Attainment). To effectively handle the write up, the work was done under; instruction, conceptual framework, philosophical basis of blended instructional materials, blended instructional materials and learners academic attainment, resume of philosophical basis of blended instructional materials and learners academic attainment, summary and conclusion.

Keywords: Blended; instructional materials; philosophical education; academic attainment; Teaching-Learning Processes.

INTRODUCTION

The current trend of events in the world has made attention to education of utmost importance. The revolutionary trend in scientific discoveries has also made innovation in educational processes of greater relevance. The world is improving geometrically, so innovation in education and the learning process had become pertinent for improvement.

Philosophers of education are not left out in this quest and desire for improvement or innovations in education. Thus, right from the ionian epoch through pre-Socratic to Post Socratic era, interest in education has been tremendous. In the medieval history of philosophy, the trend was the same as seen in the activities of the

scholastic philosophers such as St. Thomas Aquinas, St. Augustine, St. Areslem etc. Accordingly, these were seen as the doctors of the church as they tried to reconcile philosophical cum theological teachings. In the modern era, the quest for scientific knowledge increased as seen in the activities of philosophers like Francis Bacon, Thomas Hobbes and Martin Heidegger etc. In the contemporary era, the role of philosophers like John Dewey, Jean Jacques Rousseau, Maria Montessori, Johann Heinrich, Pestalozzi etc in the development of education is worthy of note.

Pestalozzi for instance believed that the school environment should be as similar to the home environment as possible because emotional security is

necessary for learning. He further advocated that students should be taught in the same way that they experience new things in life by moving from familiar things to new things.

John Dewey (1859-1952), an American philosopher and educationist is noted for his contributions to the development of education. He was a co-founder of the philosophical movement known as pragmatism. He was of the opinion that education should be practice oriented and learners centered. Thus, products of any educational system should be prepared to live a self-reliant life. By this, education should be practical oriented, functional and experiment inclined. This can only be possible if varied instructional materials are put to use. Instructional materials are boosters to teaching-learning process due to their enormous advantages, thus, the ideas about their usage.

Thus, these ideologies are better attained with the introduction of blended instructional materials. This work therefore is to examine the inter-connectivity between blended instructional materials in the academic attainment of learners. And to effectively undertake the study, the following sub-headings shall be considered viz; introduction, conceptual framework, philosophical basis of blended instructional materials, blended instructional materials and learners learning efficiency, summary and conclusion.

CONCEPTUAL FRAMEWORK

Concept of Philosophy

The word "philosophy has been subjected to many explications by different authors, scholars and philosophers. Thus, Egbcke (2010) wrote that "the concept of philosophy" means many things to many people. As there are many philosophers, so there are many definitions of philosophy. An individual philosopher may even have more than one definition of this omnibus concept".

Etymologically, the concept is said to have been derived from two Greek roots, "philo" phillien" and "saphia". Translated into contemporary English language, the two concepts "philo" refers to "love" while "Sophia" refers to "wisdom". Put together, the concept "philosophia" refers to love of wisdom or lovers of wisdom. These concepts are said to have their historical origin to the activities of the sophists and Socrates. It is asserted that Socrates is the originator of the concept influenced by the activities of the sophists. He Socrates therefore chooses not to call his students wisemen. He therefore preferred to call them "lovers of wisdom" or "philosophers".

In contemporary parlance, the concept has been subjected to diversified definitions as well. In this vein, the literary meaning of philosophy became lovers of wisdom. Subsequently, the concept of philosophy took different dimensions according to individual's perception and outlook in life. In the medieval period as recorded by Onwuka, Enemuo and Abiogun (2023:23) "the scholastic philosophers defined philosophy as knowledge of things by means of natural reason through their ultimate causes (Scientia rerum naturalium per ultimas causas). This definition implicitly suggests that philosophy involves the use of human reason/senses and the application of natural things like instructional materials in the acquisition of knowledge. In this way, philosophy is seen as a way of life and also an activity. To support this claim, Obot (2015:5) wrote that "Philosophy then can be defined as an activity and a body of knowledge aimed at methodologically seeking to acquire true knowledge" This true knowledge especially among learners can be possible and easy thought the combination of blended instructional materials which this work is out to tackle.

Blended Learning

The process of philosophizing is in divergent ways. There is not one way of philosophizing. Thus, philosophizing can be through speculation, prescription and analytic. By speculation, philosophy will seek to establish theories through which authentic knowledge can be acquired like the suggestion to use blended method of teaching and learning. By this, learning is more of rationality than practical. On the other hand, by prescription, philosophy suggests the ways and means by which learners can be taught and learning made easy. It involves a process of seeking to discover and recommending principles for the acquisition of knowledge. Furthermore, the analytic nature of philosophy calls for critical examination of the rationale behind every educational/learning ideologies. Thus, blended learning is an approach in education that combines different methodologies in teaching-learning situation. This could involve online educational materials and also opportunities for physical interaction. Succinctly put, as used in this study, it refers to the combination of more than one instructional materials in the teaching-learning process by teacher/learner.

Instructional Materials

The various modes of philosophy as mentioned above, involves the totality of all domains during the teaching and learning processes. In the speculative mode, the mind is paramount, while in the prescriptive, the mind

and other sense organs are involve just as it is the case with the analytic. Thus, in the teaching-learning process, the mind, the sense organs (sensual experiences) coupled with physical materials are very imperative. But for the purpose of this work, instructional materials refers to items deliberately and consciously used to assist in the teaching learning process in order to help learners achieve a desirable change in behaviour. Instructional materials are resources materials, used in facilitating the lesson objectives. It also refers to educational resources used to improve students' knowledge, abilities and skills. This is why Okoro (2010) wrote that effective learning depends on what learners look at and listen to which influence their behaviour. Eya (2006) on his part averred that instructional materials are all forms of information carriers which can be used to make teaching-learning effective.

Philosophical Basic of Blended Instructional Materials

Bertrand Russell in his work titles the problem of philosophy asserted that any man without a tincture of philosophy passes through life imprisoned his on own self-ignorance. No man can divorce himself from philosophy. Philosophy is involved in every facets of a man's life. Philosophy is an activity and since every living being is involved in different forms of activities, he is invariably philosophizing. This is also why "Dewey assigned to philosophy a critical function and defined it as a "criticism of criticism" (Onwuka, Enemu, Abiogu 2023). Hence, philosophy is both a subject and a disciple. A subject to be taught and a disciple to specialized on. It is also an outlook about life, a personal ideology or idiosyncrasies. Personal ideology because it has to do with an individual's emotion, feeling and motive (being the basis of action or purported action). This gives guide to the attainment of the motive (Ategwu, 2017).

Not oblivious of this, the Nigerian government choosed to use the phrase "philosophy" in it education policy. Accordingly, the policy unequivocally stipulates in section 1 with the caption "philosophy and goals of education in Nigeria". Under this, headings like: The overall philosophy of Nigeria; Nigeria's philosophy of education, mentioned Sub-section 5.6 and 7 informed by the philosophy behind the Nigeria educational system spelt out aim and modus operandi of the system. Sub-section 6 talk about national consciousness, economic, political, scientific and technological progress. The last two scientific and

technological progress are easily attainable with the assistance of blended instructional materials.

Core philosophers too in their postulations lend credence to this approach. For instance, philosophers like Charles Pierce sanders. William James and John Dewey in their postulation of pragmatism believed in the functional aspect of education which embraced blended instructional materials. Apart from the fact that they believed that education should be learner-centered, they believed in learning by-doing. Thus, pragmatism is otherwise known as "functionalism" "experimentalism" and "instrumentalism",

A close look at the three phrases used in describing pragmatism, functionalism, experimentalism and instrumentalism calls for the use of diversity of instructional materials. Most importantly, scientific and technological progress as the National Policy on Education (2014) puts it is possible through the use of blended instructional materials. Adding impetus to this assertion, Onwuka, Emenuo & Abiogu (2023) discussing the advantages of pragmatism as an element of philosophy states;

- *Classroom should be devoid of mere routine but should have beneficial alternatives where blended instructional materials are used.*
- *Direct experience in the learning process is a good one, hence when blended instructional materials are used, teaching-learning experience are made concrete.*
- *Learning by doing is to a large extend good since it enables the practicalisation of what is learnt theoretically.*

Using a wide variety of resources because not textbook will cover all aspects of learning, be cognitive, affective or psychomotor is importance. In view of this instructional materials become relevant.

In a nutshell, the philosophical basis of instructional materials in this case is anchored on pragmatism as an element of philosophy. The concept "pragmatism" is coined from the Greek word "pragme" or "pragma". This concept literary translated means "work" or "action", "to make, "to accomplish" or "to practice". In summary, according to Terhemba and Ensley (2012: 123), "the theory believes in practical ideas and experimentation" Practical ideas and experimentation as used here can only be doable when blended instructional materials are

adequately employed. Pragmatist philosophers emphasize the practical application of ideas and the importance of experience in shaping knowledge and understanding. In education, pragmatism suggests that learning should be active, experimental and rooted in real world. Based on this, the big but unanswered question is whether blended instructional materials are necessary for students' academic attainment or performance.

Blended Instructional Materials and Learners' Academic Attainment

To pragmatist philosophers, an idea is due to action or practice and nothing more. To them, ideas are true because they worked in practice. Practice as it were involves the use of instruments, (Ategwu, 2022). Thus, blended instructional materials, which combine traditional face to face teaching methods with digital tools and online resources, align well with pragmatist principles. These instruments are of different or varied categories. But all said and done, are they necessary for learners' academic attainment or performance?

The aim or purpose of any meaningful educational system is to bring a positive transformation on the part of the learner. This can only be possible if they are available resources, both human and material to make teaching learning easy and concrete. In view of this, the National policy on Education (2014) averred that necessary instructional materials and facilities will be adequately provided to ease teaching and learning in Nigeria schools.

From this document, the concepts of instructional materials and facilities depict variety of them. This according to this writer tantamount to blended instructional materials or methods. Blended instructional materials therefore used in this sense implies a way of combining in-person-instruction and integration of technology in the teaching-learning process. It is an opportunity for students to integrate learning facilities in the classroom or learning situation. Blended instructional materials refers to the integration of digital media (such as videos, online assessments, interactive platforms) with traditional resources (like textbooks, lecturers and worksheets) to create a cohesive learning experience. Thus, according to Garrison and Kanuka (2004), blended learning combines the best of worlds, merging face-to-face and digital resources to promote a richer learning environment. This combination is particularly important in addressing diverse students' needs and learning

styles, fostering both independent learning and collaborative interactions.

Blended instructional materials therefore are of different or varied categories and each category has a way of assisting students to learn. These categories include;

Visual Resources and Educational Attainment

Ogbonna (2004) defines visual resources as those materials that appeal to the sense of sight such as pictorals, models, projectuals etc. These materials when properly used in the teaching-learning settings, appeals to the sense of vision. They arouse and sustain interest in what is presented to the students (Ategwu, 2021). This in essence, help in boosting the learners' academic performance or attainment. In line with this, Tilabe (2001) opined that visual materials assist in making work or topics a real life experience when learners watched the lesson taught and concretize what are supposedly abstract ideas presented to them. By so doing, students can easily comprehend what is being taught and are able to recall it when the need arises. Visual resources arouse the interest of learners and help the teachers to explain the concepts been taught with ease. Visual resources also improves comprehension, especially for complex concepts or processes. Diagrams, infographics, and videos can make information more accessible and easier to understand. This can enhance learners' understanding and application of knowledge (Ategwu, 2021).

Audio-Visual Resources and Learner Academic Performance

Aside from visual instructional materials that assist in learners' academic attainment, audio-visual materials are also necessary. The use of audio-visual instructional material is of added advantage because visual appeal to the sense of sight while audio-visual is a combination of both the auditory sense organ and the sight organ. Abeno (2004) collaborated this by stating that audio-visual aids otherwise known as transmitted media are materials that combine both sound and sight. Examples include; educational television, instructional television and close circuit television (ICTV) computers, and some calculators. Most of these instruments are displayed by both visual projection and sound production at the same time.

When properly used, these instructional materials enhances learning efficiency. Thus, Gbamaja (2022) maintained that, the proper use of audio-visual materials in education has proven to enhance effective understanding by learners thereby leading to improvement also in their academic attainment. This is

made possible because audio-visual instructional materials helps to reduce the complexity involved in most lessons as well as saved the teacher from using chalkboard. The emergence of new technologies in teaching-learning process had made the use of audio-visual instructional materials expedient.

Otu (2020) conducted a research on "the impact of audio-visual resources in the academic performance of students in secondary school in Akwa-Ibom state. Two hundred (200) students were randomly selected and divided into two groups "A" and "B", experimental and controlled group through balloting. Each group were taught separately: for 40 minutes, group "A" with audio-visual instructional materials while group "B" were taught without audio-visual materials. Performance test was administered and after analyzing the result, it was discovered that the group taught with audio-visual materials performed better than those taught without audio-visual materials. In this wise, it is not an overstatement to say that audio-visuals assist in academic performance or achievement of students. Therefore the philosophy behind the use of blended instructional materials for lesson delivery is a welcome development.

Print Instructional Media and Learners Academic Attainment

Apart from the above mentioned brands of instructional materials, another type of instructional materials that philosophers are in support of to be used during lessons are print resources. Ogbonna, et al (2010) defines print instructional materials as those that convey information through letters. They include; books, handouts, posters, wall sheets, bulletins, handbills, newspapers, magazines, note-books, textbooks etc.

Print materials are at the disposal of the learners and they can carry it about with all amount of convenience. They can also move at their pace. Print instructional materials are also learners friendly and require minimal maintenance. There are also easily accessible. Print materials are used by learners and or students at their own pace even at home, thereby making their learning more convenient. It is important in the learning process of students. The federal government of Nigeria realized this and state, "thus, the library is at the heart of the education enterprise" (NPE, 2014:39). Print instructional materials offer several advantages for student's academic attainment or learning processes especially in educational setting where access to digital resources may be limited or where the cognitive benefits of printed materials are emphasized. Thus,

printed instructional materials improved focus and retention. Printed materials lack the notifications and distractions that is common with digital devices, thereby allowing learners to concentrate. It also leads to better retention as it enhances comprehension and memory, compared to reading on screens.

Audio Instructional Material

Audio instructional materials are teaching-learning resources that appeals to the sense of hearing. Included in this category are radio, audio-tape, tape recorder, language laboratories, telephones etc. Audio instructional materials are better appreciated through the sense of hearing. The radio for instance is the cheapest and commonest audio instructional material. It has the potency of disseminating information to a large population at different locations at the same time. The federal ministry of education in recognition of this states in section 11, sub-section 101, paragraph "h" "that radio and television educational broadcasting shall form a future of educational support service system" (NPE, 2014:40)

The internet also has become a major tool for effective teaching and learning. Teachers can with ease use it as teaching materials (both notes and videos) on school platforms or website. Zoom which is a video conferencing tool has become a useful tool in the teaching-learning process philosophy. Zoom, provides both the teachers and learners the opportunity to meet online synchronously through a personal PC/laptop or cell phone with or without using video. Teachers can set up zoom meetings to conduct lessons or classes online, as well as record them for future usage by the students. All these, elicit learners attention, motivate them to be part of the learning process, sustain their attention and motivation. It elicit learner's emotion as well as they listen to the program. It as well help in vocabulary by the learners as they try to master what is been taught by the teacher. Audio instructional materials encourages socialization and discussions among the students as they sit down together to listen or watch the lesson. Audio instructional materials is on important aspect of instructional process that every teacher must strive to incorporate in the philosophy teaching-learning process as it will leads to learners effective academic performance (Moore, 2006).

Resume of the philosophical basis of blended instructional materials on student's academic attainment.

Blended instructional materials anchored on philosophical perspectives like pragmatism, naturalism,

progressivism etc, integrates both digital and traditional resources, can significantly impact on students' academic attainment by employing different learning styles, fostering engagement and providing flexibility. Their relevance is particularly evident in several key areas which include:

- **Personalization and Adaptability:** Blended instructional materials pave way for a tailored approach to education, thereby, meeting students wherever they are in terms of knowledge and learning pace. Adaptive online modules, for example can adjust to students' needs, providing additional resources for those who struggle and face challenges, to excel. This can lead to a deeper understanding and retention of what has been taught, thus positively impacting academic attainment, (Ategwu, 2021).
- **Increased Engagement:** The traditional method of teaching and learning which is characterized by the use of chalkboards, note notes, textbooks and other manual learning materials has become monotonous and does not engage the students so such in the 21st century because of technological advancement. The use of diverse instructional materials invariably allows for increase in students' engagement. This is so because the use of mix-videos, interactive simulations, and traditional textbooks keeps students engaged and can help make abstract concepts more concrete. Engaged students are generally more motivated, which positively affects their academic performance. Conclusively, Harris and Halpin (2002) found that using multimedia in instructional materials increases students' attention and interest, thereby improving their comprehension and retention.
- **Flexible learning Environment:** The use of blended instructional materials allows for flexible learning environment as the students are allowed to study on their own pace. This flexibility is especially of uttermost importance to students who may need more time to grasp what has been taught in complex subjects. Attesting to this, Carman (2005) asserted that flexibility allows students to learn at their own pace, a feature that is particularly valuable in diverse classrooms where students may have varying levels of prior knowledge and learning speeds.
- **Feedback and assessment:** The use of blended instructional materials assist in the feedback

assessment of students. This is because many platforms offer immediate feedback, which helps students to quickly understand their mistakes and correct same immediately. This in essence, improve learning outcome, as students will immediately discover their mistakes instead of waiting for the old traditional assessment by their teachers or instructors (Ategwu, 2021).

SUMMARY AND CONCLUSION

Most people have misconstrued philosophy to be merely concerned with mysterious matters, far distanced from everyday life. Some even say that it is just committing dead bodies of letters to memory. To this class of people, philosophy has no relevance in human existence. Such people failed to view philosophy from the broader perspective which includes ideologies held even by the people criticizing it. In attempt to criticize philosophy, they become involved in the act of philosophizing. Philosophy is an integral part of man's existence since he must think and reflect on events around him. And this is why we have different philosophies and philosophers such as personal philosophy, national philosophy, philosophy of religion, politics, education etc.

In pure philosophy and philosophy of education, the contributions of some individuals to the development and understanding of philosophy is considered. In this work or study, the role of some of them was considered notably Charles Pierce Sandders, William James and John Dewey. Their postulations culminating in the theory of pragmatism was examined. This led to it affiliation with blended instructional materials and its impact on learners academic performance.

The study started with introduction, went on to do conceptual explications of some key concepts. The philosophical basis of blended instructional materials was examined and linked to the element of philosophy called pragmatism. The role of blended instructional materials of different shades in the academic attainment of learners was also undertaken. From the review literatures, it is concluded that blended instructional materials are "condition precedence" for learners' academic performance. It is hereby suggested that just as the Federal Ministry of Education as documented in the National Policy on Education realized the importance of blended instructional materials, it should be provided in all schools across the federation to assist learners at all levels in their academic pursue.

REFERENCES

- Abeno, A. K. (2004). Blended Instructional Resources and Students' academic performance in science subjects in Kogi State. Unpublished M.Ed thesis, University of Nigeria, Nsukka.
- Ategwu, E. F. (2002). "Applicability of pragmatism in the implementation of the 9-3-4 system of education in Nigeria" in *KIU Journal of humanities*, Kampala international university. 7(1).91-96.
- Ategwu, E. F. (2017). Deregulation of provision of educational services and quality assurance in Nigeria universities. Unpublished Ph.D. Thesis University of Nigeria, Nsukka.
- Ategwu, E. N. (2021). Digital learning equipment and the academic performance of secondary school students in Northern Senatorial District Cross River State. Unpublished M.Sc Thesis on Open University, Calabar study centre.
- Ategwu, E. P. (2021). Blended Instructional Materials and students academic performance in Biology in Calabar Municipality, Cross River State. Unpublished work: University of Calabar.
- Carman, J. M. (2005). Blended learning design: five key ingredients. E-learning guild. Retrieved from leaningguild.com.
- Egbeke, A. (2016). Philosophy and theory of education for Africa: A handbook. Nigeria: University of Nigeria press Ltd.
- Eya, P. (2006). *Role of Instructional Materials in Improving Qualitative Education in Nigeria Journal of Education*, Ebonyi State University 4 (i), 77 – 92.
- F. M. E. (2014). National policy on Education. NERDC.
- Garrison, D. R. & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. The internet and higher education. 7(2) 95-105.
- Gbamaja, S. T. (2002). Educational technology: the appropriate model for the 6-3-3-4 education in Nigeria: *Nigeria Journal of professional studies in education*, 1(1), 110-116.
- Moore, G. R. (2006). Effects of an advanced organizer on students differing in prerequisite skills and knowledge. Ed. Thesis, Duhoma State University.
- Obot, I. M. (2015). Philosophy of Education: Introduction, Nigeria: University of Calabar, Press.
- Ogbonna, F. C. (2004). Practicum in classroom management and school organization. Kaduna: Datura print and publishers.
- Okoro, I. F. (2010). Availability, Adequacy and utilization of instructional materials/Equipment in Teaching and Learning of Home Economics in Junior Secondary schools. Unpublished B.Ed project, Alvan Ikoku Federal College of Education, Owerri.
- Onwuka, C. J. A. Enemuo, C. P. & Abiogu, G. C. (2023). Philosophy of education. Nsukka: Chuka Educational Publishers.
- Otu, J. A. (2020). The effect of learning resources on the academic performance of students in selected secondary schools in Akwa-Ibom state, unpublished work, University of Uyo.
- Terhemba, M. Ensley, D. (2012). Groundwork in philosophy of education, Nigeria: Aboki publishers.
- Tilabe, G. S. (2001). Fundamentals of Educational Technology. Unpublished work. University of Uyo