

**PEDAGOGY COMPETENCIES IN THE USE OF MULTIMEDIA AND HYPERMEDIA TECHNOLOGIES FOR INSTRUCTIONAL DELIVERY OF BUSINESS EDUCATION IN SOUTH-SOUTH UNIVERSITIES, NIGERIA**

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**ABSTRACT**

*The study investigated the extent of pedagogy competencies in the use of multimedia and hypermedia technologies for instructional delivery of Business Education programmes. The findings includes that there are significant differences in male and female lecturers' knowledge competence, ability competence, skills competence and human relations competence in the use of multimedia and hypermedia technologies for instructional delivery of Business Education programme but that both male and female lecturers indicated low pedagogy competence in the use of multimedia and hypermedia technologies for instructional delivery of Business Education programme. This study recommended that Business Education programme curriculum designers should emphasize the re-education and reorientation of female lecturers to emancipate them from their stereotype mindset and that individual lecturers should endeavour to undertake personal and self-sponsored upskilling and reskilling efforts in order to stay abreast with current innovations and skills requirements relevant in the instructional delivery of Business Education programme. This study concluded that re-education, reorientation and consolidation of multimedia and hypermedia technology use competencies is a necessity for all Business Education lecturers for effective instructional delivery.*

**Keywords: Pedagogy Competencies, Teaching Competency, Learning Competency, Multimedia and Hypermedia Technologies**

**INTRODUCTION**

Pedagogy is the amalgamation of artistic and scientific principles that govern the act of teaching. In his work, Ceasar (2010) defined it as the act of a man having supervision and authority over a youngster in a literary context. Pedagogy as the combination of artistic and scientific methods used to educate youngsters. Pedagogy is the academic discipline that focuses on the analysis and exploration of diverse methodologies used in the process of imparting knowledge and facilitating learning.

Pedagogy is considered the central aspect of teaching. It encompasses the regulations and principles that govern productive and proficient actions, ultimately resulting in learning. Pedagogy refers to the specific methods and strategies that a teacher employs to impart the curriculum's material to the pupils. The pedagogical approach and theoretical framework used. Teachers may use many pedagogical approaches while teaching, taking into consideration factors such as the children's age, the topic being taught, and the research they have reviewed or completed. Pedagogy encompasses the fundamental concepts and techniques of teaching, focusing on the processes of instruction, learning, and growth. According to Whiteside (2010), pedagogy has a role in shaping the training of teachers and the curriculum. The evolution of pedagogy is influenced by several variables including as theories, research findings, political motivations, political influences, evidence from practice, reflection from groups and people, teacher competence and experiences, and community or social expectations and standards.

### **Concept of Pedagogy and Pedagogy Competence**

Pedagogy, or the ability to effectively educate and facilitate learning, is a crucial aspect in determining the quality of education. Pedagogical competence refers to the proficiency of instructors in effectively overseeing the process of learning. It encompasses the capacity to strategize and design an educational curriculum. The teacher's capacity to engage in interactions and effectively oversee the learning process, while also being capable of conducting assessments. According to Apelgren and Giertzwedish (2010), pedagogical competence refers to the capacity and readiness to consistently use attitudes, knowledge, and abilities in order to promote learning and achieve optimal learning outcomes.

These definitions suggest that pedagogical competence refers to the adequate ability, skill, and comprehension of ideas and theories within a subject matter, possessed by a teacher in order to effectively fulfill their role in the teaching and learning process. According to Akhyak & Bakar (2013), the effective use of teacher pedagogical competency may optimize the growth of learners in terms of their intellectual, emotional, and moral development. Teacher's pedagogical competence refers to the teacher's capacity to effectively use a blend of physical resources, such as instructional materials and technology, together with intangible resources, such as knowledge, skills, and experience, in a coordinated and synergistic manner. Teachers with proficient pedagogical subject knowledge have the capacity to comprehend the challenges encountered by students when grasping the instructional information, so facilitating students' comprehension of its organization and preventing them from encountering obstacles. Enhancing a teacher's pedagogical competency aims to improve students' academic performance. Pedagogical competence refers to the abilities and skills of instructors to enhance the whole quality of learning, including the learners' attention, confidence, and contentment. The instructor demonstrates pedagogical competence by possessing a comprehensive awareness of the students' behavioural tendencies and effectively evaluating their progress via various means such as assigning homework, quizzes, tests, and examinations, either on an individual basis or as a collective activity. The instructor demonstrates pedagogical competence by accurately assessing the students' comprehension of the learning process via class activities such as quizzes and tests conducted as a group.

Pedagogical competence is shown by effectively teaching and developing instructional materials, as well as assessing student learning. Pedagogical competence encompasses the aptitude to strategize, instigate, guide, and enhance education and instruction. The capacity to facilitate a direct transition from general information to subject-specific knowledge in students' learning. The feature encompasses the capability to establish a connection between education and research in a specific area of interest. In order to acquire pedagogical competency, it is necessary to have ongoing contact between topic didactics, instructional process, and relevant individuals both inside and beyond the school environment. In order to directly contribute to the professional growth of the teacher and enhance the educational methods used by other educators.

### **Principles of Pedagogy**

The principles of pedagogy are derived from certain aspects, as outlined by professional teacher education. These elements include the following:

1. **Meaningful Learning Activities:** The adoption and use of meaningful learning activities as a source of learning is based on constructivism. This provides learners the opportunity to be active in getting suitable queries with regards their own learning objectives and providing the basis for active knowledge creation. The idea of knowledge is always constantly changing.

Learning activities are designed to facilitate the acquisition of new knowledge and understanding of the subjects or events being studied by incorporating fresh ideas, facts, and concepts into the learners' preexisting knowledge or experiential frameworks. The learning activity not only stimulates the generation of new information but also encourages its practical application in real-

life situations whenever feasible. By engaging in learning activities, learners may cultivate proactive strategies and customize their own learning experience.

**b. Learning Partnerships**

Social interactions serve a crucial role in enhancing learning, fostering the formation of shared experiences, and facilitating the collaborative generation of new knowledge. Learning partnerships arise from interactive connections between an individual and their surroundings. Learning partnerships are established via the interactions between students, the collaboration between instructors and students, and the connections with other social networks and groups that have shared learning goals. Partnerships have a crucial role in instructional activities. The collaboration between educators and learners is established upon the concepts of openness, fairness, shared accountability, and reciprocal knowledge acquisition. Every participant in a learning partnership has the task of collectively establishing mutual trust. This relational aspect is based on the belief that human beings possess the capacity to expand, evolve, and attain self-awareness. While there are several elements that influence a person, it is crucial to prioritize the development and preservation of self-awareness, identity, and knowledge in all educational contexts.

**c. Utilization of Digital Opportunities**

Digital opportunities refer to the emergence and spread of new possibilities that arise from the advancement and widespread use of digital technology. The presence of digital technology is always changing and evolving in work environments, society, and our everyday lives. These technologies provide many communication options for people by simplifying the process of discovering, generating, and using information in a novel and inventive manner.

Encouraging students to use digital tools and resources is vital in fostering their motivation to explore, acquire knowledge, and generate novel information. Accessing and using digital tools and resources is convenient, allowing for the establishment of connections regardless of time and location, facilitating the creation and sharing of ideas. Digital technologies enable the consistent and continual provision of feedback. This facilitates the acquisition of knowledge and enables the generation of novel information for all individuals.

The aforementioned deductions establish the first two principles as the foundations for learning and guidance, while the third principle promotes meaningful learning by providing many opportunities to access a wide range of current and varied information resources.

Pedagogy is the examination of various instructional techniques. This is because each teacher has their own pedagogical style to delivering teaching in their classroom. It is crucial to examine highly efficient methods of delivering knowledge and assessing proficiency, taking into account the specific needs of each learner. It is essential to prioritize pedagogical concerns that promote personalized education in order to enhance students' learning results.

**Teaching Pedagogy**

Teaching pedagogy, usually referred to as teaching methodologies, may be categorized as either teacher-centered or student-centered, and can use either a low or high technology approach. Teacher-centered learning is a pedagogical approach that places the teacher at the centre of the learning process. The instructor primarily delivers lectures and imparts knowledge via direct teaching. This emphasizes the acquisition and transmission of the teacher's expertise to the pupils. This leads to evaluations that are focused on the instructor and are designed for students to demonstrate their ability to recall the information imparted by the teacher at the conclusion of the course. Conversely, student-centered learning encourages students to actively engage in the learning process. Although the instructor continues to provide the material. The instructor assumes a coaching and mentoring role to facilitate the pupils' learning process.

Formative assessments, which focus on students' learning progress and process, are administered more often than teacher-centered evaluations in order to provide a more objective evaluation. It offers educators valuable insights into the many ways in which pupils comprehend various subjects, enabling them to tailor their teaching methods to meet the unique requirements of each student. Pedagogy seeks to enhance the quality of educational results.

The terms "low" or "high" technology methods relate to the extent to which digital tools or resources are integrated into the learning process. A low-tech approach might include using paper-based materials such as worksheets, textbooks, and handouts. The term "higher-tech" refers to the use of advanced technology, such as learning management systems (LMS), which provide interactive lessons that may evaluate learners' existing knowledge and create an immersive learning experience with the study materials. Teachers may find that using a single or a mix of pedagogical teaching approaches may effectively facilitate, stimulate, and involve individual pupils. This is considered the most optimal way, since each teaching strategy has its own advantages and disadvantages when put into practice.

### **Learning Pedagogy**

Understanding and assisting learners requires an emphasis on learning pedagogy, which emphasizes the many ways pupils comprehend knowledge. This is equally important as teaching pedagogy. Teachers recognize that every student is unique, and having a thorough grasp of how each learner learns most effectively allows them to customize teaching. Pedagogy fosters a collaborative learning environment by facilitating students' cooperation in completing activities and learning together.

One theory about student learning is the Gardner's Theory of Multiple Intelligences, developed by Howard Gardner, a developmental psychologist. Gardner's Theory posits that individuals learn via three distinct modalities: visual, aural, and tactile. Within these groupings, there are nine distinct kinds of intelligences, including

Spatial-Visual Intelligence refers to the ability to solve puzzles, navigate using maps, and effectively use instructions.

Verbal-Linguistic Intelligence refers to a cognitive capacity that revolves on the use of words, whether in written and spoken form.

Interpersonal Intelligence refers to a kind of learning intelligence that encompasses internal, intrinsic, and self-evaluating abilities. It entails aligning one's emotions, principles, convictions, and cognitive processes with oneself.

Logical-Mathematical Intelligence refers to the ability to think and reason in a conceptual and abstract manner. It is the act of seeing and recognizing logical and numerical patterns.

Musical Intelligence refers to the cognitive capacity to identify, value, and create rhythm, pitch, and timbre in auditory stimuli.

Bodily-Kinesthetic Intelligence refers to the cognitive ability to effectively regulate bodily motions and manipulate items.

Existential Intelligence refers to the cognitive ability to contemplate profound and intricate inquiries on the fundamental aspects of human existence, such as the purpose and significance of life.

Naturalist Intelligence refers to the cognitive ability to identify and classify plants, animals, and other elements found in the natural world and surrounding surroundings.

### **Teaching and Learning Pedagogical Approaches**

There are five distinct educational methods for the purpose of teaching and learning. Each learning strategy has some degree of variation from the others. Therefore, educators have the ability to choose the most appropriate techniques for their students. Typically, the combination of

these techniques yields optimal outcomes. The following are some of the educational techniques used in teaching and learning.

**Constructivist:** In this approach learners are actively involved in the learning process. They create their own meaning and knowledge from the material.

**Inquiry Based:** This approach enables students to address real world problems. Just like in project-based learning by asking questions and doing further researches.

**Collaborative:** This approach ensures multiple learners work together in small groups instructions. They all contribute and help each other to learn.

**Reflective:** In this approach, both teachers and the students reflect on the lessons, projects and assessments to provide ways of improving them in the future.

**Integrative:** In this approach in the use of multiple academic disciplines and common language students are able to engage with a cross-curricular material.

### **Teaching and Learning Pedagogy in the Classroom**

One of the most effective pedagogical techniques is when the teacher takes on the role of a mentor or coach, providing guidance and support to students in order to assist them reach their learning objectives in the classroom or throughout the learning process. This technique facilitates collaborative work among students, allowing them to use their aggregate talents and knowledge to attain desired learning objectives.

Students may assess their understanding by collaborating with their classmates after a lesson facilitated by the instructor. This approach further allows students to engage in collaborative practice with their classmates or instructor prior to independently tackling their assignment or an evaluation.

Utilizing real-life events or circumstances as examples and engaging in problem-solving activities are very successful pedagogical methods for teaching and learning in classrooms. This provides students with a novel skillset to use and a more comprehensive understanding of how to apply the acquired information in practical scenarios, including the professional realm.

### **Competencies in Instructional Delivery of Business Education Programme**

Instructional delivery abilities are essential practical knowledge that instructors must possess in order to successfully educate students and enhance their acquisition of information and skills throughout the instructional process. An effective teacher is supposed to provide clear and engaging instructions that encourage active involvement from students and may effectively show the topic being taught. These explicit methodologies provide enough opportunity for learners to actively engage and use the course materials. Furthermore, they have the ability to acquire expertise and proficiency in succeeding classes while keeping up with the speed of learning.

The instructional delivery competent teacher will ensure the following

1. Well designed and planned instruction that will propel students to move from their current level of competence to explicit level of success.
2. Clear instructional objectives during the design of the instructional content so that the teacher presents same to the learners before lesson commencement.
3. Clear scope and sequencing of the range of related skills and order in which they are to be learnt is presented to learners by the teacher.
4. The instructional content offers sufficient opportunities for acquisition by the students.
5. Provision of multiple opportunities for students practice skills without punishment for errors and reinforcements for success.
6. Allocation of quality and quantity time for teaching each topic.
7. Teach students to learn the knowledge and skills to mastery approved and endorsed by the teacher and colleagues.

8. Current knowledge and skills should be built on existing previous knowledge and skill to increase fluency and maintain pace of mastering materials. Ensure to simplify complex concepts and ideas to simple and real life situations for ease of comprehension.

The teacher's characteristics guarantee the efficacy of the instructional delivery process and facilitate the achievement of the desired lesson goals. Furthermore, it alleviates or diminishes the apprehension associated with a lesson while participating in the teaching process, particularly when encountering unfamiliar material or a new learning setting. The proficient instructor enhances learners' confidence in their capacity to learn and engage in independent or collaborative practice.

### **Connectivism Theory of Learning: George Siemens (2004)**

Siemens stated that learning extends beyond being a solely internal and individual activity. Connectivism is a theoretical framework that facilitates the comprehension of learning in the context of the digital age. The theory posited that learning occurs when learners establish connections between concepts found inside and throughout an individual's unique learning network, which includes databases, social media, the internet, multimedia, hypermedia, learning management systems, and even other individuals. The statement suggests that by linking the appropriate individuals and resources, the learning process may be improved for all parties participating in the learning network. Connectivism argues that technology may enhance a learner's access to knowledge and facilitate their integration into a broader learning community. The underlying principle of this theory is that learners must possess the ability to differentiate between accurate and inaccurate information due to the continual and ever-changing nature of knowledge. Promoting the collective generation of knowledge is vital. It is important to promote the formation of spontaneous learning groups that engage in the sharing and use of learning materials. Most learning can be found in non-human appliances. Connectivism highlights the significant impact of internet technology as novel opportunities for learning. In the Business Education curriculum, it is essential for lecturers to establish links between their skills and knowledge and the course material, as well as the instructional technology used. The principles of the course material, the technology employed in the teaching-learning process, and the engagement level of the students should be properly aligned. By using this approach, educators may effectively foster the cultivation of the appropriate skill sets in students, which are essential for achieving the desired educational objectives. Simultaneously, they can discourage the acquisition of improper skill sets that may hinder students' advancement and achievement. This ability will arise from the lecturers' comprehension of the potential of inanimate instructional objects, such as technologies, which, when used effectively, can enhance their confidence, improve their competence, and facilitate the instructional process. These objects also serve as supplementary resources for students' self-learning, which can further enhance students' retention of the instructional material.

### **CONCLUSION**

The study ultimately determined that both male and female lecturers should enhance their pedagogical competencies in order to effectively utilize the most efficient and effective pedagogical approaches when delivering business education programs, particularly in courses that involve the use of multimedia and hypermedia technologies for instruction.

### **RECOMMENDATIONS**

In line with the findings and conclusion from this study, this study makes the following recommendations

1. Institutions offering Business Education programme should emphasize the upskilling of Business Education lecturers' competencies in their pedagogical competence in using multimedia and hypermedia technologies to enhance their productivity.
2. Designers of Business Education programme curriculum should emphasize the re-orientation and reeducation of female lecturers to emancipate them from their feminine mindset.
3. Federal, State and Local government should engage in concerted efforts in ensuring the provision, adequacy accessibility and utilization of multimedia and hypermedia technologies for instructional delivery of Business Education programme anchored in their institutions to ensure the production of economically ready and skills relevant graduates of the programme.

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