

THE CRITICAL ROLE OF PEDAGOGY IN THE FORMULATION OF THEORIES FOR THE TEACHING OF PHYSICAL EDUCATION AND SPORTS

Babatunde Samson ADEBAYO (Ph. D)

Department of Human Kinetics Education, University of Ilorin, Ilorin, Kwara State Nigeria

Corresponding Author: +234-8034600679, eadebayo.bs@unilorin.edu.ng

Abstract

A spectrum of teaching styles was developed in the mid-1960s to create some cohesiveness around teaching behaviour. The spectrum was designed not with the intent of prescribing specific teaching practices for the teachers, but as a prompt for teachers to reflect on their teaching activities. This study analyzed the critical role of pedagogy in the formulation of theories for the teaching of Physical Education and sports. How people think about pedagogy are underpinned or informed by particular knowledge paradigms and ways of perceiving the world. The review covered conceptual orientations on pedagogy from science and didactic perspectives including learning and behaviourism theories. Briggs (2003) 3p model was adapted; the model examined the interrelationships of presage, process and product variables in the teaching-learning process. The study concluded that personal development is a prerequisite for effective teaching because different orientations and approaches exist. Thus, it could be asserted that teaching theories in physical education and sports are founded on pedagogical knowledge of teachers, therefore, whatever theory the teacher adopts, the root is traceable to pedagogy.

Keywords: Pedagogy. Theories, Physical education, Sports.

Introduction

The word “Pedagogy” refers to a body of theories and rules aimed at guiding teachers and educators in their daily actions while teaching. It deals with aims and objectives, individuals, and groups with various means to teach the objective. Pedagogy takes a central concern at the issue of power in the teaching and learning context. It focuses on how and in whose interest knowledge is produced and “passed on” and views the ideal aims of education as emancipatory. Watkins and Mortimore (1999) defined pedagogy as ‘any conscious activity by one person designed to enhance learning in another. According to Bernstein (2000), pedagogy‘ is a sustained process whereby somebody(s) acquires new forms or develops existing forms of conduct, knowledge, practice and criteria from somebody(s) or something deemed to be an appropriate provider and evaluator’.

Pedagogy signals how questions of audience, voice, power, and evaluation actively work to construct particular relations between teachers and students, institutions and society, and classrooms and communities. In the critical sense, pedagogy illuminates the relationship between knowledge, authority and power. Physical education and sport developed their body of knowledge from pedagogy. Physical education in a strict sense is not a discipline in itself but derives its objectives and scientific foundations from the disciplines of Philosophy, Biology, Psychology and Sociology. Therefore, physical education can be referred to as the process of education that concerns activities, which develop and maintain the human body.

Lusted (1989) claimed that “pedagogy is under-defined, often referring to no more than a teaching style, a matter of personality and temperament, the mechanics of securing classroom control to encourage learning, a cosmetic bandage on a hard body of classroom contact”. The author also considered pedagogy to be an ugly term and rarely used by teachers. Buckingham (1998) added that

pedagogy derives from an academic discourse about education that is largely sustained within the walls of the elite universities and in the pages of obscure academic journals. Stones (2000) further suggested that pedagogy is ubiquitous and resembles an amoeba (shapeless and perpetually changing). Grossberg (1997) posited that ‘‘the very concept of pedagogy has been exploded and multiplied’’ and we get some sense of this explosion when we see the range of references to pedagogy in the fields of education, cultural studies and feminist studies.

A spectrum of teaching styles was designed in the mid-1960s in an attempt to create some cohesiveness around teaching behaviour (Cassidy, Jones & Potrac, 2009). The spectrum was designed not to prescribe specific teaching practices for teachers, but as a prompt for teachers to reflect on their teaching. It was contended that the beauty of the spectrum lay in its ability to awaken teachers to their potential for reaching more students than is possible with a less comprehensive approach. Kirk, Nauhright, Hanrahan, Macdonald and Jobling (1996) later synthesized the spectrum in an attempt to make it more ‘user-friendly’. They did this by reducing the number on the continuum from 11 to five and changing the terminology from styles to methods. Kirk et al. (1996) posited that adopting the term ‘method’ meant that the continuum became a more rigorous analytical framework, especially when a method is defined as being ‘like a set of beliefs about the way certain types of learning can best be achieved’.

Further, Gilbert and Trudel’s (2001) model of reflective conversation was designed to induce teachers to think about their practice. The model is based on empirical data and premised on the notion that the reflective conversation begins with a coaching issue. Once the issue is set, the teacher proceeds to generate a strategy through one or more options. Strategy in this context is taken as a plan of action, while methods are the beliefs that inform the plan. This study aims to highlight and critically discuss the importance of pedagogy in the choice of methods of teaching physical education and sports. It shall also look at learning theories as the foundation of teachers’ knowledge of what to teach and then discuss the critical role of pedagogy in the formulation of theories for teaching physical education and sports.

Conceptual orientations on Pedagogy

Tinning (2010) affirmed that reading about pedagogy in both the fields of education and kinesiology one often sees pedagogy equated with teaching and instruction equated with didactics. According to the author, this lack of conceptual clarity is at times confusing and making definitive distinctions between these terms difficult. How people think about pedagogy are underpinned or informed by particular knowledge paradigms and ways of perceiving the world. While there are various ways to categorize these different paradigms, Tinning (2010) discussed three perspectives that influence different conceptions of pedagogy.

Material and Methods

The study adopted an empirical review design method, focusing on the significant roles of pedagogical theories in instructional practices in physical education and sports. The researcher reviewed theories of teaching as propounded by previous researchers and the influence teachers’ beliefs on instructional content delivery to conclude. The gap in the literature has revealed a lack of detailed understanding of how teachers’ knowledge affects student learning and how their teaching mediates the effects of teachers’ knowledge on student performance.

Some researchers attribute many characteristics of teachers’ instruction to teachers’ knowledge and beliefs, whereas the field needs more studies that focus on teachers who work in similar contexts but vary in their pedagogical content knowledge, to identify what and how theoretical knowledge for teaching is related to teachers’ practices and student learning. The primary intent was to generate a more elaborate and comprehensive understanding of the interplay between teachers’ beliefs, pedagogical knowledge based on existing theories and instructional practices.

Pedagogy as Science of teaching

One popular conception of pedagogy is as a science of teaching. As a science, teaching gives room for experimentation, it is the preparatory aspect in which the teacher consults literature, books, and conducts researches to be equipped for the task ahead. The teacher needs to ask the question: “what is the relevance of the topic or subject to the needs of the students and the society?” The teacher must have a proper understanding of what is to be taught. Although teachers might not think of their work as a science, educational researchers from the behavioural psychology tradition considered that pedagogical practice was underpinned by behavioural principles that were amenable to scientific study (Tinning, 2010). Mainstream educational research had, during the 1960s and 1970s, begun to establish a tradition of research that can be characterized as scientific in nature (for example Peterson & Wallberg, 1979) because it employed scientific methods, also because it sought to identify, analyze and understand what Gage (1977) called “the scientific basis of the art of teaching”

This research tradition was predicated on the perspective that teaching can be reduced to a set of variables that can be observed and measured (Dunkin & Biddle’s (1974) presage, process, product model). The art aspect of teaching is when the teacher goes into the presence of the students to teach, either in the classroom or on the field. He demonstrates and explains what he knows to the students. It is important to note here that there must be meaningful communication between the teacher and the students. This means that the language and gesticulations of the teacher must be understandable to the students for learning to take place.

Pedagogy and Didactics

According to Hamilton and McWilliam (2001), the term didactics was originally associated with the art of teaching and “embraced procedures for the efficient transmission or inculcation of received knowledge”. Later, with the rise of behavioural science, it became associated with the science of teaching. Research into physical education was still in its infancy in the 1970s and it focused initially, like in mainstream education, on didactics rather than pedagogy. Tinning (2008) explained the link between pedagogy as follows:

“Didactic is synonymous with instructional techniques or methods but is also used to refer to the teacher’s command of the subject matter knowledge, ability to interpret student responses, and other personal competencies. In complement, pedagogy is more a reference to the teacher’s interpersonal competencies and is thus used to refer to moral and ethical-as opposed to the technical aspects of the teacher’s work with the learners. It is this sense of responsibility to learners that prompted many critical education theorists to adopt the noun pedagogy.

Theories of Learning

The theoretical foundation of research on teachers’ professional knowledge was laid at the American Educational Research Association meeting in 1985 when Shulman proposed a model for conceptualizing knowledge for teaching. There the constructs of generic pedagogical knowledge, content knowledge and pedagogical content knowledge as the core components of the specialized knowledge that is required for teaching were introduced. Although researchers have added to or specified these domains of teacher knowledge over the years, these three components have consistently appeared in literature and thus seem to be internationally agreed upon as core components of teachers’ professional knowledge (Baumert & Kunter, 2006).

Knowledge of generic pedagogy (PK) is described as general, subject-independent knowledge about classroom organization and management, general knowledge of learning theory and general methods of teaching. Content knowledge (CK) includes the knowledge of a subject or discipline per se and is not unique to teaching. It goes beyond the knowledge of facts, concepts, principles and theories to also include an understanding of how concepts and principles of a subject are organized and the rules of evidence and proof that are used to justify claims in a certain subject

or discipline.

A search through literature confirmed that many of the terms and categories used to describe pedagogical theory and practice are contested and subject to multiple interpretations and uses. The question that may be asked is what theoretical perspectives underpin the meanings ascribed to pedagogy in the field of education?

Terms such as constructivism or student-centred when used across, and even within contexts can be obscure rather than clarify and conceptualize. Details of practices used are sometimes not given either, with assumptions that they are already known. Multiple meanings can be a problem when trying to work with the term. This study, therefore, sets out to critically analyze the theories of learning that underlie the pedagogical approaches to teaching and learning and to explain some of the assumptions implicit within them.

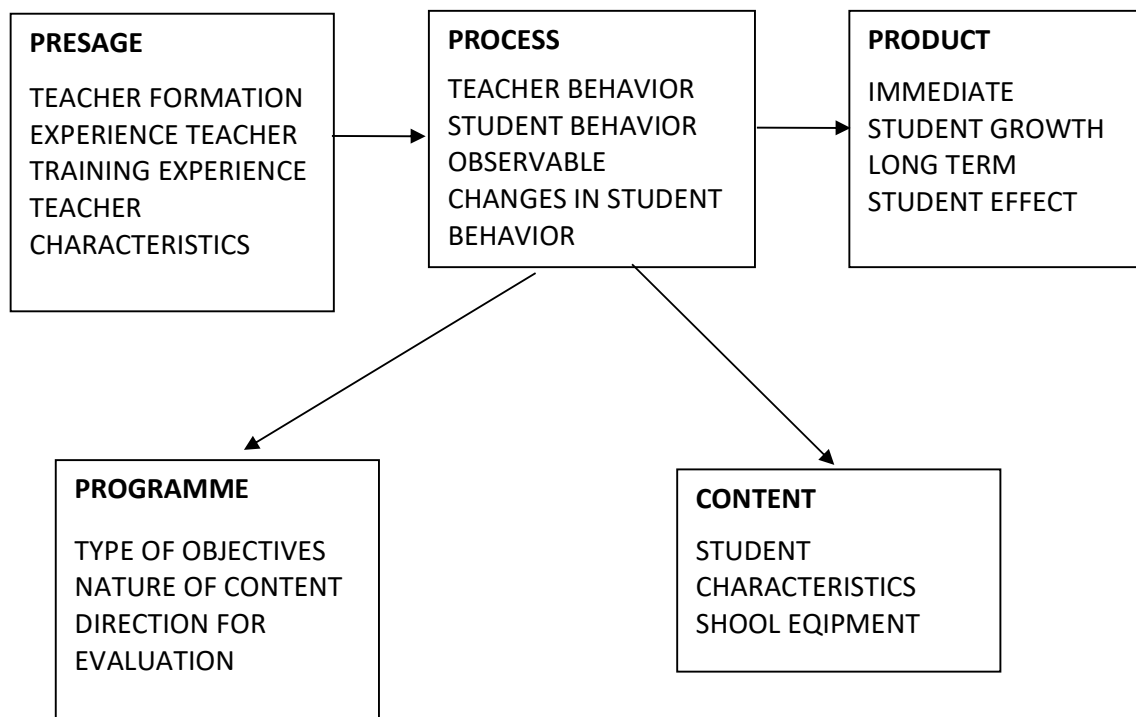
Behaviourism Theory

Behaviourism emerged as a theory of learning from the works of Thorndike, Pavlov and Skinner; this became dominant in the 1960s and 1970s. These scientifically proved laws of stimulus-response and classical and operant conditioning were used to explain the learning process through the use of rewards and sanctions—or trial and error. This was seen as biologically driven, a form of adaptation to the environment. It was propounded that learner is rewarded for small steps of learning and achievement with consistent positive reinforcement. The behaviourist model was later challenged by social learning theory, where children were seen to learn via observation (Bandura, 1977 in Shaffer, 2005) or imitation side by side with adults in an apprenticeship model.

Behaviourism supports teacher-controlled or centred approaches where the teacher is the sole authority figure. Knowledge is parcelled out from different parts of a separated curriculum that children experience as distinct subjects, and directed from the teacher to the students in set sequences, with little student choice or interaction. Assessment is often exam-oriented and high stake, without teachers' direct involvement. Bernstein (2000) noted that such performance pedagogies would be highly visible to the learner, strongly framed and paced by the teacher, with subjects strongly classified. Pedagogic approaches that can broadly be described as 'behaviouristic' in origin may result in practices such as lecturing, demonstration, memorization and imitation/copying (e.g. learning music or dance). (Barratt, Sajid et al., 2007).

Behaviourism could be held to be a universal theory, applicable within a variety of contexts, both cost- and time-efficient and require fewer resources, including demanding less-qualified and skilled teachers. Critiques of behaviourism lie in the surface-nature of the knowledge acquired and how the 'one-size-fits-all' approach excludes students with individual differences, or where the teacher remains unaware of students' current knowledge or misconceptions, or where the use of sanctions such as corporal punishment as a deterrent is acceptable.

Figure one: Framework on the critical role of Pedagogy in the formulation of theories for the teaching of Physical Education and Sports



The framework in Figure one was developed using the 3P model adapted from Briggs' (2003) presage-process-product (3p) model. The underlying assumptions of the 3P model are based on an understanding of teaching and learning as relational phenomena as advanced by Trigwell (2010), that concurrently interact with presage, process, and product factors in the learning environment as a closed system. The "Presage factors" are individual characteristics (of the student/instructor) that simultaneously affect and are affected by the process and product. Student presage factors include individual student's prior cognitive (knowledge) and non-cognitive (motivation) factors, which may or may not impact their learning processes and outcomes.

Instructor/learning environment presage factors simultaneously affect student presage factors, learning processes and outcomes. Among the themes identified as instructor presage factors are course level, instructor/institutional effects, and pedagogical training. "Process factors," for this study, include both teaching and learning processes and the interaction between student approaches to learning and instructor approaches to teaching. Student approaches to learning can be viewed on a continuum ranging from deep to surface approaches. Whether a student's approach to learning is deep or surface depends on the method of learning and the learning-focused activities that students adopt and practice.

In teacher-centred approaches, instructors transmit information in a didactic way, while using student-centred approaches, instructors adopt instructional strategies that achieve qualitative changes in student conceptions (i.e., active learning strategies). In this study, process factors are used to identify what instructional activities and strategies are adopted when delivering classroom

instruction.

In the current study, product factors are used to identify the measures (learning outcomes) that each instructor used to assess or evaluate student learning. Using the 3P model to assess instructional delivery strategies will help us focus on:

- (a) What aspects of instructor and student characteristics were considered while teaching?
- (b) How instructional strategies and activities were designed and implemented to achieve instructional goals? and;
- (c) what learning outcomes the authors of each study sought to assess or evaluate?

Based on the adopted model for this work, it could be adduced that pedagogy has contributed immensely in the preparation of teachers for the task of teaching. It is not enough to prepare theoretically ahead of the class, it is also essential for the teacher to be able to translate theory into practice, and this has been made possible through pedagogical knowledge. If teachers are not familiar with the scope and characteristics of the methods being used, it may be difficult for them to question current practice and make choices about their appropriateness of future action.

Another role of pedagogy is in the selection of teaching methods. Teaching being dynamic in nature gives the teacher a wide range of methods to pick from considering the level and ability of students. Pedagogical knowledge helps the teacher to be able to identify the interest of the students and this, in turn, enhances learning. Physical education should be able to identify the students' area of interest and build upon this teach the desired skills. To teach effectively, knowledge must be presented as problematic and must be linked to the histories and experiences of students. This has been made possible through the knowledge of pedagogy.

The physical education teacher also uses the pedagogical knowledge to choose the learning environment that is conducive to teaching and learning. Students need concentration; therefore, the learning environment must be healthy enough to make the teaching-learning process effective. The goal of physical education as in general education is to develop the "whole student", embedded in pedagogy is the scientific facts and theories employed in teaching physical education and sport. Students need a wide choice of activities that include individual and team sports; teachers have the responsibility to those students who are physically challenged. Pedagogical knowledge will help the teacher to be able to design the teaching programme that will accommodate the needs of the special students.

Pedagogical knowledge has helped in formulating a physical education curriculum design that helps in day-to-day programme implementation in schools. Through its content and process, learners are well equipped with useful goals of personal and social commitment in consonant with goals of education. Pedagogy has also helped teachers to properly articulate their thoughts and to better evaluate physical education programmes and practices. This has helped in educating many people about the scope of physical education and sport. Physical education being scientific in nature, the application of pedagogical knowledge will assist the teacher to draw on scientific inferences from biology, sociology, and psychology for effective and realistic programmes.

Teachers' actions have been guided using their knowledge of pedagogy. This has helped them to acquire an in-depth knowledge of what to teach the students, e. g. in gymnastics, the performance of the activities has been graduated (the stance, the performance of the activity, the finishing and recovery), all these are to be taught. This helps in transmitting correct knowledge to the students. Physical education teachers must have a better understanding of what they are trying to achieve. The purpose of the subject must be imprinted in the teacher's mind when teaching physical skills. Clear knowledge of what to do will have an impact on what activities are taught and how they are taught. Activities must be meaningful, worthwhile and in the interest of human welfare. All these can only be achieved through pedagogical knowledge.

Conclusion

Based on the strength of the analysis in this study, one can conclusively say that all teaching theories in Physical Education and sport are founded on pedagogical knowledge. Whatever theory the teacher adopts; the root will be traceable to pedagogy. It is the foundation upon which all other theories are built. Whatever theory that is being taught must have been researched, and research, in turn, is a product of pedagogy. With this in mind, it could be asserted that pedagogy has played a prominent role in the formulation of theories for the teaching of physical education and sport up till this present time. In essence, teaching is a transformative process and not only a matter of acquiring new knowledge and skills. Therefore, personal development is a prerequisite for effective teaching because different orientations and approaches exist. In any complex human endeavour, there are always more goals to strive for than one can achieve at one time. There are choices to make about what to concentrate on while teaching, thus discussions about goals and appropriate means of content delivery must be deliberated upon while it would more beneficial to clarify what to foster in learners rather than to debate the orientations one is favourably disposed to.

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