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## Constructivist Didactics in Teaching Economics: A Shift in Paradigm to be Exemplary Teacher

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### **Abstract**

*This paper begins with a theoretical analysis and critique of the prevailing behaviorist instructive which promotes a model of imparting and receiving knowledge in economics education. This approach is criticized for its inadequacy to facilitate higher order thinking, problem solving, creativity and collaborative learning. Contemporarily, research findings in cognitive learning shift the paradigm and provide new dimensions to information processing and constructivist view of teaching economics. It recognizes learners as constructor of knowledge and an active participant in the process of learning economic facts and principles, and economics teachers as facilitator of students' learning. This theoretical paradigm in teaching economics doesn't disvalue the instructional roles of teachers, rather it advocates that teaching economics should not only instructive but also constructive. Hence, this paper presents the philosophical and psychological roots and major pedagogical principles of constructivism, the rationale for adoption of traditional instructional perspectives with modern constructivist approach and its practical implications in teaching economics. Finally, it concludes that learning economics should not be only instructive, but also constructive.*

**Keywords:** Behaviorism, Constructivism, Didactics, Paradigm, Instruction

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### **I. Introduction**

Teaching is a scientific and goal directed activity. It is the most fundamental responsibility of teachers irrespective of their time and stage of education. It is an intricate and complicated process involving diverse pedagogical skills and sensibility as well as scientific principles and modern approaches. Teachers should not only acquire the quantum of knowledge that is required for various groups of learners, but also use diverse contemporary methods and techniques of teaching for which they have to master knowledge and skills. The quantum of approaches and pedagogical techniques is being multiplied so fast and some of the theories and concepts are getting outdated that there has been an innovation in the approaches of teaching.

Pedagogical research findings indicated that, two major learning theory metaphors have dominated education (behaviorism and constructivism) as a whole since the late 1800s, however since halfway through the nineties, the constructivist approach of learning and teaching has represented the "newcomer theory in didactics"(Jackson, 1990).

As per behaviorism, learning is the acquisition of Stimulus-Response pair and the result of instruction. In this traditional learning- teaching philosophy, the predominant understanding of didactics is characterized by interventions. The acquirement of new knowledge and skills is considered to be a process controllable from the outside that has to be imposed on the individual learners.

Meanwhile, learning through intrinsic motivation is widely ignored. Learning targets are predominantly formulated behaviouristically and this leads to the Taylorisation of learning (Jackson, 1989).

Learning is the construction of knowledge in the perspectives of constructivism, and it is the result of construction. These changes in explanatory metaphors have resulted from, and have allowed for new insights concerning the nature of learning, the methods of teaching and acquisitions of knowledge and skills. In this context, the assumption of constructivist didactics is that reality in learning process is not perceived in the way it is, but in the way the learner experiences it. Therefore, learning doesn't mean perceiving given contexts, but it does mean form own ideas ((Brooks and Brooks, 1993).

For many quarters of a century, the implicit learning theory and didactics underlying the curriculum and pedagogy of economic education, has been behaviorism. Economics education has much to learn from recent advances in knowledge of how students approach learning (Mayer, 2003). In this respect, the emerging theory of constructivism has implications for educational practices of economics education, which provides higher order thinking, problem solving and collaborative learning.

This paper highlights the theoretical assumptions of behaviorist and constructivist philosophies and looks for the essential features and didactics of constructivists, role of constructivist teacher and its implication in teaching economics to be exemplary teacher.

## 2. The Basics of Behaviorist Theory

The learning theory of behaviorism concentrates on the study of overt behavior that can be observed and measured rather than what occurs in the mind (Good & Brophy, 1990). It views the mind as "a black box" in the sense that Response–Stimulus can be observed quantitatively, totally ignoring the possibility of thought processes occurring in the mind (Doolittle, and Camp, 1999). It supports the practice of analyzing a task and breaking it down into manageable chunks, establishing objectives, and each measuring performance based on those objectives. It promotes desired behavior and knowledge transmission (Ibid).

The application of behaviorist theory to the classrooms of economics education has generally been referred to as explicit or direct instruction. The teacher is the only active agent in the classroom, transmitting knowledge to students who are expected to absorb information passively. This theory is teacher directed and teacher controlled. In this system, competition, grade and, standardized testing are upheld as the means to monitor the students' performance. This theory of learning is criticized for its inability to address the provision of high order critical and creative thinking, problem solving and collaborative learning.

## 3. Constructivism - Epistemological Roots

Constructivism is a theory of learning and teaching that has roots both philosophy and psychology. Constructivist learning is knowledge construction based on the assumption that learners actively create and restructure knowledge in highly individual ways, through experiences. It emphasizes the importance of knowledge and skills an individual brings to the experience of learning. It also recognizes the construction of new understanding as a combination of prior learning, new information, and readiness to learn (Brooks and Brooks, 1993).

Fosnot (1996) describes constructivism by reference to the major principle: learning is an important way depends on what we already know; new ideas occur as we adapt and change our old ideas; learning involves inventing ideas rather than mechanically accumulating facts; meaningful learning occurs through rethinking old ideas and coming to new conclusions about new ideas which conflict with our old ideas.

The essential core of constructivism is that learners actively construct their own knowledge and meaning from their experiences. Philosophically, this essence relies on an epistemology that stresses subjectivism and relativism, the concept that while reality may exist separate from experiences, it can only be known through experience, resulting in a personally unique reality (Andre Gordan, 1995).

Thus, constructivism acknowledges the learner's active role in the personal creation of knowledge, the importance of experience (both individual and social) in this knowledge creation process and the realization that the knowledge created will vary in its degree of validity as an accurate representation of reality. These fundamental didactics of constructivism provide the foundation for basic principle of teaching, learning, and knowledge process in any field of study.

#### 4. Constructivist pedagogy

Constructivist pedagogy is the pedagogy of liberation. It is also called the pedagogy of construction (Andre Giordan, 1995). It starts from the needs of the learners and offers appropriate learning environment for their free involvement in learning, their creativity, and their knowledge of how to be. In the constructivist didactics, collaborative and interactive methods are used to encourage students to challenge and consider different perspectives. The cultural and economic environment helps to give meaning to situations, his knowledge progresses when fertile subjective interactions between his mental activities and his environment are put in place (Ibid).

The general theoretical propositions indicated that eight factors are essential in constructivist pedagogy. These theoretical principles are derived not solely from constructivism, but assembled from other learning theorists in different times (Steff&Galle, 1995).

***Learning should take place in authentic and real world environments-*** Experience plays paramount role in building accurate representations of reality, consensual meanings in social activities, or personally coherent models of reality. It is well known for its catalysis nature in knowledge construction. However, knowledge construction is enhanced when the socially and object-oriented experience is authentic.

***The contents and learning experiences should be relevant to the learner-*** Constructivist didactics advocates the adaptive function of knowledge in real life challenges. This relevance boosts learner's motivation in learning and encourages seeking for more adaptive knowledge. Consequently, experience with relevant knowledge and skills will provide the individual with the mental processes, social information, personal experiences necessary for enhanced functioning with in one's real life.

***Learning should involve social negotiation and mediation-*** Constructivist didactics emphasized the role of social interaction as basis for knowledge construction. It provides grounds for the development of socially relevant knowledge and skills. If learner acquires experience in social mediations, this experience may contradict or validate his prior knowledge and skills. If contradictions appear, then the learner must accommodate this contradiction and uncertainty in order to accurate social model of reality.

***Content and skills should be understood within the framework of the learner's prior knowledge-*** Every kinds of learning commence within an individual's previous knowledge. Understanding a student's behavior requires an understanding of the student's mental structure. It is only by understanding student's prior knowledge and experience, will the teacher be able to create effective experience, resulting in optimal learning.

***Students should be assessed formatively, serving to inform future learning experience-*** Constructivists advocate that the acquisition of knowledge and understanding is a continuous process that is highly influenced by student's prior knowledge. However, knowledge and understanding are not directly visible, but rather must be inferred from action. Thus, to take into account an individual's current level of understanding in this ongoing teaching and learning process, a teacher must continually

assess the individual's knowledge. This formative assessment is necessary to accurately create the next series of experiences and activities for students.

***Students should be encouraged to become self-regulatory, self-mediated and self-aware-*** The basic assumption in constructivist pedagogy is that learners are not passive recipients of knowledge, rather active in their construction of knowledge and meaning. This activity involves mental manipulation and self organization of experience; and requires that students regulate their own cognitive functions, mediate new meanings from existing knowledge, and form an awareness of current knowledge structures.

***Teachers serve primarily as guides and facilitator of learning-*** As per constructivist pedagogy; there is no factual knowledge to transmit. The typical role of a teacher is motivating learners to construct their own knowledge, providing examples and illustrations, discuss, facilitate, support and challenge, but not to transmit knowledge. The teacher is also responsible to guide students to create awareness about their experiences and socially agreed-upon meanings. Neuhauser(1992) put it best that teachers do not teach, but students learn. Students should ask their teachers: "*Let me discover, don't tell me things, give advice in my terms, when my work is poor, tell me how to improve it*".

***Teachers should provide for and encourage multiple perspectives and representation of content-*** Learner's exposure in experiencing multiple perspectives of a particular event provides the student with the raw materials necessary to develop multiple representations. These multiple representations provide students with the ability to develop more complex schemes relevant to the experience. In general, multiple perspectives provide the students with a greater opportunity to develop a more viable model of their experiences and social interactions. This principles are versatile and the backdrop of the pedagogy of constructivist classrooms, role of constructivist teacher and applicable in the strategies of constructivist teaching.

## 5. The Constructivist Classroom in Teaching Economics

Constructivists' pedagogy mainly emphasized the need to establish democratic classrooms and learning environments, which could operate in accordance with the aforementioned basic principles of constructivism. It gives due concern for shared responsibilities and decision making within the learner and the teacher. The classroom is no longer a place where the teacher pours knowledge in economics principles and facts into passive students, who wait like empty vessels to be filled (Senapaty & Pradhan, 2005).

In this respect, (Brooks & Brooks, 1993) clarifies the basic features of constructivist classroom, which have practical implications to teach economics as follows:

- ***Students' autonomy and initiatives are accepted and encouraged-*** In constructivist class rooms, teachers should have to respect and encourage students' ideas, which yields independent thinking and helps learners to attain their own intellectual identity, take responsibility for their own learning and become problem solvers. In this stage, the assumption is that if there is no freedom for free discussion, and to make choices, students are less likely to adopt deep approaches to learning economic facts and theories.
- ***Higher level thinking is encouraged-*** In constructivist class room, economics teachers should challenge students to reach beyond memorization and simple clarification of facts, principles and theories of economics. He should also motivate learners to synthesis, analyze, predicting and justifying their ideas and conceptions in their own understandings.
- ***Students are engaged in experiences that challenge hypothesis and encourage discussion-*** The students should be encouraged to design, predict their own hypothesis about economic phenomenon. The economics teacher should have to give ample opportunities, models and

illustrations to test their hypothesis through collaborative and cooperative discussions and mediations in their classroom.

- ***Students are engaged in dialogue with the teacher and each other-*** In constructivist class room, the activities are interactive; the class environment supports the active involvement of students in collaborative activities. These activities and interactions help students change or reinforce their ideas. If they have the chance to explain their views and opinions of economic realities, they can hear others reflections, they can also construct their own personal knowledge.
- ***The class uses raw data, primary sources, and manipulative, physical and interactive materials-*** Constructivist approach of teaching economics initiate learners to participate in concrete world situations, which help them to analyze and synthesis abstraction with concrete.

## 6. Constructivist Strategies in Teaching Economics

Many instructors conceive of teaching as the well organized syllabus, explained in clear and well organized lectures with assignments and examinations to test for mastery. The unwelcome but inescapable fact is that sometimes, this kind of teaching doesn't result in student learning outcomes. It certainly doesn't stimulate the best students in economics classes (Becker, E. W., and Watts, M. 1998).

Research findings indicated the "chalk-and-talk" approach is the instructional strategies predominantly used in the teaching of economics which is based on lecturing that ignore students' view (Walstad and Watts, 1985). The role of the teacher is the transmission of knowledge, learners found to be passive recipients of information; the class is dominated and controlled by the teacher. It is the common explanation for the low interest of students on economics courses (Becker and Watts, 2001a; George, 2008). Constructivist pedagogy denounces such traditional behaviorists' approaches of teaching economics and recommends its own perspectives through exploring some useful strategies from traditional approaches.

It has been realized that constructivist pedagogy has paramount implications for teaching economics education. First, teaching economics cannot be viewed as simple transmission of knowledge about economics facts, principles and theories from the teacher to the learner through mere lecturing. Second, learning is based on previous knowledge; hence some association should have to create between prior knowledge of economics with the present new knowledge and understandings. Third, economics teacher should have to engage students in learning experiences through brainstorming their prior knowledge and make them to synthesis with the new information.

Some of the strategies that help economics teachers to move towards constructivist approaches are: seeking and using student questions and ideas to guide lessons and instructions; engage students in questioning, activity construct and explain a model and providing adequate time for reflection and analyzing the ideas given by students. In general, constructivist pedagogy determines the principles, stages of teaching, strategies and the crucial role expected from the constructivist teacher, which have paramount implications to become a model teacher in economics.

According to Fosnot (1996), some of the stages of strategies that help teacher to move towards constructivist didactics in teaching different subjects are the following. These stages have practical implication in teaching economics.

- ***Introduction-*** In this phase of teaching, prior knowledge and experience can be activated in many ways. Recall previous knowledge about economics; introducing new theories and principles, asking some questions, which make students to be active participant and eagerly involve in discussions and classroom discourses.

- **Exploration-** Students engage in collaborative and cooperative learning, experimentation, employ learners centered strategies, practice enquiry approach, discuss with teachers and classmates about economics facts and issues.
- **Experiential Mode-** Students interact and challenge each other and discover new ideas, construct their own understandings. Hence, meaningful learning occurs with authentic learning tasks. The teacher mainly acts in the provision of materials and arranging appropriate learning environment and facilitating learning and guiding learners.
- **Abstract Conceptualization and Understanding-** As per constructivist pedagogical tenets, learning economic facts and theories, is a matter of associating and attaching a new meaning to past cognitive experiences, constructing new explanations, experiences and making decisions.
- **Reflection-** Constructivist teacher encourage students to reflect on their current ideas and findings in the light of earlier hypothesis. This reveals that learners in economics education are encouraged to think about their own learning.
- **Application and Evaluation-** Evaluation is ongoing process of instructional process. This makes the constructivist approach of teaching a cyclic process. This process enable constructivist economics teacher to assess whether the learner has achieved understanding of concepts, theories and principles of economics or not. In general such stages of strategies can be adopted by a committed economics teacher to be both constructive and instructive for effective economics teaching.

## 7. The Role of Constructivist Economics Teacher

As research in cognitive science indicated, constructivism as emerging theory of learning is based on the idea that learning occurs when a learner actively constructs a knowledge representation in working memory. In this view of learning, learner is a sense maker, whereas the teacher is a cognitive guide. It plays the role to encourage students to use active learning technique, e.g. experiments, and problem solving, to create more knowledge and then to reflect what they have understood.

Contrary to criticisms by some traditional educators, constructivism does not dismiss the active role of the teacher or the value of expert knowledge. Constructivism modifies that role, so that teachers instruct students to construct knowledge rather than to produce a series of facts. The constructivist economics teacher provides tools like, problem solving and inquiry-based learning activities with which students formulate and test their ideas, draws conclusions and inferences, and pool their knowledge in a collaborative learning environment.

Thus, teaching economics should not only instructive but also constructive, instruction and construction can be connected successfully, however, which category of economic education and which contents should be filtered. One has to point out which challenges teachers have to meet facing the fields of instructive and constructive teaching approaches. In general, the role of constructivist economic teacher is different from the traditional role of a teacher as information provider. In constructivist classrooms, economics teachers functions as a stimulator of curiosity and resource person. A teacher also acts as senior co-investigator, a guide, as co-learner and as facilitator of knowledge construction.

## 8. Conclusion

The central idea dealt with this paper is that currently behaviorist teaching approach is the predominant mode of instruction in the teaching of economics, which makes the subject least popular and not easily understandable discipline indifferent levels of education. Recent research findings in cognitive learning and teaching have given new dimensions of constructivist view of teaching and learning economics.



Constructivist didactics highly recognizes learner as a constructor of knowledge and an active participant in the process of learning economics. Contrary to other modern theorists of teaching and learning, constructivists extremely demand teachers, the active role of the teacher and the worth of expert knowledge. It modifies the role that the economics teachers help students to construct knowledge rather than just mechanically receiving knowledge from the teacher. Thus, learning economics should not be only instructive, but also constructive.

Instruction and construction cannot be put in to effect using a simple “all – or- nothing principle. Learning always demands motivation, interest and activity on the part of the teachers, thus, every learning process is constructive, the major objective of teaching is to enable and activate constructive learning. Learning also requires orientation, instruction and guidance. The teacher should have to play the role of both instructive and facilitator and guide for constructive learning. Hence, it requires a paradigm shift and the commitment to adopt the instructive perspectives with constructivism to be exemplary teacher in economics.

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