

ASSESSMENT OF THE CHARACTER OF THE TEACHER IN A CONSTRUCTIVIST BUSINESS EDUCATION CLASSROOM

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Abstract

This paper investigates the character of the teacher in a constructivist business education classroom. Constructivism is a theory which states that learning takes place in contexts and that learners form or construct much of what they learn and understand as a function of their experiences in situations. However, the problem of how the teacher can effectively function in constructivist learning environment has been a major concern in education generally. In a constructivist business education classroom, the focus shifts from the teacher to the students. The teacher becomes the facilitator or coach. The paper therefore investigates the special characteristics of the teacher in a constructivist business education environment. It explores the differences between a traditional business education teacher and a constructivist business education teacher. It recommends amongst others that teachers of vocational business subjects should be willing to adopt a variety of styles so they can effectively achieve the desired learning goals.

Formally, the traditional role of the teacher in a traditional business education classroom was that of a dispenser of information (Ugwuanyi and Eze, 2010). They further stated that in such classroom, the teacher was looked upon as a repository of knowledge and information or data bank. Only the teacher is active while the students remain almost completely passive. However, the twenty-first century classrooms challenge traditional, teacher-centered curriculum to meet the increasingly diverse needs of students and make the required increases in achievement gains (Brown, 2003). According to Brown, teachers in a teacher-centered environment focus on making relationships with students that are anchored in intellectual explorations of selected materials. They focus more on content than on student processing. Along that same line of thought, Jones and Brader-Araje (2002) opined that the behaviorist (traditional teacher-centered approach) movement led to a long series of strategies for schools such as management by objective, outcome-based education and teacher performance evaluation systems and placed the responsibility for learning directly on the shoulders of teachers. They commented that after years of implementation, behaviorism fell short of producing positive effects within the complex context of the classroom and left teachers feeling shortchanged and cheated by a system that placed the guilt for students' failure to learn on their heads.

The underlying concept of the teacher-centered approach is based on traditional pedagogy wherein knowledge is passed from teacher to children (Kara, 1995). According to Kara, there is primarily one-way movement of knowledge and learning contents which is from the teacher to the learners. Teachers in a teacher-centered environment focus on making relationships with students that are anchored in intellectual explorations of selected materials (Brown, 2003). They focus more on content than on student processing. Since this is the information age and the society is rapidly becoming knowledge-based, teachers are faced with the dilemma of too much to cover in too little time (Cey, 2001). On the other hand, Kerka (2008) opined that using a constructivist approach in business education may facilitate learning by encouraging active inquiry, guiding learners to question their tacit assumptions and coaching in the construction process. This is in contrast to the behaviouralist (teacher-centred) approach to learning that has dominated education generally in which the teacher dominates the learning activities and tasks and imposes his choice of selected knowledge on the learners (Cey, 2001). With the constructivist approach, the teacher becomes the facilitator or coach. He/she does not possess all the knowledge. Cobb (1999) commented that constructivist learning theory predicts that knowledge encoded from data by learners themselves will be more flexible, transferable, and useful than knowledge encoded for them by experts and transmitted to them by an instructor or other delivery agents.

Techniques employed in constructivist classrooms include: scaffolding, fading, cognitive apprenticeship, and collaborative learning (Seitz-
<http://methodenpool.uni-koeln.de/apprenticeship/Introduction.htm>). According to Educational

Broadcasting Corporation (2004), the constructivist teacher provides tools such as problem-solving and inquiry-based learning activities so that students can formulate and test their ideas, draw conclusions and inferences, and convey their knowledge in a collaborative learning environment.

This article therefore, explores the role of the teacher in a constructivist business education classroom. It further examines the concept of constructivism and the differences in the roles of the teacher in a constructivist (learner-centred) and traditional (teacher-centred) business education classrooms and the special characteristics of the constructivist vocational business teacher.

The Concept of Constructivism

Constructivism is a theory which states that learning takes place in contexts and that learners form or construct much of what they learn and understand as a function of their experiences in situation (Nanjappa and Grant 2003). Constructivism in education emerged after the behaviorist movement as a welcome and refreshing view of learning that centers on the active learner within the teaching-learning process (Jones & Brader-Araje, 2002). In the opinion of Can (2007), as a philosophy of learning, constructivism can be traced at least to the eighteenth century and the work of the Neapolitan philosopher Giambattista Vico, who held that humans can only clearly understand what they have themselves constructed. According to Can, many others worked with these ideas, but the first major contemporaries to develop a clear idea of constructivism as applied to classrooms and childhood development were Jean Piaget and John Dewey. Constructivism also has its root in the works of Bruner, Vgotsky and Papert. An important part of constructivist learning is critical analysis and in this day and age of "information overload," fostering critical thinking skills is paramount (Brown, 1998). Students are bombarded with information of all sorts due to the availability of resources on the Internet and the role of education in the age of information will be the development of disciplined readers, skilled in the art of abductive logic. Constructivism has roots in philosophy, psychology, sociology, and education (Hoover, 1996). Hoover further noted that two important notions orbit around the simple idea of constructed knowledge. The first is that learners construct new understandings using what they already know. There is no tabula rasa on which new knowledge is etched rather, learners come to learning situations with knowledge gained from previous experience and that prior knowledge influences what new or modified knowledge they will construct from new learning experiences. The second notion is that learning is active rather than passive. Learners confront their understanding in light of what they encounter in the new learning situation. If what learners encounter is inconsistent with their current understanding, their understanding can change to accommodate new experience. Learners remain active throughout this process, they apply current understandings, note relevant elements in new learning experiences, judge the consistency of prior and emerging knowledge, and based on that judgment, they can modify knowledge. In similar development, Miami Museum of Science (2001) noted that it is up to the teacher to facilitate the constructivist learning process. The structure of the learning environment should promote opportunities and events that encourage and support the building of understanding.

Constructivist teaching is based on recent research about the human brain and what is known about how learning occurs (Caine and Caine, 1991) in Teixeira (2005). They further enumerated brain-compatible teaching to be based on 12 principles namely: -

- The brain is a parallel processor. It simultaneously processes many different types of information including thoughts, emotions, and cultural knowledge. Effective teaching employs a variety of learning strategies.
- Learning engages the entire physiology. Teachers cannot address just the intellect.
- The search for meaning is innate. Effective teaching recognizes that meaning is personal and unique and that students' understandings are based on their own unique experiences.
- The search for meaning occurs through patterning. Effective teaching connects isolated ideas and information with global concepts and themes.
- Emotions are critical to patterning. Learning is influenced by emotions, feelings, and attitudes.

- The brain processes parts and wholes simultaneously. People have difficulty learning when either parts or wholes are overlooked.
- Learning involves both focused attention and peripheral perception. Learning is influenced by the environment, culture, and climate.
- Learning always involves conscious and unconscious processes. Students need time to process how as well as what they have learned.
- We have at least two different types of memory: a spatial memory system, and a set of systems for rote learning. Teaching that heavily emphasizes rote learning does not promote spatial, experienced learning and can inhibit understanding.
- We understand and remember best when facts and skills are embedded in natural, spatial memory. Experiential learning is most effective.
- Learning is enhanced by challenge and inhibited by threat. The classroom climate should be challenging but not threatening to students.
- Each brain is unique. Teaching must be multifaceted to allow students to express preferences,

Dimensions of Constructivist Approach to Learning

Cognitive Constructivism: Cognitive constructivism is the concept that knowledge is actively constructed by the learner, not passively received by the environment. Cognitive constructivism is identified with Jean Piaget (1896-1980). According to Doolittle and Camp (1999), cognitive constructivism emphasizes that knowledge acquisition is an adaptive process and results from active cognizing by the individual learner. Cognitive constructivism is based on two different senses of construction. First, 'on the idea that people learn by actively constructing new knowledge, not by having information poured into their heads. Moreover, constructivism asserts that people learn with particular effectiveness when they are engaged in "constructing" meaning personally (e.g. computer programs, animations) (Clark, 2010).

Social Constructivism: This was the theory of Vygotsky in the late 1970's. His principal premise is that human beings are products not only of biology, but also of their human cultures (Tinzmann, Jones, Fennimore, Bakker, Fine and Pierce, 1990). 'Consequently, while Piaget hypothesized that language developed to express knowledge acquired through interaction with the physical world, for Vygotsky, thought was essentially internalized speech, and speech emerges in social interaction (http://www.cramlap.org/FileStore/Fileupload_29115.en.doc). Vygotsky's point of view was that acquisition and participation were synergistic strategies in learning situations. The most significant bases of a social Constructivist theory as lay down by Vygotsky (1896-1934), is his theory of the Zone of Proximal Development (ZPD) (Atherton, 2011). "Proximal" simply means "next". He observed that when children were tested on tasks on their own, they rarely did as well as when they were working in collaboration with an adult.

Radical Constructivism: Ernst von Glasersfeld (1989) is a prominent proponent of radical constructivism. Radical Constructivism holds that the 'fitting' of knowledge to our experiences, or its cognitive viability, is the key to evaluating competing knowledge claims and the mechanism by which we learn. Knowledge is therefore not adapted to the natural world, but the very world is adapted to our cognitive needs. Radical constructivists proposed that human knowledge about the world corresponds to and is constrained by reality as we experience and make sense of it. According to Glasersfeld (1989) in Holtorf (N.D.), there are two main claims of radical constructivism, they include:

- (a) knowledge is not passively received but actively built up by the cognizing subject;
- (b) the function of cognition is adaptive and serves the organization of the experiential world, not the discovery of ontological reality.

Cultural Constructivism: Cultural constructivism brings in a wider context to learning to include customs, religion, language, physiology and tools available (Computers, books, etc.). Learning tools are used to redistribute the cognitive load between the learner and the learning activities, and can affect the mind beyond actual use by changing one's skills, perspectives, and responses.

Distinctive Characteristics of the Teacher in a Constructivist Business Education Classroom

Constructivism as an approach to learning does not dismiss the active role of the

teacher or the value of expert knowledge (Seigel, 2004). According to Seigel, rather, it modifies that role, so that teachers help students to construct knowledge rather than to reproduce a series of facts. Brooks and Brooks (1993) suggested twelve strategies for teachers to exercise in order to move towards a more constructivist approach. They are:-

- use cognitive terminology such as "classify," "analyze," "predict," and "create,"
- encourage and accept student autonomy and initiative.
- use raw data and primary sources along with manipulative, interactive, and physical materials.
- allow student responses to drive lessons, shift instructional strategies, and alter content.
- search out students' understanding and prior experiences about a concept before teaching it to them.
- encourage students to engage in dialogue both with the teacher and with one another.
- encourage student inquiry by asking thoughtful, open-ended questions and encouraging students to ask questions of each other.
- seek elaboration of students' initial responses.
- engage students in experiences that might engender contradictions to their initial hypotheses and then encourage discussion.
- allow waiting time after posing questions.
- provide time for students to construct relationships and create metaphors.
- nurture students' natural curiosity through frequent use of the learning cycle model.

Differences in the Roles of the Teacher in a Constructivist (Learner-Centred) and Traditional (Teacher-Centred) Business Education Classrooms

Traditional Business Classroom	Constructivist Classroom
Teacher allows students primarily work alone.	Students primarily work in groups.
Teacher presents curriculum part to whole, with emphasis on basic skills.	Curriculum is presented whole to part with emphasis on the big concept.
Strict adherence to a fixed curriculum is highly valued.	Pursuit of student questions is highly valued.
Curricular activities rely heavily on textbooks and workbooks of data and manipulative materials.	Curricular activities rely heavily on primary sources.
Students are viewed as "blank slates" onto which information is etched by the teacher.	Students are viewed as thinkers with emerging theories about the world.(cognitive apprentices)
Teachers generally behave in a didactic manner, disseminating information to students.	Teachers generally behave in an interactive manner mediating the environment for students.
Teachers seek the correct answers to validate student lessons.	Teachers seek the student's point of view in order to understand student learning for use in subsequent conceptions.

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Distinctive Characteristics of the Teacher in a Constructivist Business Education

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Assessment of student learning is viewed as interwoven with separate from teaching and occurs almost observation of	Assessment of student learning is teaching and occurs through teacher

entirely through testing.

students at work and through exhibitions and portfolios.

(Brooks & Brooks, 1993)

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Steps for Constructivist Approach in Business Education Classroom

Yager (1991) in Hanley (1994) offered the following steps for implementing constructivist lesson which can be applied in business education classrooms.

1.	Start the lesson	Observe surroundings for points to question. Ask questions. Consider possible responses to questions. Note unexpected phenomena. Identify situations where student perceptions vary
2.	Continuing the lesson	Engage in focused play. Brainstorm possible alternatives. Look for information. Experiment with materials. Observe specific phenomena. Design a model. Collect and organize data. Employ problem-solving strategies. Select appropriate resources. Students discuss solutions with others. Students design and conduct experiments. Students evaluate and debate choices. Students identify risks and consequences. Define parameters of an investigation.
3.	Proposing explanations and solutions	Communicate information and ideas. Construct and explain a model. Construct a new explanation. Review and critique solutions. Utilize peer evaluation. Assemble appropriate closure. Integrate a solution with existing knowledge and experiences
4.	Taking action	Make decisions Apply knowledge and skills. Transfer knowledge and skills. Share information and ideas. Ask new questions. Develop products and promote ideas. Use models and ideas to illicit discussions and acceptance by others.

Conclusion

This paper investigated the character of the teacher in a constructivist business education classroom. Constructivism is a theory which states that learning takes place in contexts and that learners form or construct much of what they learn and understand as a function of their experiences in situation (Nanjappa and Grant 2003). In constructivism business education environment, the classroom is no longer a place where the teacher pours knowledge into passive students, who wait like empty vessels to be filled (Seigel, 2004). Rather, according the teacher functions more as a facilitator who coaches, mediates, prompts, and helps students develop and assess their understanding, and thereby their learning. However, the problem of how the business education teacher can function effectively in a constructivist learning environment has been a major puzzle. The paper therefore, corroborates Brooks and Brooks (1993) that becoming a constructivist business teacher "requires a paradigm shift" from teacher-centred (traditional) approach to

students-centred approach to learning and requires teacher's willing abandonment of familiar perspectives and practices for the adoption of new ones for the effective achievement of desired learning goals.

Recommendations

- Teachers of vocational business subjects should be willing to adopt a variety of styles so that they can effectively achieve the desired goals of learning.
- Learning should be learner-centred rather than being teacher-centred.
- Teachers should understand students' individual differences and allow students to learn at their own pace.

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