

AUTHENTIC PEDAGOGY: IMPLICATIONS FOR EDUCATION

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ABSTRACT

Most students enter the world of work hardly able to transfer learning to real life situations. This failure to transfer learning has been largely attributed to the traditional pedagogy that encourages passive learning and regurgitation of content at the expense of profound mastery of content. Some Educationists propagate a paradigm shift from the traditional approach which separates knowing from doing to authentic pedagogy which encourages real life learning. In authentic learning the role of the teacher is to facilitate the learning process and enable learners to take full responsibility of their own learning. The learner's voice must be heard. Students adopt the role of professionals, simulating real life situations to enhance transferability of knowledge. The approach enables learners to think critically, develop problem solving skills and connect learning in the classroom with the real world. Authentic pedagogy places emphasis inter alia on learning tasks that relate to real life situations, use of materials or tools that experts use in their profession, collaborative work (team work), scaffolding of students' effort, the development of critical thinking as well as the use of multidisciplinary approach to teaching.

Keywords: authentic learning, transfer of learning, pedagogy, traditional approach, critical thinking.

INTRODUCTION

Most students enter the world of work hardly able to transfer the learnt knowledge in real life situations. Brophy (1991) Herrington and Oliver (2000) and Levenson (2000) challenge the traditional teaching pedagogy taught in the schools as not being retrievable in real life, problem solving contexts which separate knowing and doing. They are without familiarity with the environment which they will engage with (Hui & Koplín, 2011). They fail to link the theory with actual situations. For this reason Gardner (1991) claims that education has become nothing more than a drill and response implying that there is no relevance for the materials the students are expected to learn.

Traditional methods of teaching have been blamed for students' failure to transfer the learnt knowledge into real life situations. Some psychologists condemn the behaviourist perspective that creates situations where the learner is a passive recipient of knowledge. On the contrary, Piaget (1974) and Bruner (1972) suggest that the learner should be proactive in learning. Piaget (1974) believes that the learner must be actively engaged in real learning. Learning is said to be active when the learner is able to see relationships between the new knowledge and their prior knowledge. In support, constructivists believe that a meaningful context that brings the real world into the classroom learning is crucial to promoting effective learning (Brown, Collins & Duguid 1989; Hui & Koplín, 2011).

There is absolute need to shift from traditional teaching approaches to new pedagogy that can facilitate a shift from a theoretical learning that has led to the acquisition of useless

knowledge to real learning that learners can utilise in solving existential problems (Hui & Koplin, 2011).

Some researchers claim that authentic learning could lead to meaningful learning: learning that immerses the learner into real life problems. It is argued that AL could bridge the gap between learning experience and the complexity of the real world. (Hoi and Koplin; 2011) This article explores the relevance of authentic approach to education.

Definitions of AL

Authentic learning is a pedagogical approach that allows students to explore, discuss, and meaningfully construct concepts and relationships in contexts that involve real-world problems and projects that are relevant to the learner (Donavan, Bransford, & Pellegrino, 1999). Authentic learning therefore refers to learning that is genuine, true and real. It is learning that is useful in solving real life problems (Webster's Revised Unabridged Dictionary, 1998).

Authentic learning encourages students to create a tangible, useful product to be shared with their world. Authentic learning is learning by doing. The teacher becomes a guide on the side or a project manager, a facilitator not a dictator. Authentic learning is synonymous with African Traditional education which was pragmatic, for instance there were no classrooms. The environment was the classroom meaning that students learnt from nature. They dealt with real life problems. They learnt hunting through hunting. They learnt traditional medicine through practice.

Authentic Learning

Authentic learning encourages students to create a tangible, useful product to be shared with their world. The role of the teacher in this pedagogy is that of a guide on the side or a project manager, a facilitator not a dictator. The content collected is organized appropriately into portfolios.

The Authentic learning approach engages the entire learner's senses thus allowing him/her to create a meaningful, useful, shared outcome. Learners work on real life tasks, or simulated tasks that provide the learner with opportunities to connect with the real world. Authentic learning also provides a learner with support to achieve a tangible, useful product worth sharing with their community and their world. It is prudent for teachers to implement multi-sensory activities, pursue meaningful tasks, explore a variety of skills with real world applications is optimal learning and that it needs to be practiced regularly.

The authentic learning model emphasises mainly the quality of process and innovation. The emphasis is not about understanding teacher speak and regurgitating content just for a unit test, it's about developing a set of culminating skills sets, within a realistic timeline, using self-motivated inquiry methods to create a useful product to be shared with a specific audience.

Content driven education is a linear learning model that will fail to provide our students with the steep challenges of the 21st century. Content always changes but processes are forever. "We can give them fish to eat or we can teach them to fish". On a planet that is rapidly changing we need to provide students with the tools to meet these challenges.

Authentic Learning (AL) engages students in the multidisciplinary problem solving and critical thinking (Windham, 2007). Students learn to investigate problems that require more than text book formulas or rationales to solve (Windham, 2007). Processes become the predominant force and the content collected is organized appropriately into portfolios. Authentic learning has been shown to help students' classroom learning (Hoi & Koplín, 2012). The approach enables learners to link the learning in class to the real world thus enhancing problem solving. Additionally AL engages the students to participate fully in organised learning activities. Students are intrinsically motivated through performing actual work tasks and produce that reflect what they are and what they believe in (Wagner, 2008).

Implementing Authentic Pedagogy

Authentic learning makes information for students meaningful. For authentic learning to take place teachers should establish an authentic learning environment. The most effective way to learn is through cognitive apprenticeships (Brown, Collins & Duguid, 1989). There should be an opportunity for learners to acquire skills from experts. The experts according to Vygotsky (1972) can be knowledgeable adults or peers. The expert can intervene to prevent the learner from regressing (Brunner, 1978). The support that is given to the child by the expert should gradually decrease as the novice's knowledge increases.

Learning Materials/ Tools

Authentic learning is based on diversified learning materials that provide for depth study and mastery of content. The approach enables students to use the same tools that are used by the experts in their trade (Wagner, 2008). The students' culture of learning should match the culture of the experts. It should be borne in mind that authentic learning is real life learning implying that the emphasis is on transfer of learning. It follows then that the learner should also use the same tools that the expert uses in real life situations. For instance the child learns music by also using the tools the musician uses such as the guitar. The learners use primary sources rather than secondary ones. Primary sources refer to the use of newspapers, journals, diaries while secondary ones may be books.

The role of the Teacher in Authentic Pedagogy

In traditional classrooms teachers are regarded as authority figures while the learner is viewed as a passive recipient of knowledge, to the contrary in authentic pedagogy prominence is given to the learner. In fact learning is a shared responsibility: emphasis is on learning not teaching. In Authentic Pedagogy the teacher assumes the role of the facilitator to enable the learners to take responsibilities for their own learning. They need to understand the background, experience and interests of the learners thus understanding the learner more deeply. As a facilitator of the child's learning the teacher should allow the learner's voice to be heard (Khamas, 2004). The teacher simply acts as a guide without imposing any restrictions. In fact authentic learning is negotiated between the teacher and the learner. Teachers should make effort to provide students with meaningful real-life learning experience.

Teachers should provide students with authentic experience- experiences that reflect the real world ways of knowing and doing. This enables learners to transfer knowledge from formal education to practice and to provide opportunities for meaningful learning. The authentic

teacher has to learn to wait and help students only when help is needed. The teacher must leave the child to struggle for control of ownership (Graves, 2003).

Role of the Student

The learning environment must enable students to be proactive. Herrington and Herrington (2000) and Leveson (2000) challenge the traditional abstract knowledge teaching approach taught in higher education as not retrievable in real life, problem solving context which separates knowing and doing. As a matter of fact there is lack of skill transferability between classroom and workplace. Teachers should immerse learners in meaningful activities that manipulate and interact with their environment and provide major connections to their world. Hence Piaget argues that the child is active participant of his/her learning. Learners should be active participants in the construction of knowledge. This challenges the image of a teacher as harbinger knowledge and students as passive recipients. Learners should own their learning and understanding in their own terms related to their own experiences.

Authentic pedagogy discourages over reliance on the text books. The approach encourages the use of materials that are meaningful and useful in the real world. Such materials will ensure “real learning “that is transferable.

Students should be accorded the opportunity to carry out research as it is done in the real world where scientists conduct experiments in a dynamic, creative and interactive fashion constantly observing, making sense of results, hypotheses, evaluating, redesigning tests and generating new ideas (Skinner & Cowan, 1998). They allow students to adopt the role of a professional eg teacher, researcher etc. Students have the opportunity to simulate real life situations.

Learners contribute to a supportive classroom environment, keep a focus on learning and motivate themselves to accomplish the learning task. They monitor their learning and progress. They collaborate with their teachers and peers. Above all the acquire new knowledge and construct their own meaning.

Collaboration

Learner centred education is both collaborative and constructivist in nature. In authentic learning environments, students work collaboratively in groups to solve real life problems. Group work is structured so that each student brings a distinct skill ensuring that each member feels utilized and engaged. To ensure full participation by all group members, everyone is assessed as group and individually.

Collaborative learning is effective for learning content, social interaction and boosting students’ attitudes towards learning (Schrum & Levin, 2009). Students learn to interact in positive ways through active and by valuing one another’s contribution (Lomlech, 2006).

Scaffolding Students’ efforts

Scaffolding is a metaphor for appropriate support. Scaffolding is said to occur when a more knowledgeable person helps a learner succeed in tasks that would be otherwise beyond their reach (Wood, Bruner, & Ross, 1976). The term scaffolding has traditionally been used to refer to the process by which a teacher or more knowledgeable peer assists a learner, altering the

learning task so the learner can solve problems or accomplish tasks that would otherwise be out of reach (Collins et al 1989). Another person should intervene at times appropriate for the learner in that situation so what the learner can accomplish increases with the interventions. Scaffolding is associated with Vygotsky (1978) notion of the zone of proximal development which characterises the region of tasks between what the learner could accomplish alone and what he or she could accomplish and master with assistance (Rogoff,1990).

To scaffold learners the teacher must provide them with the structure they need to solve problems and systematically remove it to enable students to become independent in their problem solving activity.

Scaffolding facilitates students to move to new levels of development. Teachers should endeavour to make students experience as authentic as possible as possible to what happens in real life and in doing so should provide support for students to be reflective and to learn. Scaffolding can be provided through technology. Software tool can support learners rather than only teachers or peers (Reiser, 2004).

Promoting Critical Thinking

Critical thinking refers to the ability and tendency to gather, evaluate and use information effectively (Bayer, 1985). It is reflective thinking. It involves creative activities such as formulating hypotheses, gathering information, evaluating arguments, recognising relationships, drawing and testing conclusions and making judgements. Students are said to think critically when they are able to assess the merits of various options before them on the basis of relevant factors. Learners should engage in activities that promote critical thinking. Authentic learning puts more emphasis on discovery of truth than the answer. Students look for information or seek out collaborations. Problems are left open-ended with no right answers.

To engage students in critical thinking teachers should provide a supportive learning environment where reflective enquiry is valued. There must be organised tasks that enable students to think through problematic situations (Alberta Education). Also teachers should encourage critical dialogue and debate.

Multidisciplinary Approach to teaching

Finding a pedagogy that enhances meaningful learning is a serious challenge in education. The world over a search for appropriate approaches of delivering content to students is an on-going process. There are a multiplicity of teaching approaches that teachers use such as the subject approach, the interdisciplinary approach and the multidisciplinary approach. Authentic pedagogy propagates the use of the multidisciplinary approach. Multidisciplinary approach denotes the teaching of concepts across more than one discipline (Adeyami, 1998; Borthwick et al 2007).

Teachers should use a multidisciplinary approach in teaching. When students engage in complex problems they learn to engage other experts for assistance and how to manage collaborative relationships. Students learn that most problems need a multidisciplinary approach or an integrative approach. Multidisciplinary instruction enables learners to connect and use information learnt from one discipline to solve problems in another. They

thoughtfully incorporate and connect key concepts and skills from many disciplines into presentation of a single unit (Adeyami, 1998; Langa & Yost, 2007).

Students have the opportunity to see and feel the world around them whether through real life or a game like environment. Multidisciplinary instruction empowers students to transfer knowledge to a variety of problem solving situations in the real world.

Learning Tasks

In authentic learning teachers are expected to give students assignments which are broken into weekly tasks. Breaking assignments makes it more manageable for both students and the teacher. Borthwick et al 2007 encourage the breakdown of an overall complex task into sub tasks for the students. The tasks enable students to relate what they are learning to the real world. Students through the tasks are able to make connections to real life issues and their experiences (Borthwick, et al 2007). The tasks must enable the students to link theory with practice. They should not just grasp abstract, incomprehensible material.

To work on the weekly tasks efficiently, students must make use of many resources from a multiple sources (Borthwick, et al. 2007).

Nature of Assessment

Authentic assessment is defined as assessment that is embedded directly into authentic realistic learning experiences instead of being administered as independent quiz or test in an isolated context (Herrington & Kevin, 2007). Authentic learning occurs if it is based on a challenging performance task and measured by an authentic performance assessment. In authentic learning students' performance is assessed over an extended period of time. The standards and criteria of assessment should be known in advance to students.

CONCLUSION

Education should be useable. Schools should teach utility education. There should be a paradigm shift from the tradition pedagogy which regarded the learner as a passive recipient to more progressive approaches such as the authentic pedagogy that encourage critical thinking and problem solving. In authentic education the learner's voice is heard. The learner takes ownership and is responsible his own education. This approach allows him to apply the real tools that experts use in their professional trade. There is knowledge transferability. The classroom education is in accord with the life realities outside the school. The teachers must facilitate learning by allowing students to take responsibility of their learning. The teacher should encourage collaboration to solve given real life problems. Students should use real life tools in solving problems. They must be encouraged to think critically and their efforts should be scaffolded to sustain their interests. To encourage full participation by all learners group as well as individual assessments are done. Indeed its all in the doing.

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