



REVIEWING AND CLARIFYING SOME THEORETICAL AND PEDAGOGICAL IMPLICATIONS FOR A LEARNER ENGAGED INSTRUCTION

AGBA Yoboué Kouadio Michel

Ecole Normale Supérieure d'Abidjan, Côte d'Ivoire.

English Section

agbamichelyoboue@gmail.com



ABSTRACT

The issue of student engagement is all the more critical as educational research indicates that an increasing number of students disengage from learning, and that many teachers are having hard times involving them in classes. This paper suggests a pedagogical framework that educators might use to foster engagement in learning. It first offers an overview of the concept of learner engagement based on the literature. Specifically, it clarifies the concept as an active learning attitude involving self-structuring and inter-structuring. Then, it focuses on problem-based learning, cooperative learning, and project-based learning as learner engagement fostering tools. Finally it suggests an operational framework for the implementation of a learner engaged pedagogy.

Keywords: learning, teaching, engagement, problem, cooperation, project.

INTRODUCTION

According to Shulman, "learning begins with student engagement, which in turn leads to knowledge and understanding" (2002: 38), and for Christensen (1991), to teach is to engage students in learning. The significance of the notion of engagement in a teaching/ learning context is also supported by a body of research that indicates that engagement is essential in promoting achievement (Johnson, 2008; Shernoff & Schmidt, 2008), and that the likelihood of academic success is maximized through participation in educational processes that promote engagement (Christenson & al. 2001; Fredericks and al. 2003). Also, evidence suggests that the use of strategies for engaging students in learning correlates with a decrease in students' misbehaviors in the classroom (Raphael, Pressley & Mohan, 2008). Coincident with this, teacher input was found to be an important variable to enhance students' engagement and academic achievement (Greenwald et al., 1996; Hedges & al., 1994; Marks, 2000) and a strong correlation was established between the instructional mode and student engagement. Likewise, Wehlage & al. (1996 in Park, 2005) found that authentic pedagogy had positive effects on student performance, and Marzano & al. posited that "keeping students engaged [should be] one of the most important considerations for the classroom teacher" (2001: 98).

However, "engaging ... pupils [is] one of the biggest challenges facing educators, as between 25% (Willms, 2003) and over 66% (Cothran & Ennis, 2000) of students are considered to be disengaged" (in Harris, 2008: 57) and, although a number of methods said to be active and beneficial to learners have been established to encourage student engagement, they are not emphasized or even present in the vast majority of school settings (Marks 2000; McDermott, Mordell, & Stolzhus 2001). So, this article mainly sets out to answer the following questions:

1. What are the foundations for learner engaged pedagogy?
2. How can students' engagement to learn be practically earned? In other words, which teaching devices can bring about learner engagement?



We believe with Jablon and Wilkinson (2006: 2) that if "some factors related to learners' achievement are not in teachers' control,(...) creating a climate of engagement in the classroom is", and this can be achieved through activities that make learning an individual as well as a collective and active meaning construction process.

Thus, in answering the two aforementioned questions, we'll first try to clarify the concept of engagement. Then, we will go on to review some engagement fostering pedagogies, and finally we will suggest a framework for a learner engaged pedagogy.

1. Engagement in learning: clarifying the concept

Student engagement as a psychological, a behavioral, and a cognitive term, characterizes learners who "try hard to learn what school offers, and take pride in earning grades and understanding the material"(Newmann, 1992: 2–3.). Thus, it refers to learners' "willingness, need, desire and compulsion to participate in, and be successful in, the learning process...." (Bomia, L. & al., 1997: 294). This implies that the learner is: (1) attracted to his work, (2) persists in the work despite challenges and obstacles, and (3) takes visible delight in accomplishing the work (Schlechy, 1994, 2001).

Engagement in learning can also be equated with active learning, i.e. "the extent to which students are involved in experiences that involve actively constructing new knowledge and understanding" (Radloff & Coates, 2009:17), and with "instructional activities involving students in doing things and thinking about what they are doing" (Google, 2013). Accordingly, learner engagement is in line with cognitive and constructivist theories that have always focused on putting students into situations that allow them to construct knowledge by themselves as they actively think, 'dig' apply, transform into knowledge and skills, what they learn in the classroom working either individually or with other students. Bateson (1977) also rightly associates the idea of active learning with that of engagement when considering level 2 learning as the stage where the learner makes things happen invents, constructs viable and original responses to unique and complex situations.

Another essential aspect in defining the concept of engagement is 'interaction' which by definition "points to mutual listening, reciprocity, and dialogue (...) in a willingness to change" (Barnett, 2003; 23). At this level, learning takes place with others on a collaborative and shared knowledge basis. In line with Bruner (1966)'s social constructivism, knowledge develops as the individual is in interaction with other individuals. This would mean that learner engagement is also about empowering learners to think for themselves through self structuring and/ or through inter-structuring.

1.1. Self-structuring

Learning by self-structuring is a "process" whereby the learner changes his mental structures to accommodate new ones. It is an intra-individual construction process i.e. through an act of appropriation, the learner transforms or builds, relevant «schemata» to respond to a new situation (Piaget, 1973). In other words, the learner has existing knowledge (old equilibrium), he receives new ones or is confronted with a situation that changes his old equilibrium (imbalance). He assimilates and accommodates new knowledge (new equilibrium). The underlying principle is the adaptive nature of human intelligence, that is, its function of organization and structuring. Pedagogically this would mean that that learning is a spontaneous or a natural quest. So, learners only need the tools for building knowledge by themselves. By interacting with their environment, manipulating objects, asking questions and carrying out experiments, doing personal research, they can develop thought processes that will enable them to be autonomous in their learning (learning to learn), and thereby find solutions their own solutions to problems (Bruner, 1966). This process of self-structuring occurs in real or authentic situations, i.e. situations which represent a complex social environment, and that allow learners to give meaning to their knowledge construction process.



1.2. Inter-structuring

Learning through inter-structuring on the other hand, uses social variables (interactions) as an inherent part in the development of the learner. Interactions with peers and the environment are considered to allow the individual to acquire knowledge. The social reality, adults or other more experienced people, play a significant role in the construction of knowledge and in the development of the «tools for thinking» (Vygotsky 1978; Bruner, 1966). Basically,

“the secret of real learning lies in the nature of the social interaction between two or more people with different level of skill and knowledge. The role of the one with most knowledge, usually a parent or teacher, but often a peer, is to find ways of helping the other to learn” (Williams and Burden, 1997:40)

There is therefore a shift from Piaget’s bipolar learner- object model to a "tripolar" subject (learner)- object-alter model where the learner enters into a construction and a co-construction relationship with others, and can benefit from effective socio-cognitive dynamics. Through interactions, he develops higher cognitive abilities (understanding, analyzing etc.).

Learning as an inter-structuring process is thus in line with Bruner’s scaffolding and the Vygotsky’s Zone of Proximal Development (ZPD) where the adult plays a central role by helping the child to learn in a zone ranging between what he can do with help, and what he can do alone, without help.

Finally, student engagement is not an individual endeavor. It is also a social endeavor where self-structuring (individual learning, self-development) and inter-structuring (social interaction) are essential. But how can this be translated in pedagogical terms?

2. Engagement fostering pedagogies

According to Clarapède (1931:283), "a lesson must be an answer." Only on this condition does it show all its fecundity. An engagement fostering pedagogy will thus imply the creation of contexts for students to perform activities that are "wished, prepared and assumed."¹ Such activities will engender "the need to think to do something"² of significance. Put differently, for learners to be engaged, they "need to be given the reasons why particular ways of acting and thinking are considered desirable." (Von Glaserfeld, 1995:177). In other words, for learning "to be an enriching experience the meanings that emerge must become personal, and they must be significant and important in some part of the person’s life." (Thomas and Harri-Augstein, 1985:257). Consequently, the implementation of an engagement fostering teaching is based on the teacher's ability to structure tasks so that they:

1. encourage an active learning process
2. involve self-structuring and inter-structuring
3. Are related to a real need
4. involve the manipulation of concrete objects and are authentic
5. allow to establish conceptual links between elements of knowledge
6. foster cognitive conflict in order to develop effective learning;
7. call for learners’ existing knowledge and previous experience.

The teacher will definitely need to create a context that induces risk taking, cooperation and cognitive investment either in the resolution of various real life problems, or in the realization of a project.

2.1. Problem-based instruction as a learner engaging tool

Principally, a problem is presented to learners that will enable them not only to learn by doing, but also to learn how to learn by their own efforts (Clark, 1987). As they try to solve the problem, they are forced to

¹ in *Univers de la psychologie* 1977-1981, p.279

² *ibid.*



engage deeply into a learning and discovery process in which they actively use the knowledge at hand. As a matter of fact, the problem will trigger in them 'a process of question posing that will either result from or will lead to discussions and analysis where they listen to each other's as well as express their own views as they discuss and analyze the problem. The analysis will involve researching and collecting relevant information. As learners try to find possible solution to the problem, they consult reference documents, talk to others, present their results, listen, speak, read and write effectively. In so doing they develop their vocabulary, learn grammar and social conventions of language use.

Finally learners will have to reflect on their own processes. The underlying idea is that "as a result of reflecting upon their learning experiences, they are expected to learn how to go about their learning task better, in other words to learn how to learn"(Clark, 1987:53).

On the whole, problem-based instruction is based on at least three assumptions (Schmidt et al. 2009; Rotgans et al., 2011; Deci, 1992):

- 1- with help of their peers, students develop an initial theory about the phenomena described in the problem
- 2- the use of authentic problems or real-life problems encourage *interest in the topic at hand* and helps students gain a deeper understanding of the principles or processes underlying the problem...
- 3- feeling in charge of one's own learning results in increased cognitive engagement and encourages deeper understanding

Using problem as a teaching tool definitely helps learners increase their level of engagement as they try to perform and provide a solution to the problem relying on their individual thinking as well as that of their peers' (Duch, Groh and Allen of the University of Delaware, 2001).

2.2. Cooperative learning for engaged learning with peers

Basically, cooperative learning situations involve learners in articulating their ideas, responding to their classmates' points, and developing skills in evaluating the evidence of their own and others' positions (Davis, 1993: 63). So, in solving problems, discussing, writing or doing any other activities, students 'learn to cooperate' and 'cooperate to learn' (Dione 2006) so that learning is maximized for each group member and for all (Johnson and Johnson, 1994). As they try to achieve a common goal students coordinate their actions by sharing the different tasks and roles necessary for its realization (Hay, 1979). This results in learners: « striving for mutual benefit so that all members of the group benefit from each other's efforts(...), recognizing that all group members share a common fate(...) and that one's performance depends mutually on oneself and one's colleague (..),» (Johnson, Johnson and Smith, 1991). Consequently, cooperative learning increases students' level of interest in school and directly affects their emotional well-being (Wentzel, 1997) as it creates a feeling proud in front of a common achievement. As such, it also increases self-esteem (Jenkins, Antil, Wayne, & Vadasy, 2003; Zinsser, 2009), and their engagement in classroom activities.

2.3. Project based instruction as a learner engaging tool

As defined by Wikipedia,

"Project-based learning is an instructional method that provides students with complex tasks based on challenging questions or problems that involve the students' problem solving, decision making, investigative skills, and reflection PBL is focused on questions that drive students to encounter the central concepts and principles of a subject in a hands-on method. Students form their own investigation of a guiding question, allowing students to develop valuable research skills as students engage in design, problem solving, decision making, and investigative activities.



.... PBL emphasizes creative thinking skills by allowing students to find that there are many ways to solve a problem."³

So, a learner engaged pedagogy can be arrived at, through project work because the execution and completion of a project requires the use of diverse skills to produce various work products (research papers, multimedia presentations, art installations, or musical and theatrical performances etc.).⁴ The products are ‘generally of the kinds they may be asked to perform in academic or adult life’ (GFE, Teacher’s book, 1995: 1) and does not only requires specific content knowledge or skills, but also lends to authenticity in learning and makes learners perceive their work as being personally meaningful and worthwhile doing. As says Sylvia Chard in *The Handbook of Project Based Learning* puts it, "one of the major advantages of project work is that it makes school more like real-life. It’s an in-depth investigation of a real-world topic worthy of children’s attention and effort" (2006: 10)

From the above, in project based learning, students are engaged because they complete tasks that they are like to encounter in real live. They take greater ownership of their learning, and engagement increases. Also, working in collaboration with peers, students who connect to engaged peers and also become engaged (Headden and McKay, 2015), and because they have a “sense of control over the work” learner are engaged and motivated (Headden and McKay, 2015) they feel more responsible

Project-based learning, like problem-based learning and cooperative learning are manifestly engagement fostering teaching tools but how can they be included in a language teaching framework?

3. Implementing a learner engaged pedagogy

Problem based learning, project-based learning, and cooperative learning are three forms of active learning (Bonwell & Eison, 1991). Used singly or together, these teaching tools can offer a solution to the issue of learners’ disengagement in class work. In our framework, they are used concomitantly, and with the concepts of self-structuring and inter-structuring.

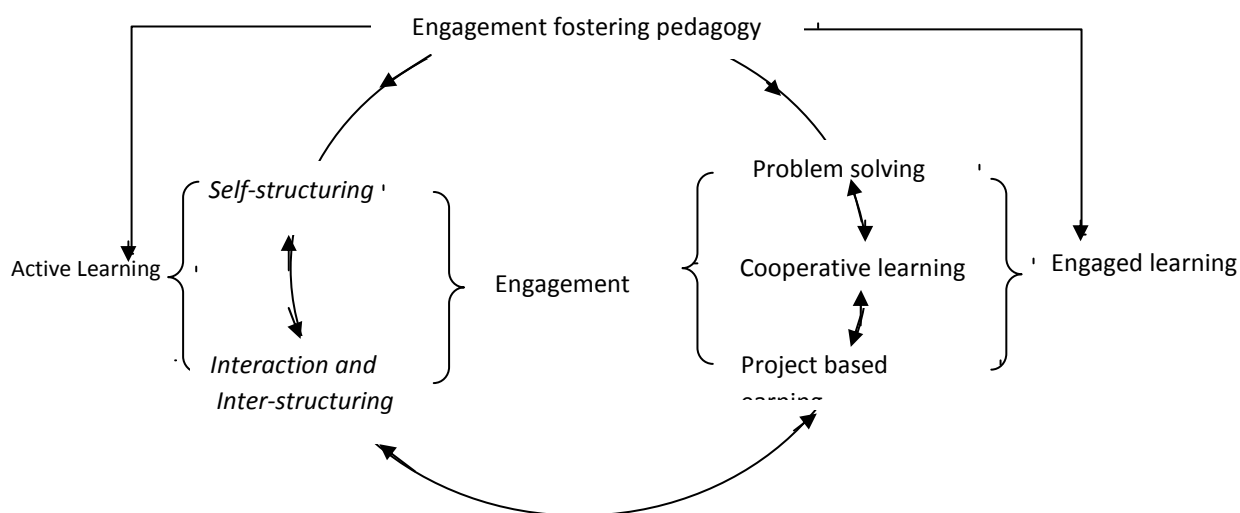


Fig.1. framework for a learner engaged pedagogy

A learner engaged pedagogy is based on the role of the teacher as a provider of an engaging learning experience that learners see of value to them. He is the one who establishes an engaging classroom climate using the appropriate teaching tools likely to make the learner willing and wishing to carry out the learning

³ https://en.wikipedia.org/wiki/Project-based_learning

⁴ <http://edglossary.org/project-based-learning/>



tasks. The diagram thus clearly indicates that his objective is to induce both active and engaged learning in his learners. It also suggests that self-structuring and inter-structuring lead to engagement in learning, and that learner engagement may result from the pedagogic use of problem based learning, cooperative learning, and project based learning. So, the teacher will encourage learner engagement by (1) creating the conditions for active learning and engagement, (2) activating self-structuring and inter-structuring, and (3) using problem solving, cooperative learning, and project-based learning as teaching devices. He is no longer the starting point of knowledge. He just

1. "... designs activities in which learners work by themselves
2. gives a few explanations for learners to continue working by themselves (autonomy)
3. encourages learners to take initiative speaking or doing personal work
4. allows learners to make their own reasoning and think by themselves to solve problems

CONCLUSION

The implementation of a learner engaged pedagogy is based on the one hand, on the learning concepts of self-structuring and inter-structuring, and the other hand on problem based instruction, cooperative learning and project based instruction. An essential feature of this instructional mode is that it gives learners the possibility to make their own choices in terms of learning strategies as they work with their peers and the teacher, and through teaching devices that allow them to talk to and listen actively to one another's thinking, justify their thinking to others and reflect on what they are doing as they learn. In short, a learner engaged pedagogy is about allowing students to decide how they are going to learn and deciding which instruction modes best suit their learning needs in order to develop 21st century skills like teamwork, problem solving, research gathering, time management, information synthesizing etc. However, successful teaching and learning will depend on the quality of a personal relationship between the teacher and the students and the ways in which students perceive that teaching is appropriate to their various ways of approaching learning.

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