A Learner Centered Approach

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Abstract: You are in a convertible on a flat road driving 40 miles an hour. You throw a ball in the air. Will the ball come down 1) in front of the car 2) in the car 3) behind the car? Unless you have knowledge of physics you may not know the answer. You must use your insight and intuition to determine what you consider to be the best answer. Most of the issues we adults have in our lives must be solved this way – by using knowledge we have but cannot necessarily verbalize.

In this paper, I suggest that post-secondary educators teach in a way that allows students to learn through personal reflection and then share their knowledge with others. I suggest that classrooms should be student centered, focusing on how the student can apply what has been learned, rather than teacher-centered, focusing on what need so be taught.

By the way, the answer is 3 – behind the car.

Keywords: Tacit Knowledge, Explicit Knowledge, Andragogy, Pedagogy

Introduction

Post-secondary students are preparing themselves for a successful career. It is our job, as educators, to prepare students to be successful. As shown by Wilkesmann and Wilkesmann (2011) “Knowledge is the central resource of many organizations” (p. 95). To understand the issue of teaching post secondary students we must first learn the difference between tacit knowledge and explicit knowledge.

Literature Review

The concept of knowledge has received much attention in literature. It is generally accepted that Michael Polanyi (1966) is the first person to describe two types of knowledge – tacit and what he called “formal” or explicit knowledge. David and Alex Bennett (2008a) describe knowledge as being divided into three parts – implicit, tacit, and explicit.

Implicit knowledge is described as knowledge that is stored in memory but the individual does not realize it is there (Allen, 2011). For instance, when you see someone you know, you recognize them. You don’t need to follow a process to determine who the person is – you just know. Hey! That’s my wife standing over there!

Bennet and Bennet (2002) have an interesting description of how implicit knowledge is obtained. They talk about driving a car. First, you start with explicit knowledge – a manual or an instructor. Next, you learn slowly through trial and error. You are now creating your own knowledge, but it is still explicit because you can explain to others what you are doing. As your experience as a driver increases, your actions become automatic (or implicit) – how to apply the brakes or how to turn a corner, for instance. Soon, what you do becomes natural and much of what you are doing is implicit knowledge.
Tacit Knowledge
Tacit knowledge is described as knowing what decision to make or how to do something. It is knowledge that the individual knows he or she has but is difficult to explain or share with others. Polanyi identified the significance of tacit knowledge by using the phrase “we know more than we can tell” (Polanyi, 1966, p. 4). This is a classic definition of tacit knowledge. He considers tacit knowledge to be knowledge that is difficult to describe to others. It is something that an individual knows from experience. Since Polanyi’s work other researchers have described tacit knowledge in many ways. Ravetz (1971) describes tacit knowledge as being so embedded in a person’s mind that he or she takes it for granted. Lyles and Schwenk (1992) describe it as knowledge that an individual has in the form of skills and habits that cannot be easily shared. An example of tacit knowledge in use is provided by Kakabadse, Kouzmin, and Kakabadse (2001). They use the example of a master craftsman. How does this person know what is needed to create something? The creativity comes from within - the personal tacit knowledge – of the craftsman.

How does a person acquire tacit knowledge? When an individual experiences an event that he or she has experienced before, the individual does not consciously think through the steps to follow but relies on the tacit knowledge that was stored in memory during the previous event (Nonaka & Takeukchi 1995, Reber, 1993). For instance, how far do you need to turn the steering when in a car to merge into another lane? The chances are you just turn the wheel without thinking about it.

Explicit Knowledge
Explicit knowledge is knowledge that an individual has, but can articulate – point out to others or express it in a way that others can use.

Polanyi (1966) described explicit knowledge as knowledge that can be codified and then transmitted in formal language. In other words, it is knowledge that can be written down or communicated in some way to others.

Bennet and Bennet (2008a) describe explicit knowledge as information that can be recalled and described in such a way that others can comprehend it. Or, put another way, explicit information can be exchanged between people.

From the point of view of our higher education students, it is important to help them to translate information learned in the classroom to knowledge that can be understood and then used. Simply memorizing lists of data does not help these students. Applying the data to their work or career should be the goal. This brings us to the concepts of andragogy and pedagogy.

Andragogy and Pedagogy
Many post-secondary educators do not know the difference between Andragogy and Pedagogy. (Deverge, 2016). In fact, many educators have not heard the term andragogy. The term 'andragogy' is derived from Greek words meaning man-leading and it is distinguished from the term pedagogy which means child-leading (Chinnasamy, 2013).

Johann Friedrich Herbart (4 May 1776 – 14 August 1841) is the founding father of the concept of pedagogy, or, the theory of education (Kenklies, 2012). Pedagogy is the discipline that deals with the theory and practice of how best to teach, and is associated with the methods used to teach children. The word pedagogue was originally used to refer to the slave who escorted Greek children to school.

Teachers in our public schools today are concerned with the welfare of the
children they teach (Kaplan, 2013). They seek to know the circumstances of each of their students and to determine what the student knows and needs to know. Teachers create favorable circumstances for learning and control the environment in which their students will learn. Currently, in most public school classrooms, the teacher works in a teacher-centered environment and can be considered to be the sage on the stage. (Morrison, 2014). Teachers seek to control the students, and deliver the information the students need. Grading is largely done by having students repeat what was learned using examinations and standardized tests and by evaluating how well students have performed on their assignments.

Malcolm Knowles believed that methods used to teach children are often not effective when teaching adults. In The Modern Practice of Adult Education, Knowles (1970) outlined assumptions about how adults learn.

- Adults recognize they have a need to learn
- Adults want to have some input into what, why, and how they learn
- The learning’s content has a meaningful relationship to the learner’s experiences
- What is to be learned must relate to the individual’s current life situation and tasks
- The learning climate minimizes anxiety and encourages freedom to experiment
- All learning styles are considered
- There is a cooperative learning climate
- Design of learning is sequential – moving from one concept to the next logically

Adults over 21 are the fastest-growing segment of today’s "undergraduates," especially in distance and online education (Kowit, 2006). Teaching methods should consider that adults learn differently than children. Androgogical principles are more effective than pedagogical principles. For instance:

1. There is a need to explain the reasons specific things are being taught
2. Instruction should be task-oriented instead of focusing on memorization -- learning activities should be in the context of common tasks to be performed by the learners
3. Instruction should consider the wide range of different backgrounds of learners
4. Since adults are self-directed, instruction should allow learners to discover things and knowledge for themselves

If pedagogical teaching is described as “sage on the stage”, then androgogical teaching can be described as “guide on the side.” Gulden Akin (2014) has identified differences between a pedagogical approach and an androgogical approach to teaching:

1. In andragogical education, learners' experiences are used as one of several learning sources. However, in a pedagogical education the experiences of children are not accepted as the source of learning.
2. In andragogical education, there is urgency about transferring the new information to the learners' practical lives, while in pedagogical education the same transferring process can be postponed or in some situations no transfer takes place.
3. In an andragogical environment, learning generally occurs by relating the new information with the learners' lives. In pedagogical environments, learning is based on memorizing or rote.
4. In andragogical education, authority in the classroom is shared between teacher and learners, but in pedagogical education, the teacher is the only person who guides the educational environment.

5. In andragogical environments, the physical environment is arranged by teacher and learners together, but in pedagogy, physical environments are arranged by the teacher in advance and students are not generally asked for their opinions.

Conclusion

“Teaching is a finite activity, which ends as soon as the teacher is no longer around. Learning, however, is infinite” (Oosterlinck & Leuven, n.d. p. 6). In post-secondary education, our students are adult learners. If we use Pedagogical methods and concentrate on just teaching facts to our university students, they will soon become frustrated because they cannot apply those facts. For instance, we can teach a student how to conduct a survey, but that does not mean the results can be analyzed correctly. I believe we should be moving beyond offering facts, figures, and data, and focus on the application of the information we are presenting. To emphasize critical thinking, we need to use real word situations and let the students ask questions to determine possible answers and solutions. And perhaps, by the end of the class, the students will implicitly and explicitly know that the ball will fall behind the car.

References


