

Introduction

This statement is to clarify and make explicit the guiding principles of my pedagogy of learning and instructional practice. This philosophy shall provide structure to the processes which govern the trajectories of my research and should be evident in my professional practice.

Key Influences

There are many scholars who have directly influenced my current view of pedagogy. Chief amongst these are the works of Lev Vygotsky and his sociocultural theory and cultural historical activity theory (with Leontiev and the more recent work of Engeström), Albert Bandura and his work on social (cognitive) learning theory, Jean Piaget's individual constructivist theory, Donald Schön and Chris Argyris's work on learning systems (action science), James Kaufman and Ronald Beghetto's study of creativity, and Fenwick and Dahlgren's application of complexity theory in socio-material learning.

Three Guiding Principles of Pedagogy

In order to be an effective teacher I believe that my students must be able to think creatively and demonstrate unique understandings. To help students achieve these goals I will help students share multiple perspectives—prior knowledge—through multiple means. In this way students will help each other to create new knowledge as well as create an environment to test their unique understandings. My beliefs are based on multiple principles which guide my pedagogy and which have been influenced by the theories I listed above. Individually these principles can be further clarified.

First, I believe that to develop unique understandings and be able to apply these understandings to multiple contexts that students should be exposed to multiple perspectives. This principle is based on my understanding of complexity theory and multiple constructivist theories. The idea that students will develop unique perspectives is based on the works of Piaget's individual constructivist learning theory that individuals create new knowledge from prior knowledge. By allowing students to experience more and different perspectives which they can then relate to their prior knowledge there is an increased chance that, in addition to developing new knowledge, the students understanding will also be unique. This process is cyclic. Students who have developed a unique understanding share these understanding to more students. In action this principle can most easily be identified in the environment the instructor creates for teaching. Is there a satisfactory understanding being demonstrated by the students? Are their chances--and ways--for students to express multiple views points? Does the environment encourage diverse groups of students to work together? These are all questions which may identify an instructor who believes in encouraging multiple perspectives to develop unique understandings.

Second, I believe that learning is dependent on communication and interaction through multiple means. As with the first principle this is largely influenced by my understanding of social constructivist (sociocultural) and social cognitive (social learning)

theories. Learning and development require that individuals have a means of interaction. In education this is predominately through communication / language, but need not be limited to just this. Technology and non-verbal communication are also means of interaction which can mediate sharing and learning. Learning and development are not restricted to what a student can experience first-hand. I believe that effective learning can and should be facilitated from a social cognitive learning perspective, which includes observations of capable peers and appropriate role models. Teaching requires the instructor to focus on using multiple means to create both observational and experiential opportunities. Within a classroom, a typical lesson that follows this principle may include an introduction to the topic with a demonstration by peer or competent social model (social cognitive). This may be then followed by the students engaging an activity to build competence (mastery experience) and then a discussion or activity which encourages students to interact with each other.

Third, I believe that students must be given the opportunity to enact their learning and adjust their understanding through reflection. This theoretical framework actually contains aspects of both individual constructivist, social cognitivist, and social learning. A key addition in this principle is giving students the opportunity to enact or validate their understanding. By enacting their learning students will be able to test their understanding explicitly. Within a sociocultural learning change precedes development, i.e. what I see from my students may not be what they understand. Likewise, in social learning students build beliefs and competence on topic but unless the learning includes a mastery experience students are unlikely to demonstrate their understanding. As a result, if students are forced to put their individual understandings into action without extensive testing the results can sometimes lead to demoralizing failure. Repeated failures may make it more and more the student will avoid putting their personal theories into practice. I believe that in designing instruction the teacher must allow and encourage students to test their understanding and allow them to reflect. Additionally, when students enact their understanding other students can observe and the teacher can facilitate discussion. An instructional example may proceed as follows: after a demonstration, students can engage in discussion and then—in groups—be given a performance opportunity to demonstrate their understanding. Before having students act you can have them write or say explicitly their belief, act, and then reflect on what they experienced and if comfortable allow other students to provide feedback. As a class the groups can be brought back in after the demonstration to discuss new understandings.

Alternate Perspectives

In order to create a more effective pedagogy, I have spent time looking at alternative perspectives of teaching and learning which I disagree with. As I am a strong believer in student centric learning and making sure students experience multiple perspectives through multiple means the learning theory that I believe is in opposition to my own is extreme behaviorism and some of the work of B.F. Skinner. While I do believe in an extension of behaviorism in the social cognitive learning theories of Albert Bandura, I do not follow behaviorism exclusively and do not believe that extreme behaviorism is a good form of learning. The behaviorist view of learning is a change in external behavior through shaping (reinforcement and repetition) such as

through classical and operant conditioning. A very specific difference between this view and my own is that I don't view learning as dependent on conditioning. Learning is facilitated through interactions in contexts and dependent on the individual's experience. In my view behaviors are observable outcomes but do not necessarily represent a permanent change in understanding. With respect to this difference I believe that an important reason why my view is better is because behaviorism does not explain how individuals can develop flexible understandings that can be different in different contexts.

Concluding Thoughts

There are many positive outcomes I see in relation to my guiding principles. For example, I believe that in the near future there will be an increased emphasis on being able to evaluate students based on creativity and innovation. Current forms of standardized tests have a hard time differentiating between students. To better evaluate their students teachers will identify unique understandings and look for products which show the understanding explicitly such as from a demonstration.

Like with the positive outcomes there are many negative outcomes that may also happen. An example from present teaching and learning but one I think will become more pronounced in the future is as follows: technology as a means for learning is used in the classroom but is not used to increase interaction and as such is not actually a tool for communication, but as a replacement for the teacher (i.e., a tool for learning through behaviorism rather than as a tool for facilitation). It is also my fear that teachers who are forced to implement technology too quickly and without understanding the multiple ways it can be used will develop a mindset that focuses on behaviorism to achieve quick and superficial results. To address this, it is more important than ever to show teachers how technology can increase collaboration and communication to facilitate learning.

Classroom environments are rapidly evolving, student diversity is continuing to increase, and technology is becoming a staple in schools and society. I firmly believe that classroom instruction is moving towards the goals I have described above and I believe that I am well placed and well principled to be an effective educator.