Examining Knowledge Beliefs to Motivate Student Learning

By Jennifer Anderson-Meger

"I just cram for the exam and then forget everything."

"If I can just get this last paper done I am in the clear."

Comments like these make us cringe, but we all know the external factors that motivate students: grades, grades, grades. I spend a great amount of time providing students with concrete, detailed feedback on papers only to hear someone say, "Oh, I didn't look at the feedback, just the grade." From a faculty perspective, the grade is the least important. The joy of student engagement and learning drives our work. We ended up in higher education for a reason—most of us see great value in the learning process.

So how can we help students understand that there is more to college and learning than getting good grades and fulfilling requirements? Is there a way to reach the student and help her understand how learning can be supported and viewed as important? Is it essential that the student become internally motivated? The research on epistemological beliefs and development lends some insight to these questions (Hofer & Pintrich, 2002). Epistemology explores the beliefs we hold about knowledge, what knowledge is, how knowledge is constructed, and what constitutes knowledge. Beliefs about the sources of knowledge will influence our decision-making processes, guide critical thinking practices, and facilitate self-regulated learning (Bakx, VanDer Sanden, Sijtsma, Croon, & Vermetten, 2006).

Ignoring the epistemological belief systems of students can lead us to ineffective teaching strategies and learning outcomes (Marra & Palmer, 2008). We end up spinning our wheels and wondering why the student is not responding to our pleas for improvement. If the student does not believe there is significance or importance to developing certain forms of knowledge then he keeps the knowledge separate; establishing a dualistic knowledge reference (Kuhn & Weinstock, 2002). If the student believes the knowledge is relevant and important then the student is more likely to internalize her learning and work towards building more knowledge, rather than just focusing on the grade (Kuhn & Weinstock, 2002). I have seen students make this shift in classes to the point where they are just as interested in the feedback and how to improve as the grade. These students begin to demonstrate a willingness to examine how they construct knowledge and what this means to their future.

There is no magic solution to the motivation question. Motivation for learning is an extremely complex entity and scholars disagree on how to measure motivation, evaluate learning, etc. (Schunk, 2012). I believe the heart of motivating students lies in the ability to reach the student at the beliefs level. By working with students to help them explicitly (rather than just implicitly) understand how they view knowledge and the implications of knowledge beliefs can make a difference. In my research classes, I provide students with a "beliefs questionnaire" at the beginning of the research methods courses. The questions require students to rate their agreement with sources of knowledge, the validity of that knowledge, the construction of knowledge, and so on. Students share the responses in small group discussion where they compare their beliefs with others. The conversations become very animated. Students seem to light up as they begin to discover how and why they believe what they believe about school and learning. Students will indicate a new awareness of how their knowledge beliefs lead to biases in how they interpret various forms of knowledge. Students indicate that they have never discussed knowledge beliefs before, and certainly never with other students. A frequent comment is "so this is why we have to learn to read research articles."
Based on a study I conducted of student epistemological beliefs, it became clear that the majority of students' knowledge and beliefs of knowledge are based on their personal life experiences and relationships with others. Given the diverse background of life experience and relationships that formed students' knowledge beliefs it is pertinent to try and connect our material to the students' beliefs. We need to utilize students' beliefs about knowledge to help motivate them to question and learn in a new way thereby enhancing epistemological development. This does not mean the classroom turns into a support group where students share personal experiences. Helping students understand how their ideas are formed, the sources they use for the ideas, and the connection to critical thinking sets a foundation for students to engage in the learning process in a new way.

Instructors also can utilize concrete strategies to facilitate epistemological development. Specific strategies include:

- allowing students to choose topics for research;
- encouraging targeted peer discussion about knowledge beliefs and their impact on learning;
- letting students form their own work groups (and then teach conflict resolution for the ensuing challenges);
- providing lecture material (yes, some lecture) on what is epistemology and how it informs learning; and
- designing a variety of exercises to have students compare sources of knowledge when dealing with a difficult scenario.

Despite the wealth of literature about self-regulated learning, motivation, cognitive/affective development, and epistemological development, there is no simple solution for motivating student learning. In the end, students are still going to focus on grades, their personal relationships, and outside work, but perhaps there will be greater understanding of the importance of examining and developing beliefs in order to enhance critical thinking, decision making, and knowledge building. Bottom line, because students are relationship driven, faculty have to model the importance of epistemological development for our disciplines.

References:


