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Self-Efficacy in College Teaching

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Over a quarter century ago, Albert Bandura introduced the concept of self-efficacy or "beliefs in one's capacity to organize and execute the courses of action required to produce given attainments" (1997, p. 3). Since that time, research in many arenas has demonstrated the power of efficacy perceptions in human learning, performance, and motivation.

Teachers' Sense of Efficacy

Teachers' sense of efficacy is a judgment about capabilities to influence student engagement and learning, even among those students who may be difficult or unmotivated. Teachers with a strong sense of efficacy tend to exhibit greater levels of planning, organization, and enthusiasm and spend more time teaching in areas where their sense of efficacy is higher, whereas teachers tend to avoid subjects and topics when efficacy is lower. They tend to be more open to new ideas, more willing to experiment with new methods to better meet the needs of their students, and more committed to teaching. They persist when things do not go smoothly and are more resilient in the face of setbacks. And they tend to be less critical of students who make errors and to work longer with a student who is struggling (Ashton & Webb, 1986; Coladarchi, 1992; Gibson & Dembo, 1984; Tschannen-Moran & Woolfolk Hoy, 2001).

Ross (1994) reviewed 88 teacher efficacy studies in pre-college settings and identified potential links between teachers' sense of efficacy and their behaviors. Ross suggested that teachers with higher

levels of efficacy are more likely to (1) learn and use new approaches and strategies for teaching, (2) use management techniques that enhance student autonomy, (3) provide special assistance to low achieving students, (4) build students' self-perceptions of their academic skills, (5) set attainable goals, and (6) persist in the face of student failure.

The Development of Efficacy

Bandura (1977, 1997) identified four sources of efficacy expectations: mastery experiences (the most powerful source), physiological and emotional states, vicarious experiences, and social persuasion. The perception that teaching has been successful (mastery) raises expectations that teaching will be proficient in the future, unless the success required such massive work that the individual feels unable to sustain this level of effort. The perception that one's teaching has been a failure lowers efficacy beliefs, contributing to the expectation that future performances will also be inept, unless the failure is viewed as providing clues about more potentially successful strategies. Interpretations of emotions and physiological arousal can add to the feeling of mastery or incompetence. For example, feelings of tension can be interpreted as anxiety and fear that failure is imminent or as excitement (i.e., being "psyched" for a good class).

Vicarious experiences are those in which someone else models a skill. The more closely the observer identifies with the model, the stronger the impact on efficacy (Bandura, 1977). When a credible model teaches well, the efficacy of the observer is enhanced. When the model performs poorly, the expectations of the observer decrease. Social or verbal persuasion may entail a "pep talk" or specific performance feedback from a supervisor, colleague, or students. Student evaluation of instructions can be a form of verbal persuasion, for better or worse. Social persuasion, though limited in its impact, may provide a "boost" to counter occasional setbacks; the potency of persuasion depends on the credibility, trustworthiness, and expertise of the persuader (Bandura, 1986).

Teacher efficacy is highly context-specific, too. A teacher, for example, who feels highly efficacious about instructing her honors literature class may feel less efficacious about teaching freshman

composition or vice versa. Therefore, in making an efficacy judgment, it is necessary to assess one's strengths and weaknesses in relation to the requirements of the task at hand.

One of the things that makes teachers' efficacy judgments so powerful is the cyclical nature of the process. Greater efficacy leads to greater effort and persistence, which leads to better performance (a new mastery experience), which in turn leads to greater efficacy. The reverse is also true. Lower efficacy leads to less effort and giving up easily, which leads to poor teaching outcomes, which then produce decreased efficacy.

Implications for College Teaching

The research on self-efficacy development suggests that efficacy judgments are most malleable in the early stages of mastering a skill and become more set with experience—at least as long as the context and task remain relatively stable. So it makes sense that early teaching experiences would be important shapers of efficacy judgments. If these early experiences are positive, then new teachers are better able to persist in the face of the inevitable disappointments and discouragements of the first attempts at college teaching. On the other hand, unsuccessful early experiences in teaching as TAs can direct graduate students away from the professoriate.

What do we know about encouraging the emerging efficacy beliefs of teaching assistants? Heppner (1994) described a three-credit-hour course for GTAs in the teaching of psychology conducted over two semesters that resulted in improved self-efficacy for teaching. In contrast to the usual finding that mastery experiences are the most important sources of efficacy, Heppner found that about 75% of the influences on efficacy described by the GTAs were forms of verbal feedback, often from their students. The practicum had taught these novice teachers how to use peer consultation to get feedback from students and this process proved a powerful source of efficacy information. In addition, discussion in the practicum helped participants see their fears and anxieties as normal and appropriate. The remaining 25% of the influences on efficacy were categorized as mastery related, such as "coming up with a good way to lecture about a difficult topic." To improve their mastery, these novice teachers wanted more knowledge about establishing personal

teaching philosophies and goals, using learning objectives to guide teaching, developing critical thinking in their students, understanding students' developmental needs, facilitating productive discussion and collaborative class projects, and handling unmotivated students as well as the nuts and bolts of planning such as constructing syllabi and assignments. Providing such pedagogical tools helps. Prieto and Meyers (1999) found that GTAs in a national survey who received formal training in teaching had higher self-efficacy scores than GTAs who received no training, regardless of the respondents' previous amount of teaching experience.

In sum, sense of efficacy is a valuable outcome of early teaching experiences and can be fostered with specific training that provides needed pedagogical knowledge, a variety of forms of feedback, and social support that normalizes the predictable fears of novice teachers.

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More information on teacher efficacy and instruments for measuring are available on two websites:

http://www.coe.ohio-state.edu/ahoy/

http://www.emory.edu/EDUCATION/mfp/effpage.html

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