

Issue:

Students' beliefs about their self-efficacy (i.e., expectations of success or expectancy judgments) are often low. Can the learning environment be set up to foster their efficacy-beliefs?

Rule:

Expectancy judgments stem from four sources of information: (1) individuals' past performance histories (Bandura, 1977, 1997; Mischel, 1973; Mischel, Cantor, & Feldman, 1996; Olson et al., 1996), (2) observation of other people's performances, (3) received verbal feedback, and (4) physiological arousal.

Studies indicate that people who have succeeded in solving professional issues in the past are likely to consider chances for future success in this area higher than those who have failed. As a result, previous successes further high expectations of success for the future, whereas past failures or setbacks weaken efficacy beliefs in the future. Watching and examining the successes or setbacks of others can become part of the observers' performance histories (i.e., vicarious learning). Praise or criticism focused on efforts made or strategies used to solve a professional problem fostered mastering the situation despite difficulty, thus strengthened self-efficacy beliefs. In contrast, by giving person-oriented feedback (i.e., praise and criticism concerning persons' traits), helpless responses were triggered that weakened self-efficacy beliefs (Diener & Dweck, 1978, 1980; Mueller & Dweck, 1998; Seligman & Maier, 1967). Affective and physiological tension (e.g. fear or sweating while solving a professional problem) weakened future expectations while positive affective and physiological responses (e.g., feeling happy) after successfully solving a school related task strengthened individuals' self-efficacy beliefs (Bandura, 1997).

Application:

Students' observation of other people's performances and received verbal feedback can be directly influenced by specifics of the learning environment. For example, one can demonstrate how to successfully tackle a school task by presenting a student's well-written paper and revealing why the paper was graded highly. Verbal (and written) feedback should emphasize the learning process instead of personal performance. For example, instead of commenting a student's paper with "You did a great job" (i.e., focus on the person and his/her performance), indicating "You applied the learning material well and presented your arguments concisely" will increase persistence to master more difficult tasks or future setbacks. Consequently, students are enabled to exchange negative self-evaluation and associated sensations (e.g., "I will never be able to comprehend this issue" accompanied by fear of failure and discouragement) with positive ones (e.g., "If I only put in a little more effort, I can improve my papers" accompanied by a sense of control). The result is an enhanced performance history.

Conclusion:

Individuals' self-efficacy beliefs - impacted by personal performance experience, received feedback, and vicarious learning - influence their thoughts and actions. Setting process-oriented goals, giving specific process-oriented feedback and role-modeling desirable behavior enhances students' expectations of success and subsequent performance.