

Self-Efficacy Beliefs and Career Development

Strategic interventions are required to keep young people who are disadvantaged because of poverty, cultural obstacles, or linguistic barriers from dropping out of school. Recent studies showing a relationship between a student's belief structure and behavior suggest that self-efficacy beliefs may be an important focus for intervention.

This *ERIC Digest* discusses ways in which self-efficacy beliefs are influenced by various internal, external, and interactive factors and reflected in career-related outcome expectations and performance. It examines ways of channeling self-efficacy beliefs toward positive outcomes that lead to the development and expansion of career goals and expectations. It presents strategies for enhancing the self-efficacy and career development of students that draw upon contextual, problem-based, and community-based learning practices and promotes self-monitoring and self-assessment.

Beliefs and Perceptions

According to Bandura (1977), self-efficacy is mediated by a person's beliefs or expectations about his/her capacity to accomplish certain tasks successfully or demonstrate certain behaviors (Hackett and Betz 1981). Bandura postulates that these expectations determine whether or not a certain behavior or performance will be attempted, the amount of effort the individual will contribute to the behavior, and how long the behavior will be sustained when obstacles are encountered (*ibid.*).

Self-efficacy expectations, when viewed in relation to careers, refer to a person's beliefs regarding "career-related behaviors, educational and occupational choice, and performance and persistence in the implementation of those choices" (Betz and Hackett 1997, p. 383). They are reflected in an individual's perception about his/her ability to perform a given task or behavior (efficacy expectation) and his/her belief about the consequences of behavior or performance (outcome expectation) (Hackett and Betz 1981).

The Social Cognitive Career Theory (SCCT) developed by Lent, Hackett, and Brown (1996) draws upon Bandura's self-efficacy theory. It offers a framework for career development, explaining the interplay between educational and vocational interests, career-related choices, and performance. SCCT highlights the relationship among social cognitive variables (e.g., self-efficacy) and their relationship with other variables in the individual's socio-contextual environment, such as gender, race/culture, family, community, and political components (*ibid.*). Chen (1997) contends that this integration of self and social context offers an opportunity for individuals to gain a sense of control over their career development and increase their career-related self-efficacy expectations.

Self-Efficacy and Learning

When individuals have low self-efficacy expectations regarding their behavior, they limit the extent to which they participate in an endeavor and are more apt to give up at the first sign of difficulty. Their efficacy beliefs serve as barriers to their career development. Low self-efficacy beliefs of women are thought to reflect the limited and disadvantaged position women have in the workplace and the limited range of career options presented to them (Hackett and Betz 1981).

Bandura (1997) identifies four ways in which self-efficacy is learned and self-efficacy expectations acquired: performance accomplish-

ments, vicarious learning, verbal persuasion, and physical/affective status.

Performance Accomplishments. The manner in which accomplishments are received has an influence on an individual's self-efficacy expectations and actions. In the classroom, for example, poor grades and other negative assessments of ability can lower self-efficacy beliefs. In the social environment, job discrimination, racism, prejudice, and sexism can do likewise. Whether such experiences reinforce or promote low levels of self-efficacy depends upon the individual's perceptions and whether or not the barriers are overcome (Swanson and Woitke 1997). Stitt-Gohdes (1997) notes, for example, that the way African American girls and women perceive barriers influences in part their ability to predict how the environment will respond to their behavior or performance in a given situation.

Vicarious Learning. Beliefs are often acquired through observation and interpretation. In observing the modeling behavior of others, the learner is able to reflect on past experiences with such behavior and make meaning of its relevance in a new situation. When the modeling reflects economic, gender, cultural, or social class limitations—e.g., lack of nontraditional occupational choices, students' career interests (and perceived options) are limited.

Verbal Persuasion. Beliefs about self are influenced by the messages conveyed by others. Encouragement supports career-related self-efficacy, criticism hampers it. Families, friends, and teachers who have their own agendas, may inadvertently (or even overtly) limit the educational and vocational progression by discouraging certain occupational interests, choices, and engagement.

Physical/Affective Status. Stress and anxiety have a negative effect on self-efficacy as well as learning. "The brain learns optimally when appropriately challenged, but downshifts under perceived threat" (Caine and Caine 1990, p. 68). It functions best in a supportive environment. Therefore, conditions that cause conflict may portend low levels of self-efficacy and result in low participation and outcome expectations.

Interventions

An examination of these four variables and their influence on self-efficacy expectations suggests that efficacy-based interventions must increase the range of students' experiences and promote the personal and contextual factors that lead to high levels of self-efficacy. Following are some strategies for helping students develop positive self-efficacy expectations and outcomes that are connected to occupational interests, linked to career-related goals, translated into action, reflected in skill development, and realized through proper coaching and mentoring.

Career Development Practices

Contextual Learning. Weinbaum and Rogers (1995) describe contextual learning as a process by which "knowledge is socially shared, thinking is shaped by engagement with tools, learning is engaged with objects and events, and learning is situation specific" (p. 5). The emphasis is on application of knowledge and skills in the context of real-life experiences, problems, and events (Brown 1998). Learning occurs as students attempt to make sense of the situations with which they are presented and develop strategies for confront-

ing barriers typically encountered in the workplace to arrive at a course of action that they can test for viability. Teamwork, negotiation, leadership, and conflict resolution are encouraged.

Problem-based Learning. Connecting learning to its application in the workplace is the goal of problem-based learning (PBL) activities. PBL engages the student in investigating a problem situation for which there is no right or wrong answer. The situation raises concepts and principles relevant to the subject matter that reflect real-life issues of the students' world. PBL requires observation, investigation, solution building, and resolution by students who "own the problem" and who must formulate their own solutions. The ill-structured problems offers students opportunities to test their skills and confront the internal and external barriers they may perceive as limiting their successful achievement of a goal or objective.

The instructor's role in problem-based learning is that of coach and facilitator. As such, the instructor may model a behavior, demonstrate a procedure, or role play a situation to help students understand a concept, but gradually reduces assistance and transfers the learning responsibility to the student. Observation responses, performance reviews, and other feedback should be given in a way that offers encouragement to the student. Deficiencies should be presented as avenues for improvement and as a natural part of the learning process. Brophy (1998) suggests the following strategies for helping students improve self-efficacy beliefs (p. 2):

- Act more as resource persons than as judges.
- Focus more on learning processes than on outcomes.
- React to errors as natural and useful parts of the learning process rather than as evidence of failure.
- Stress effort over ability and personal standards over normative standards when giving feedback.
- Attempt to stimulate achievement efforts through primarily intrinsic rather than extrinsic motivational strategies.

Community-based Learning. Community-based learning experiences are also forms of contextual learning. Examples include project-based workplace learning, apprenticeships, and school-directed worksite learning. Community-based learning experiences connect school work to career goals by involving students in solving the real-world problems of the business community. Kallick and Leibowitz (1998) present six criteria that characterize worksite learning:

1. Learning goals are established through the agreement of students, teachers, and community partners.
2. Projects focus on real-world problems that are of relevance to students and community, and require effort and persistence over time.
3. Students receive coaching and advice from teachers, employers, and community partners; they use the tools and follow practices of experts in the field.
4. Students develop an awareness of the educational requirements of an occupation and of career opportunities in the occupational area.
5. Learning involves the interdisciplinary process of inquiry, investigation, hypothesizing, articulation, collaboration, negotiation, practice, and reflection.
6. Achievement is demonstrated through multiple types of assessment.

Self-Monitoring and Self-Assessment

Contextual, problem-based, and community-based learning practices provide opportunities for students to apply knowledge and skills in the same way they are used in the real world; however, their contribution to self-efficacy is embedded in reflection. Self-assessment, peer reviews, performance checklists, journal writing, and portfolio assessments offer students opportunities to make meaning of what they have learned and enhance their career development. The goal of assessment is empowerment. Portfolios that contain students' selected works, for example, allow students to reflect on their

performances, compare current with prior work, and recognize their potential for continued growth. Feedback that is directed to a student's progress rather than to a comparison with other classmates' work offers guidance for future learning rather than discouragement by emphasizing inadequacies.

Conclusion

The discussion and strategies presented in this *Digest* can be applied to all students. However, students who must overcome the internal and external barriers to self-efficacy because of poverty, cultural obstacles, or linguistic barriers are especially in need of positive learning experiences that guide them in overcoming real or perceived barriers to career development. These learning experiences must integrate school-based learning with the real-life conditions of their existence, because these are the conditions that predispose students' career success. Additional information on new teaching and learning practices that contribute to this end are provided by Brown (1998).

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