

SELF-EFFICACY: CONCEPT AND ITS IMPORTANCE IN EDUCATION

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Abstract: This paper clarifies the concept of self-efficacy, its dimensions and usefulness in the educational context. The concept of self-efficacy stems from Bandura's social cognitive theory of learning and it is related to personal factors in learning. Self-efficacy is defined as a person's belief about being able to do or reach an aim successfully during a certain task. This leads to differences among students regarding how they feel, think and act. Those with a high level of self-efficacy choose high-level tasks, setting higher aims for themselves. They also explore their environment and search for new possibilities. According to Bandura, there are two types of people and learners: efficacious and inefficacious. The former are those who take every chance and opportunity, whereas the latter do not always take an opportunity or go over limitations. Educational institutions are places where the teaching staff needs to foster students' development of self-beliefs and self-regulatory capabilities, so that they would be able to continue educating themselves throughout their lives. According to Zimmerman, the efficacy beliefs have been studied in relation to students' persistence and academic success. Students with strong beliefs in their ability show greater persistence and achieve high grades. The implications of this theory are of great importance for mastering any skill, since an individual who does not believe in his/her success can easily become susceptible to negative self-fulfilling prophecies. Teachers also have a role in encouraging students' self-efficacy beliefs and increasing their level of motivation for learning, which positively affects the learning outcomes.

Key Words: self-efficacy, students, learning, higher education

1. INTRODUCTION

The concept of self-efficacy stems from Bandura's social cognitive theory of learning and it is related to personal factors in learning. Self-efficacy is defined as the person's belief about being able to do something or reach an aim successfully during a certain task. This leads to differences among students, manifested in the way they feel, think and act. There are different definitions of self-efficacy, but Albert Bandura is the researcher most notable for this concept. Before defining self-efficacy, Bandura (1997) reflects on the importance of events that affect human lives and their constant need to control these events. There is a comparison between the ancient times and people's primitive beliefs and the present time, characterized by an evident growth of our knowledge about the events which we can predict and control, to a certain extent. According to Bandura (1997), the issue of control is central in human lives. People's levels of motivation, affective states and actions are based on what they believe more than on what is objectively true.

Concerning the beliefs about personal efficacy, Bandura (1997) especially emphasizes that people's desire to do something is lower if they do not believe that they can produce desired effects by taking action. Applied to the context of education, it implies that students who do not believe that they can master a lesson content, or even a certain course in its entirety, are not very likely to take action, nor to achieve satisfactory results. When considering the significance of self-efficacy in the higher education context, the focus is on the fact that academic results influence one's occupational paths and career success, together with other factors, such as academic environment, academic institutions and professors.

2. SELF-EFFICACY: DEFINITIONS AND CHARACTERISTICS

Apart from the above mentioned conceptualization of self-efficacy, there are other definitions of this concept, further clarifying its features. Maddux (1995) relates self-efficacy to the role of personal cognitive factors and delineates it from other similar phenomena, such as self-concept (the sum total of beliefs about oneself) and self-esteem (the sum total of the evaluation of those beliefs and of oneself). Bandura (1997) also makes a differentiation between self-efficacy, which deals with judgment of personal capability, and self-esteem, dealing with judgments of self-worth. Perceived personal efficacy predicts aims that people set for themselves and their achievements, which self-esteem does not affect.

Maddux (1995) asserts that self-efficacy cannot be measured and defined as a personality trait. Rather, it emerges in the context of specific behaviors, in specific situations and contexts, among others, in the academic context as well. Zimmerman, Bonner & Kovach (1996) define self-efficacy as »the degree to which a person feels capable of successfully performing a certain task, such as solving a type of science problem. Therefore, self-efficacy can vary in different situations: a college student may consider that he/she has a quite high ability to solve a science problem and not such a high ability to write an essay in English.

Lyszczynska and co-authors (2005) describe self-efficacy as an individual's belief in his/her capability to practice control over challenging demands and their own functioning. It determines the cognitive appraisal of stressful situations and it can increase and decrease motivation. Lyszczynska and co-authors (2005) emphasize effects that self-efficacy has on the way people think, feel and act. People with a high level of self-efficacy choose high-level tasks, setting high aims for themselves. In contrast to them, people with a low level of self-efficacy do not have positive beliefs about their future development, which can hinder successful learning and mastering of the specific areas that the held self-efficacy beliefs refer to.

Depending on the beliefs people hold about their capabilities to exert control in different contexts, Bandura (1997) distinguishes between two types of people: efficacious and inefficacious. The former are those who take every chance and opportunity, whereas the latter do not always take an opportunity or go over limitations. In the learning environment, efficacious students are expected to take chances at mastering new content, while inefficacious students may be uncomfortable about learning new lessons and tackling tasks that they consider difficult.

Self-efficacy and beliefs in one's ability to perform specific activities in a certain context vary on several dimensions: level, generality and strength. Level leads to the perceived personal efficacy, which can be limited to simple task demands, or can refer to the most complex performance demands, depending on the person in question. People judge their efficacy in a wide range of different activities. Generality can be defined as the extent to which self-efficacy can be generalized. It varies on a number of different dimensions, including the degree of similarity of activities, expressed modalities of capabilities (behavioral, cognitive and affective), qualitative features of situations and characteristics of the person. When it comes to strength, weak efficacy beliefs are easily negated by disconfirming experiences. However, individuals with tenacious belief in their capabilities persevere in their efforts, despite innumerable difficulties and obstacles (Bandura, 1997).

According to Maddux (1995), self-efficacy beliefs influence behavior through the following four mediating processes: goal-setting and persistence, affect, cognition and selection of environment and activities. A student's self-efficacy beliefs affect the goals which they set and pursue, their level of persistence in reaching them and the environments they choose. Therefore, a particular emphasis is placed on the study of academic self-efficacy. Self-conceptions highly influence academic performance and the focus is on how efficacy beliefs affect students' motivation to learn, develop affective response to these efforts and achieve academic goals. According to Bandura (1995), students judge their capabilities to fulfill given task demands, regardless of who they are or how they feel about themselves in general. Efficacy beliefs are multidimensional and self-efficacy is measured before students decide to perform the relevant activities. The value of self-efficacy is in predicting students' motivation and in influencing their level of effort, endurance and choice of activities. Students with strong beliefs in their abilities exhibit greater persistence and achieve very high grades (Bandura, 1995).

Concerning the significance of self-efficacy in the academic context, it can be stated that the engagement in learning activities that promote the development of educational competencies and affect the level of academic achievement and motivation is fostered by the perceived self-efficacy (Bandura, 1995). Social and evaluative feedback and setting proximal goals enhance the development of academic competencies and self-efficacy. There is a stronger relationship between efficacy beliefs and students achievement among low-achieving students, which is why the efforts towards developing their beliefs should be even greater. Bandura (1995) concludes that the development of academic and self-regulatory efficacy increases academic attainment, the outcome that all parties involved in the education sector strive to achieve or promote.

Zimmerman, Bandura and Martinez-Pons (1992) underline the existence of a growing interest in students' self-regulation of their academic learning and performance. Academic self-regulation is concerned with the degree to which students are metacognitively, motivationally and behaviorally proactive regulators of their own process of learning. Many studies have indicated that students with a high sense of academic efficacy display greater perseverance, effort and intrinsic interest in their academic learning and both performance and motivation depend on self-efficacy beliefs and personal goals (Zimmerman, Bandura & Martinez-Pons, 1992).

After defining self-efficacy as an individual's confidence and ability to organize and execute a given course of action in order to solve a problem or accomplish a task, Sharma and Nasa (1994) list four sources of self-efficacy: verbal persuasion, vicarious experience, mastery experiences and physiological and affective states, such as stress, emotions, mood, pain and fatigue. Verbal persuasion refers to feedback or evaluation that students receive, which is why it is important for students to obtain clear and detailed criticism of their work, with clear steps to be taken so as to improve their level of knowledge and skills. Mastery experiences refer to a student's firsthand experiences. Achievement of successful results promotes self-efficacy beliefs, while experiences of failure negatively affect them. Vicarious experiences refer to observing other people's behaviors. If a student notices that his/her role model achieves success by expending effort, that observation may positively affect their own self-efficacy beliefs.

3. GUIDELINES FOR PROMOTING SELF-EFFICACY IN THE ACADEMIC CONTEXT

Zimmerman claims that academic records predetermine public reactions to a person and his or her occupational paths. For this reason, educational institutions are places where the teaching staff needs to foster students' development of self-beliefs. Teachers have an important role in promoting their students' self-efficacy that they can fulfill by focusing on the areas of goal setting, strategy training, modeling and feedback (Sharma & Nasa, 2014). Goal setting refers to clarifying the course objectives to students, so that they would be able to set their learning goals. Students should be encouraged to set several proximal goals and their progress is to be monitored by giving them feedback and information on what they need to improve to speed up their advancement (Sharma & Nasa, 2014). Students need to learn to set specific, measurable, achievable, relevant and time-oriented objectives to achieve success in learning and other pursuits. Teachers can also help their students learn how to make strategies for studying, so that they would be able to approach learning systematically and gain control over learning processes. The strategies that are proposed are verbalization and procedures of thinking aloud (Sharma & Nasa, 2014). In modeling, the role of teachers is to present their students with various cognitive strategies and techniques of self-regulation. If the students are shown a model which applies a certain cognitive strategy while solving a difficult task, that will help them feel more motivated for tackling the task themselves. Finally, feedback given to students by the teaching staff is significant for their evaluation of learning and achievement, but best results are accomplished if it is given in a timely manner, regularly and in a constructive way.

Woolfolk, Hughes and Walkup (2014) give guidelines that teachers can apply during the teaching process in order to promote their students' self-efficacy beliefs. The guidelines focus on four areas: emphasizing students' progress, giving specific feedback on steps for improvement of performance, emphasizing the relationship between extending effort and achieving success in the past and setting learning objectives and modeling mastery orientation in learning, which refers to learning for the sake of developing new skills, instead of getting a certain grade. Listed suggestions for emphasizing students' progress include keeping a portfolio of exemplary student papers and projects. Some strategies for feedback include providing students with paper evaluations that consist of detailed comments and introducing student peer review assignments. One of the strategies for emphasizing the relationship between extending effort and achieving success is confronting students about ineffective learning strategies. Finally, modeling mastery orientation can be accomplished if teachers share their personal experiences about mastering skills in the area they teach and discuss with their learners stories about other people who managed to surpass various challenges while striving to obtain a certain skill.

4. CONCLUSION

The concept of self-efficacy is based on the social cognitive theory of learning, according to which people are driven by behavioral, environmental and personal factors. Self-efficacy is related to personal factors in learning that every student should try to improve on his or her own, but teachers also have a significant role in developing it. The implications of this theory are very important for mastering any skill, since an individual who does not believe in his/her success can easily become susceptible to negative self-fulfilling prophecies. Students who believe that they are not capable of achieving success in any area will most likely put in less effort in mastering the learning content and thereby really obtain unimpressive results that they expected. Since students' efficacy beliefs predict their academic and career success, educational institutions and teachers should promote its development in the instructional practice, for the reason students with a strong sense of self-efficacy face »threatening« learning situations with confidence, they stay focused on the task and are not likely to give up. Ways in which teachers can promote development of students' self-efficacy include verbal persuasion, by giving students constructive and timely feedback, teaching learners about goal setting and learning strategies and modeling the application of successful cognitive strategies.

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