



RESEARCH IN FOCUS:

Goal Setting

INTRODUCTION

As higher education becomes more attainable for people in the United States, the focus of secondary education has shifted toward preparing students to succeed in college (Zinth & Millard, 2015). The Educational Policy Improvement Center (EPIC), considers students to be ready for college when they “can qualify for and succeed in entry-level, credit-bearing college courses leading to a baccalaureate or certificate [...] without the need for remedial or developmental coursework” (Conley, 2012, p. 1). According to the EPIC, college readiness consists of mastery in four key areas: cognitive strategies, learning skills and techniques, content knowledge, and transition knowledge and skills. The current brief will focus on the key area of learning skills and techniques, and more specifically, on a student’s abilities to set, work toward, and achieve goals.

The EPIC (Conley, 2012) identifies goal setting as a key learning skill involved in academic success. Goal setting allows students to take ownership of personal learning, an important ability involved in preparing for college. Given the importance of goal setting in academic success, this brief will first examine goal setting in relation to performance in education, describe unique psychological benefits related to goal setting thinking in education, and examine goal-setting interventions aimed at increasing academic success.

DEFINING GOAL SETTING AND PERFORMANCE

Goal setting is broadly defined as the process of developing clear and usable intentions, or objectives, for learning. Research into goal-setting began formally in 1968 (Locke) with a simple question: “Does goal setting affect one’s performance on a task?” (Latham & Locke, 2007, p. 290). As the answer appeared to be yes, goal-setting research moved forward and branched into a variety of areas. Since 1968, researchers have gained a wealth of knowledge about specific aspects of goal setting that lead to improved task performance and have identified personality traits involved in the relationship between goal setting and achievement.

While researchers have established the relationship between goal setting and greater performance, this relationship appears to depend on certain aspects of goal setting. First, specific, challenging goals result in higher task performance than easier, non-specific goals (Locke, Shaw, Saari, & Latham, 1980). That is, goals that are both detailed and difficult to achieve seem to encourage greater success in performance. Importantly, while successful goals should be difficult to attain, they must also be within the student’s capacity to obtain. Researchers have found that role overload (i.e., a combination of lack of resources and copious work) also moderates goal setting impact in that goals only positively affected performance when role overload was low (Brown, Jones, & Leigh, 2005). Additionally, in order for goal setting to improve performance, students must be involved in developing the goals (Azevedo, Ragan, Cromely, & Pritchett, 2003). Goals appear to affect performance largely through directing attention, increasing persistence, mobilizing effort, and motivating strategy development. Specific, high goals that are difficult to obtain lead to higher levels of commitment and performance than easy goals (Locke & Latham, 2006).

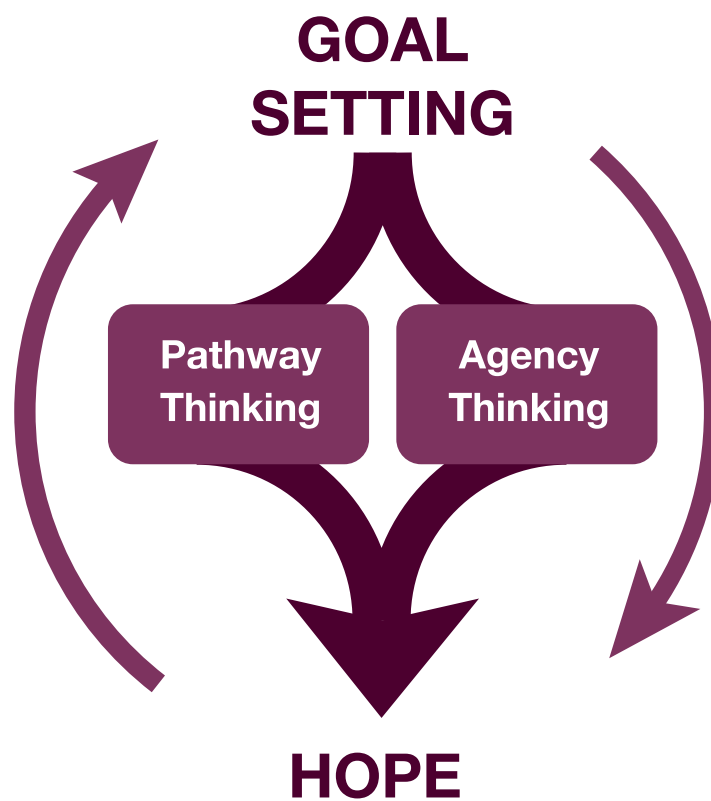
According to Locke and colleagues (1980), several mechanisms increase the likelihood that goal setting will improve task performance, and these include: provision of feedback in relation to progress and goals, provision of reward for goal achievement, and acceptance of or participation in assigned goals by participants. Goal setting appears to be moderated by feedback, commitment to the goal, task complexity, and situational constraints (Locke & Latham, 2006). That is to say that students who receive feedback on progress, and who are both committed to and capable of achieving a goal, are more likely to succeed in their goals.

Additionally, students appear to adopt two primary types of goal orientations: mastery or performance.

A mastery orientation is characterized by an interest in learning

new skills and improving understanding and competence. Mastery-orientated students are more likely to seek out challenges and persist, view errors as opportunities to learn, and are more likely to be internally motivated (Furner & Gonzalez-DeHass, 2011). Mastery goals have been linked to a belief that effort leads to success and are often closely tied with self-efficacy—belief in personal ability to succeed (Moeller, Theiler, & Wu, 2012).

Individuals with a performance orientation are typically concerned with proving their abilities or avoiding negative judgments of their competence. They are more likely to be vulnerable, avoid challenging tasks, and tend to view errors as indications of failure (Furner & Gonzalez-DeHass, 2011).



GOAL SETTING IN ACADEMICS: THE ROLE OF HOPE

Given the importance of goal setting, various researchers have developed conceptual models to capture the positive effects of setting goals. In 1994, psychologist and positive psychology researcher Charles Richard Snyder introduced a hope theory that emphasized the importance of cognitive and motivational aspects of goal setting. In Snyder’s hope theory, people must approach goals through two modes of thinking simultaneously to achieve high hope.

Through pathway thinking, or waypower (Snyder, 2002, 1994), students visualize and plan strategies or routes to achieve their goals. Then through agency thinking, or willpower (Snyder, 2002, 1994), students self-motivate to follow these pathways and pursue their goals. Pathway and agency thinking, together, make up hope. If a person has one and not the other, it creates what Snyder (2002, 1994) terms a mixed-hope pattern, which

results in low hope and poor goal achievement. Using Snyder's concept of hope, researchers have continually demonstrated the positive relationship between hope and academic achievement (Snyder, 2002).

By framing student goal setting within Snyder's hope theory, correlational studies with grade school, high school, and college students have consistently illustrated that hope levels are associated with superior academic performance (Snyder, 2002). For example, in a six-year longitudinal study with students entering college, Snyder and colleagues (2002) found that hope scores predicted better overall GPA. Importantly, hope's predictive effect on GPA remained after controlling for the effect of college entrance examination scores (i.e., ACT scores). In addition, these researchers found that high-hope students were more likely to have graduated, relative to their low-hope counterparts (Snyder et al., 2002).

While studies like Snyder and colleagues' demonstrate the predictive nature of high hope levels on academic achievement, the correlational nature of these studies does not directly address hope's mechanism on greater academic performance. However, researchers have proposed that hope's positive relation to increased academic performance lies in its goal-related conceptualization (Snyder et al., 2002). Researchers (Snyder, 1994, 2002; Conti, 2000) posit that high-hope students conceptualize their goals clearly, are intrinsically motivated, and are highly energized to pursue their goals; thus, a student with high hope can clearly articulate their goals, feels in control of pursuing their goals, and is highly motivated to pursue their goals. These qualities all appear to translate well to academics and, likely, explain part of hope's association with increased academic achievement (Snyder, 2002). While most of the literature on hope and academics has been correlational, hope research in clinical settings (Snyder, Feldman, Taylor, Schroeder, & Adams, 2000) has demonstrated that hopeful thinking can be taught. Given that hope appears malleable in clinical settings, increasing hopeful thinking in academic environments appears to be a viable option for educations.

To date, a few studies exist examining the effect of hope interventions in school-aged students. Despite the limited number of studies, results demonstrate that hope can be increased within a school population. Marques, Lopez, and Pais-Ribeiro (2011) found that a 5-week hope-focused program increased middle-school students' levels of hope, life satisfaction, and self-worth relative to a control group. The 5-week hope program helped students to: "(1) conceptualize clear goals; (2) produce numerous range of pathways to attainment; (3) summon the mental energy to maintain goal pursuit; and (4) reframe seemingly insurmountable obstacles as challenges to overcome" (Marques et al., 2011, p. 144).

The program first introduced hope theory and how it relates to positive outcomes and then encouraged students to learn how to recognize goals, overcome obstacles, and identify personal goals. Next, the program encouraged students to talk about hope and goals, refine their goals to be more specific, and be clearer about how to achieve their goals by creating multiple pathways and identify agency thoughts for each of their goals. Students then learned how to engage in "hopeful talk" and read someone else's personal hope story. Finally, in the last component, students reviewed and shared their

own hope stories and plans for future steps. Importantly, while not statistically significant, students in the hope group demonstrated an increase in their academic achievement, as measured by their current grades, while the control group's grades did not change (Marques et al., 2011).

ACADEMIC GOAL-SETTING INTERVENTIONS

While literature on hope has demonstrated the correlation between goal setting and academic achievement, research is demonstrating how goal-setting interventions can increase academic outcomes. A longitudinal study, conducted over the course of 4 years, observed the impact of a goal-setting intervention on the results of students' Spanish coursework throughout high school (Moeller et al., 2012). A cohort of Spanish teachers were given extensive training in goal setting and reflection and taught to use a program, *LinguaFolio*, a classroom-based intervention designed to promote the goal-setting process. Over the course of 4 years of Spanish instruction, students used the *LinguaFolio* program to establish personal goals and action plans relevant to their learning objectives in the classroom. Results indicated that student achievement as language learners was significantly related to the goal-setting process (Moeller et al., 2012). Additionally, researchers found that growth in goal-setting abilities was significantly linked with growth in achievement. Similar findings were discovered in a Nigerian study designed to increase student academic achievement in the English language (Abe, Llogu, & Madueke, 2013).

Beyond language learning, research has also focused on the relationship of goal orientation to student anxiety and achievement in mathematics.

“As was previously noted, students who adopt a mastery orientation are more likely to seek challenges, be persistent, and to view mistakes as opportunities for learning.”

Additionally, classroom environments perceived to emphasize mastery goals are positively related to increased student help-seeking behaviors (Karabenick, 2004). Learning environments which promote the importance of striving toward learning and growth and reduce emphasis on social comparison (through achieving ideal grades) promote student orientation toward mastery goals. According to research (Furner & Gonzalez-DeHass, 2011), teachers can promote mastery-oriented environments by engaging students in personal goal setting, involving students in academic decision making, and assigning tasks that provide students with reasonable challenges while emphasizing the importance of understanding and improvement. Math teachers who are able to create mastery-oriented environments can reduce or even prevent student anxiety related to mathematics and increase student achievement.

CONCLUSION

Goal setting is an important element of learning. Increased goal-setting abilities contribute to college readiness and can help students to succeed in a variety of academic settings. Educators and parents can improve student academic achievement through increasing students' abilities to set specific, high goals focused on personal development in education by developing environments that emphasize mastery goals, learning, and growth.

REFERENCES

- Abe, I. I., Llogu, G. C., & Madueke, I. L. (2013). Effects of goal-setting skills on students' academic performance in English language in Enugu Nigeria. *New Approaches in Educational Research*, 3(2), 93-99.
- Azevedo, R., Ragan, S., Cromely, J., & Pritchett, S. (2003). Do different goal-setting conditions facilitate students' ability to regulate their learning of complex science topics with RiverWeb? Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Brown, S. P., Jones, E., & Leigh, T. W. (2005). The attenuating effect of role overload on relationships linking self-efficacy and goal level to work performance. *Journal of Applied Psychology*, 90(5), 972-979.
- Conley, D. T. (2012). A complete definition of college and career readiness. Eugene, OR: Educational Policy Improvement Center.
- Conti, R. (2000). College goals: Do self-determined and carefully considered goals predict intrinsic motivation, academic performance, and adjustment during the first semester? *Social Psychology of Education*, 4, 189-211.
- Furner, J. M., & Gonzalez-DeHass, A. (2011). How do students' mastery and performance goals relate to math anxiety? *Eurasia Journal of Mathematics, Science & Technology Education* 7(4), 227-242.
- Karabenick, S. A. (2004). Perceived achievement goal structure and college student help seeking. *Journal of Educational Psychology*, 96, 569-581.
- Latham, G. P., & Locke, E. A. (2007). New developments in and directions for goal-setting research. *European Psychologist*, 12(4), 290-300.
- Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Decision Processes*, 3, 157-189.
- Locke, E. A. & Latham, G. P. (2006). New directions in goal-setting theory. *Association for Psychological Science* 15(5), 265-268.
- Locke, E. A., Shaw, K. N. Saari, L. M., & Latham, G. P. (1980). Goal setting and task performance: 1969-1980. *Psychological Bulletin*, 90, 1-90.
- Marques, S. C., Lopez, S. J., & Pais-Ribeiro, J. L. (2011). "Building hope for the future": A program to foster strengths in middle-school students. *Journal of Happiness Studies*, 12(1), 139-152.
- Moeller, A. J., Theiler, J. M., & Wu. C. (2012). Goal setting and student achievement: A longitudinal study. *The Modern Language Journal*, 96(2), 153-169.
- Snyder, C. R. (1994). *The psychology of hope: You can get there from here*. New York: Free Press.
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, 13(4), 249-275.
- Snyder, C. R., Feldman, D. B., Taylor, J. D., Schroeder, L. L., & Adams, V. H., III. (2000). The roles of hopeful thinking in preventing problems and enhancing strengths. *Applied and Preventive Psychology*, 15, 262-295.
- Snyder, C. R., Shorey, H. S., Cheavens, J., Pulvers, K. M., Adams, V. H., III., & Wiklund, C. (2002). Hope and academic success in college. *Journal of Educational Psychology*, 94(4), 820-826.
- Zinth, J., & Millard, M. (2015). Using assessments to inform 12th-grade interventions and accelerations. *ECS Education Policy Analysis*, March 2015. Denver, CO: Education Commission of the States.

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