

Believing is Achieving: The Implications of Self-Efficacy Research for Family and Consumer Sciences Education

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The authors review the research regarding self-efficacy and its application in academic settings. Based on the relevant published findings, the authors discuss the implications of the research for family and consumer sciences educators. Because of AAFCS's core values of research application, innovation, and empowerment of individuals, families, and communities, FCS education is an ideal vehicle for the implementation of instructional methods aimed at increasing students' self-efficacy.

Few people outside the profession are fully aware of the range of responsibilities of teachers in Family & Consumer Sciences. In addition to having knowledge and experience in all of the areas that Family & Consumer Sciences encompasses, a teacher is a manager, educator, and motivator of students. The teacher sets the tone and tempo of the classroom, and a motivating teacher means a motivating teaching environment. In order to be effective, a teacher must learn instructional and management skills developed through training in educational theory and practice and enhanced by years of experience with students. Consistent with AAFCS's core values of innovation, creativity, and application of research (American Association of Family and Consumer Sciences, 2001), FCS educators strive to incorporate into their teaching innovative strategies that have their foundation in both theory and research. Through this constant process of innovation and application, FCS educators shape and empower students to strive for their goals and become productive members of their families and society.

Some of the most challenging aspects of teaching involve developing and encouraging student motivation, goal setting abilities, and independent problem solving skills. Furthermore, the nature of these challenges varies from topic to topic and from student to student. Some students have not been

exposed to a good model for problem solving, whereas others simply lack the self-confidence to try things on their own. One means of fostering students' motivation to learn independently is through building the students' sense of self-efficacy. Self-efficacy simply refers to a judgment a student makes about his or her ability to accomplish a specific future task (Bandura, 1986). Educators nurture students' self-direction and sense of self-efficacy by providing them with opportunities to exercise at least some degree of control over their own learning. Thus, in addition to teaching basic concepts or skills, FCS educators must also focus on teaching students strategies that allow them to learn skills more effectively and to develop the self-confidence needed for success in school and in all aspects of life.

First in this article is a description of the theoretical foundations of self-efficacy theory, then a review of the literature that supports the role of self-efficacy in supporting educational achievement. Specific examples are provided to illustrate how the techniques demonstrated in prior research can be used effectively in a family and consumer sciences classroom. In particular, Bandura's instructions regarding the development of self-efficacy scales are emphasized as an important component of an educational strategy to enhance the self-efficacy of students in family and consumer sciences.

Theoretical Underpinnings of Self-Efficacy

Bandura is well known for his social learning theory and his ideas about modeling as an important means by which children learn. Over time, Bandura further developed this theory, adding cognitive components such as motivation and self-regulation, ultimately renaming it social cognitive theory. In 1986, Bandura added the self-efficacy

component to his theory, which holds that people possess a “self system” that enables them to exercise control over their thoughts, feelings, and actions. This self system is comprised of cognitive and affective components including the ability to symbolize, learn from others, plan alternative strategies, regulate one’s own behavior, and engage in self-reflection. Bandura (1986, 1997) also proposed the concept of reciprocal determinism, which is essentially the notion that how learners interpret the results of their performance informs and alters their environments and self-beliefs, which in turn alters their subsequent performances.

According to Bandura (1995), “People differ in the areas of life in which they cultivate their sense of efficacy....Teachers must have some knowledge

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of students’ perceived strengths and weaknesses not simply in general learning, but in very specific learning tasks. The efficacy belief system is not a global trait but a differentiated set of self-beliefs linked to distinct realms of functioning” (p.1). Self-efficacy judgments are both task and situation specific; students use their judgments about their abilities in reference to a specific task or goal (Maehr & Pintrich, 1997). Thus, having high self-efficacy in a specific area or domain does not imply

that a person will have high self-efficacy in a different domain (Bruning, Schraw, & Ronning, 1999). For example, a student in a food preparation skills class who is learning to make emulsions may attempt to make a vinaigrette and experience little difficulty. This same student may nevertheless have difficulty acquiring another similar skill—making mayonnaise, for example. The point is that the teacher should not make generalizations about students’ sense of self-efficacy across situations; a student’s sense of self-efficacy is likely to vary from one situation to the next, even when those situations seem similar in some regard.

Self-efficacy beliefs are developed by four sources: mastery experience, vicarious experience, verbal persuasion, and physiological state (Alderman, 1999; Bandura, 1986; Dweck & Leggett, 1988; Maehr & Pintrich, 1997). Mastery experience, the most influential, refers to the student’s subjective evaluation of his or her past experience with regard to a particular task or skill. Mastery

experience leads to two possible outcomes that influence self-efficacy: the perception of success or the perception of failure. An outcome perceived by a student to be a success brings about a greater sense of self-efficacy. The outcome believed to be a failure lowers it (Maehr & Pintrich, 1997). This is a powerful determinant of future success, especially “...if failure occurs early in the learning experience unless it is attributed to an internal-unstable factor, such as lack of effort” (Alderman, 1999, p.57).

According to Bandura (1986, 1997), a person’s attributions about his performance are related to his motivation to achieve. There are three attributional dimensions that influence a person’s success or failure in learning: locus of control (internal vs. external causes), stability (long-term vs. short-term effects), and controllability (controllable vs. uncontrollable). The locus of control dimension refers to beliefs about whether a given outcome was caused by the individual or by some external factor outside of his control. For example, some students attribute their failure on exams to luck. Other students believe that factors such as effort or their level of knowledge of a particular area are responsible for their grades. Thus, students in the latter group will try harder if they are dissatisfied with their performance.

The stability dimension refers to a cause being attributed to either temporary (unstable) or permanent (stable) factors that lead to positive or negative results. For example, a student may attribute poor performance to an illness that came on suddenly before an exam. On the other hand, another student might attribute poor performance to factors that the student perceives as beyond his or her control. Some will say that the task is just too difficult, for example, which can actually lead to a decrease in the student’s efforts to improve his or her performance on that task.

The third dimension, controllability, refers to whether or not a person feels that he has control over a given outcome. Research has demonstrated that perceptions of control can influence learning (Deci & Ryan, 1987). For example, a student who attributes failure to uncontrollable factors may decide that the teacher creates biased and confusing exam questions that are designed to promote student failure; thus, expending a great deal of effort would be a waste of time. On the other hand, a student who attributes success to controllable factors might decide that his or her performance was due to methods of studying, and would be more likely to feel motivated to change

something about the way that he or she studies in order to attain a more acceptable outcome.

Vicarious experience, or the observing of others performing a task, is the second type of experience affecting self-efficacy beliefs. According to Bandura (1986), "...observing that others perceived to be similarly competent fail despite high effort lowers observers' judgments of their own capabilities and undermines their efforts" (p. 399). Even though the effect of this type of experience is not as strong as the mastery experience, it can be a useful educational tool. For example, some factors may make students more sensitive to the influence of vicarious experience such as: (a) uncertainty about one's capabilities; (b) lack of prior experience with a subject; and (c) the criteria by which the ability is evaluated. "Because most performances are evaluated in terms of social criteria, social comparative information figures prominently into self-efficacy appraisals" (Bandura, 1997, p. 399). Many times, students express relief when they know they are not the only ones who are having difficulty with a given skill or concept. Vicarious learning can be especially effective when the person demonstrating is a peer or coping model to whom the student can relate (Bandura). To be a good coping model, of course, the peer must be at least somewhat more skilled at the specific task. For example, if a student feels uncertain about his ability to use a knife correctly, another student in the class who has succeeded at this task could demonstrate the steps he went through in learning to use knives correctly.

Verbal persuasions or verbal judgments are comments by significant others that develop beliefs in self-efficacy (Bandura, 1986; Alderman, 1999). Bandura believed that verbal persuasion "can contribute to successful performance if the heightened appraisal is within realistic bounds" (p. 400). Negative comments are more effective in lowering self-efficacy than positive comments are in increasing self-efficacy (Alderman, 1999). When giving students feedback, teachers often concentrate on the students' weaknesses in order to justify the points deducted from their grades. Doing so can result in students feeling negatively about their ability to perform a given task. A better way to motivate students is to point out the areas where progress has been made, and then give students clear, concrete feedback about what they need to do to continue this improvement and ultimately conquer the skill they are attempting to learn.

A learner's physiological state can also affect

self-efficacy; for example, anxiety, fear, fatigue, or pain can all affect self-efficacy beliefs (Bandura, 1997). Anxiety in particular can interfere with self-efficacy, ultimately interfering with a student's performance. A student with severe test anxiety, for example, may be attentive in class and study diligently, but nevertheless perform poorly on in-class examinations. Anything a teacher can do to lower anxiety about evaluations of student performance could help to raise the students' sense of self-efficacy and thus improve their concentration and performance. Recommending study groups, sharing personal learning and test-taking strategies, and recommending methods of relaxation are just a few examples of ways that teachers can directly influence their students' anxiety. Teachers can also attempt to create a friendly and non-threatening classroom environment that helps students to feel generally more relaxed.

Research Findings

Self-Efficacy and Learning

The importance of Bandura's self-efficacy concept for education is clear. The judgments a person may make about his or her abilities can lead a person to decide which activities to try or not to try, how much effort to give, or how persistent he or she will be when challenged. Highly efficacious students set higher goals, try harder to reach their goals, improve upon existing efficacy as they make progress, use critical thinking skills and strategies, and do not give up as easily (Bandura & Schunk, 1981; Bouffard-Bouchard, 1990; Lent, Brown, & Larkin, 1984; Pajares, 1996; Schunk & Hanson, 1985). Thus, the highly efficacious student is more likely to succeed.

It has been about two decades since Bandura first introduced the concept of self-efficacy and described its importance as a component of social cognitive theory. Thus, the research on self-efficacy is relatively new. Recently, there has been increasing attention in educational research on the implications of self-efficacy for education (Pintrich & Schunk, 1996). The results of the research on self-efficacy affirm the importance of having high self-efficacy when faced with new and challenging skills (Bandura, 1995; Bandura & Schunk, 1981; Schunk & Hanson, 1985). For example, Bouffard-Bouchard, Parent, and Larivee (1991) found that students with high self-efficacy engaged in more effective self-regulatory strategies. This study also

supported Bandura's contention that self-efficacy enhances students' persistence, and ultimately their memory performance. Zimmerman, Bandura, and Martinez-Pons (1992) used path analysis to show that self-efficacy improves students' performance directly and indirectly; not only do students' with high self-efficacy perform better academically, but they also set higher academic goals for themselves.

Strategies to Improve Students' Self-Efficacy

Researchers typically have assessed self-efficacy beliefs by asking students to report the level, generality, and strength of their confidence in their ability to accomplish a task or learn a skill. Studies regarding the relationship between self-efficacy and academic performance have been conducted in the areas of mathematics (Hackett & Betz, 1989), reading and writing tasks (Shell, Colvin, & Bruning, 1995), and the use self-regulatory strategies (Bandura, 1989). Other tests of self-efficacy in academic settings include assessments of students' expected performance in a given subject (Meece, Wigfield, & Eccles, 1990) and whether students believe that they are good at a given academic subject (Marsh, 1990; Meece, Wigfield, & Eccles).

If one accepts that students' self-efficacy is related to their academic performance, then the question remains: What educational practices enhance students' self-efficacy? Alderman (1999) discussed strategies that can build up students' self-efficacy towards learning. Some of these strategies include modeling, sharing of self-efficacy stories, constructive feedback, goal setting, rewards, and estimating student self-efficacy by using a scale.

Modeling. Modeling refers to the process of demonstrating and describing the process of mastering a new skill to a novice. Modeling is effective in increasing self-efficacy because it can provide explicit information about how to acquire a skill and can raise the student's expectation that he can master the skill (Schunk, 1989, 1991).

There are two types of models that can be used in a classroom situation to enhance the student's sense of self-efficacy: mastery and coping models. Mastery and coping models are both good models to observe, and both should be used in the

classroom when the opportunity presents itself. A mastery model is someone who is an expert at the task. A coping model would be someone who may still have some difficulty with the task but can teach and demonstrate the task successfully to someone who is just acquiring the skill.

Both peers and teachers can serve as mastery or coping models. In order to raise students' self-efficacy, many researchers believe that doing the task with a more capable peer can lead to task accomplishment (Alderman, 1999). Often, peers are more able to assess what sort of explanation another student would best understand (Schunk, 1989). Many teachers who are "expert" in their field have difficulty relating to the point of view of a novice, and thus have a more difficult time explaining concepts in terms that the students can understand. Small group projects in which students help guide each other through a complex task is therefore a desirable strategy to enhance the students' sense of self-efficacy (Schmuck & Schmuck, 1992).

In order for peers to serve as effective coping models, the teacher must encourage an atmosphere of cooperation and respect in the classroom. Competition is often implicitly encouraged in classrooms through rewards, grading practices, or other means of comparing one student's performance to that of other students. Although competition may appear to serve as an incentive for students to achieve, it can often have the opposite effect. Students may hope for lower performance among classmates so that their performance will seem superior in contrast. In a competitive atmosphere, there is little incentive for more competent students to provide assistance for students who are having trouble with a given concept or assignment. When a teacher encourages cooperation, peers can begin to act as mentors and coping models in an effective way. This cooperative atmosphere can be promoted through group assignments and activities or through grading practices that are a reflection of an individual's accomplishment and improvement over time rather than merely an indication of how one student compares to the group as a whole.

A cooperative atmosphere is advantageous not only because it enhances the self-efficacy of students in need of assistance, but also because it enhances the collective efficacy of the class as a whole. Collective efficacy has been found to be positively related to differences among schools in student achievement (Goddard, 2001, 2002), and

... teaching methods that foster student self-efficacy can also be used for leadership development, student-to-student mentoring, and life skills training.

thus is positive for all students, not just a few.

Another strategy to improve self-efficacy is using a teacher model as a coping model. For example, the instructor uses a knife skill, intentionally displaying some difficulty at first. The instructor then corrects herself and relates the process to the students who may encounter the same difficulties. More capable peers, students who have mastered a skill, can also demonstrate a skill in this same manner. Another way to demonstrate a technique or skill would be by correctly performing the skill as an expert or mastery model.

Feedback. Teachers should always make an effort to give students clearly defined assignments and clearly articulated, constructive feedback (Schraw, Dunkle, & Bendixen, 1995). Giving the student clear and constructive feedback may be the most over-looked strategy that an instructor can utilize (Schraw & Brooks, 2001). For example, if a student needs more practice with cutting vegetables, an instructor can point out that the student did a fine job selecting a variety of vegetables, but the cut vegetables should be more uniform. The teacher can make these instructions clearer by either demonstrating the skill or having another more skilled student demonstrate for the student.

Goal setting. When setting goals, make sure that they are proximal and not distal to insure students' success in reaching them (Locke & Latham, 1990). Proximal goals are goals that one can easily reach but are still challenging. For example, a teacher who is attempting to teach how to prepare a sauce without "breaking" it may want to take the students through the steps one by one, guiding them along as they work. Simply running through the list of steps and telling them what the end goal should be is not enough for many students, and can lead to frustration and disappointment. Giving instructions should serve as a road map to success.

Goal setting can be applied to other, more general goals, such as enhancing a student's problem solving skills. A teacher can accomplish this using several methods. First, it is important to discuss the importance of self-reflection and the role it plays in self-regulated learning (O'Neil & Abedi, 1996). A teacher may also attempt to enhance a student's self-knowledge through encouraging or requiring scrupulous documentation of study strategies over time. Such documentation could become part of the student's routine class activities or out-of-class assignments, and may include notes regarding the relative effectiveness of learning strategies. This can lead to

enhanced regulatory skills in the student, who will see that some strategies are more effective than others in attaining specific, clearly defined academic goals. This can lead to a greater feeling of self-efficacy that comes from enhanced regulatory skills; self-regulatory skills tend to generalize to other learning situations (Schraw, 1998).

Another way to promote understanding among students is to work with the students on developing a systematic approach to assessment. The use of monitoring checklists in which the students check off component steps in the learning process helps to accomplish this goal (Schraw, 1998). Schraw and Brooks (2001) provided the following example of a monitoring checklist:

1. What is the purpose for learning this information?
2. Do I know anything about this topic?
3. Do I know strategies that will help me learn?
4. Am I understanding as I proceed?
5. How should I correct errors?
6. Have I accomplished the goals I set for myself? (p. 13)

The steps presented in this kind of checklist may seem patently obvious to an instructor. Researchers examining the effectiveness of such checklists have reported favorable results, especially when students are attempting to learn difficult material (Delclos & Harrington, 1991; King, 1991). As Schraw and Brooks (2001) pointed out, "When it comes to strategy instruction, it is hard to be too explicit" (p. 13).

Rewards. Rewarding students is another method that has been used to increase self-efficacy. It should be cautioned, however, that this method of raising students' self-efficacy is considered to be the least effective (Alderman, 1999). Allowing the students to take home something that they have created to share with friends and family is a reward for the students and shows appreciation for their hard work. Rewards can also involve praise or enjoyable in-class assignments. Rewards are best used on a group basis, rather than on an individual basis. Rewarding students as a group will help to ensure a more cooperative atmosphere, which is

Through goal-setting, feedback, modeling, rewards, and self-efficacy assessment, family and consumer sciences can empower students to become more independent learners. . . .

Figure 1. Food Preparation Skills Efficacy Scale

In the Confidence column rate how sure you are that you can learn the following culinary skills.

| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |
|---|----|----|----|----|----|---------------------------|----|----|----|----------------------|
| Cannot do at all | | | | | | Moderately certain can do | | | | Certain can do |
| | | | | | | | | | | Confidence (0 - 100) |
| Measuring ingredients for a recipe | | | | | | | | | | _____ |
| Sauté fish or meat/poultry | | | | | | | | | | _____ |
| Braise or roast foods | | | | | | | | | | _____ |
| Stew foods | | | | | | | | | | _____ |
| Substitute a food item or solve a cooking problem | | | | | | | | | | _____ |
| Cook foods to a specified temperature | | | | | | | | | | _____ |
| Cook a food item for a specified time & temperature | | | | | | | | | | _____ |
| Work as a team player on food preparation task | | | | | | | | | | _____ |
| Practice proper sanitation and personal hygiene | | | | | | | | | | _____ |
| Follow instructions to performing culinary techniques | | | | | | | | | | _____ |
| Follow rules of the kitchen from chef/instructor | | | | | | | | | | _____ |
| Make sauces | | | | | | | | | | _____ |
| Fry foods | | | | | | | | | | _____ |
| Order food for recipes (for X no. of people) | | | | | | | | | | _____ |
| Use knives and kitchen tools properly | | | | | | | | | | _____ |

essential if peers are to serve as effective models.

Self-efficacy assessment. It is important that the teacher first assess all the students by administering a task-specific self-efficacy questionnaire at the beginning of the semester or course. Such information will allow the teacher to tailor strategies to meet the needs of the individual students. Bandura's (1995) guide for constructing self-efficacy scales was used as a basis for the scale shown in Figure 1 for students learning food preparation skills. The domains assessed in this scale are specific to the goals of the particular course. According to Bandura,

the construction of sound efficacy scales relies on a good conceptual analysis of the relevant domain of functioning. In short, self-efficacy scales must be tailored to activity domains and assess the multifaceted ways in which efficacy beliefs operate within the selected activity domain. Scales of perceived self-efficacy must be tailored to the particular

domain of function that is the object of interest (p. 1).

A course-specific self-efficacy scale can be developed using the basic goals for a particular lecture or a representative selection of specific goals for a course. The instructor can then ask the students to rank their confidence that they can learn each skill or attain each goal on a scale of 1 – 100, with 1 indicating no confidence in one's abilities, and 100 indicating absolute confidence about one's abilities. The scale should be relatively focused—the instructor should try to limit it to no more than one page if possible.

Once the self-efficacy scale has been developed and refined through pilot testing with students in any course (to make sure the items are clear and specific), the scale may be administered to develop a baseline assessment of the level of self-efficacy of each of the students relative to learning course material. In any given class, the instructor can expect to encounter a great deal of variability in

the students' level of self-efficacy. This can be useful in planning small group exercises, for example. Students with a stronger sense of self-efficacy can be paired with students with lower self-efficacy. These students with higher self-efficacy will serve effectively as coping models for the other students. Over time, it may be desirable to change the composition of the groups based on students' performance in class or subsequent self-efficacy assessments. Students may develop a greater sense of self-efficacy as their performance improves, and thus may become, over the course of time, excellent coping models for other students who are having difficulty with a given concept or skill.

In order to assess the teacher's success in improving student self-efficacy, self-efficacy assessment should be on-going. This can be done by referring to the initial scale and observing the students' self-efficacy toward actually applying a specific skill. For example, a student may rate his confidence in measuring ingredients for a recipe as low (70 or below on the self-efficacy scale) and show difficulty applying the skill in class. Once identified, the efficacy problem can be resolved by using strategies that lead the student toward increased self-efficacy and skill mastery. A student who feels uncertain about his or her ability to correctly use a knife may need to have that procedure demonstrated by the instructor or another student. If a student models the behavior, the student model can describe the process of developing that particular skill. The process of using a knife can also be broken down into clear and easy-to-follow steps. If a student shows difficulty with any of the steps, the instructor can explain to the student exactly where he or she needs improvement and how to go about improving that specific part of the process.

In addition to using self-efficacy skills for task-specific skills (see Betz, Schifano, & Kaplan, 1999, for a self-efficacy scale regarding basic domains of vocational skills) students often have trouble with more abstract problems, such as learning strategies or self-regulation. These can also be broken down into simple component parts (making careful notes regarding study habits and progress regarding specific goals, changing strategies when needed in response to performance) which can be used to develop course assignments and instructor feedback to students. Self-efficacy scales have been developed and tested to determine self-efficacy for study skills (Silver, Smith, & Greene, 2001), academic skills (Hampton, 1998; Fall & McLeod,

2001), and social competence (Fan & Mak, 1998). Students should also be encouraged to work in heterogeneous groups¹ whenever possible, so that students can be exposed to a variety of learning styles and strategies.

Periodic evaluations coupled with informal observations and conversations with students are the best way to assess the plan. But the true test of the plan will come at the end of the semester or course when the students again fill out the efficacy scale, and the answers are compared to the initial scale answers. As described previously, a self-efficacy scale can be developed to measure changes in self-efficacy in relation to specific class goals, thus demonstrating positive change over time for those students who begin the class with low self-efficacy.

Implications for FCS Education

Family and consumer sciences can and should be a leader in the educational community when it comes to using innovative and creative methods of student development. Family and consumer sciences as a discipline seeks to understand and improve "reciprocal relationships between people and their environments" (AAFCS, 2001); thus, the FCS classroom should be a model of a supportive and cooperative learning environment. In addition to student centered learning environments, using teaching methods that foster student self-efficacy can also be used for leadership development, student-to-student mentoring, and life skills training. Since family and consumer sciences educators teach courses such as Family Dynamics and Family Life Management, is it not appropriate that their teaching methods are a direct reflection of the desire to create a new generation of responsible adults who make sound decisions with

¹The topic of heterogeneous learning groups brings up questions regarding diversity in the classroom, and how that may affect an instructor's teaching strategies. Self-efficacy strategies have been shown to be especially effective with ethnic minority students (Dopke, 2001; Duran, 2000; Fan & Mak, 1998; Hong & O'Neil, 2001; Salas, 2001; Torres & Solberg, 2001), and female students (McCormick, 2000; Jackson, Ervin, Gardner, & Schmitt, 2001), who often struggle with issues of self-efficacy and self-esteem (Hargrow, 2001). Although not addressed in the literature on self-efficacy, teaching strategies that enhance self-efficacy often involve group activities and enhanced cooperation among students. It may well be that these strategies could bring about greater inter-cultural understanding in the classroom through increased exposure and "creating an atmosphere in which students have something in common" (Walker, 1993, p. 345).

regard to their professional and family lives? According to Jinks and Morgan (1999), "...enhanced self-efficacy generalizes to other situations, with the strongest effects occurring in activities that are most similar to those in which self-efficacy has been improved" (p. 3). By helping students develop a sense of self-efficacy in areas such as self-reflection, planning, and problem solving, FCS educators will also be helping to develop coping strategies, motivation to learn, and persistence to see a task through to its successful completion. Assisting students to develop self-efficacy is also a means of ensuring that students feel valued, respected, and empowered.

Administering a self-efficacy questionnaire as a pre- post assessment can be helpful in evaluating educators' attempts to increase students' self-efficacy. With regard to teachers' course-related goals, showing an increase in the students' self-efficacy beliefs toward learning basic skills can be a means of demonstrating success. FCS educators can not only demonstrate that they are good classroom managers, but also that they are motivators and mentors to their students.

Conclusion

Among the many goals that family and consumer sciences programs share are promoting a positive self-image, developing personal and career skills, enhancing communication skills such as conflict resolution, and acquiring related "real life" skills such as budgeting and financial literacy. Because of its mission and the nature of the discipline, FCS educators are uniquely prepared to help students enhance their sense of self-efficacy. Research on the effects of domain specific feelings of self-efficacy supports the notion that high self-efficacy promotes student learning (Pajares, 1996). FCS students who have a higher level of self-efficacy should be better able to learn new skills and concepts needed to succeed. Family and consumer sciences classrooms often involve the continuous bombardment of new concepts, skills, and procedures that a student must learn in order to be successful in the profession. Students must have the confidence necessary to cope and problem solve in the classroom and in all other aspects of life. Through goal-setting, feedback, modeling, rewards, and self-efficacy assessments, family and consumer sciences can empower students to become more independent learners as future professionals that embody the discipline's core values. ■

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