

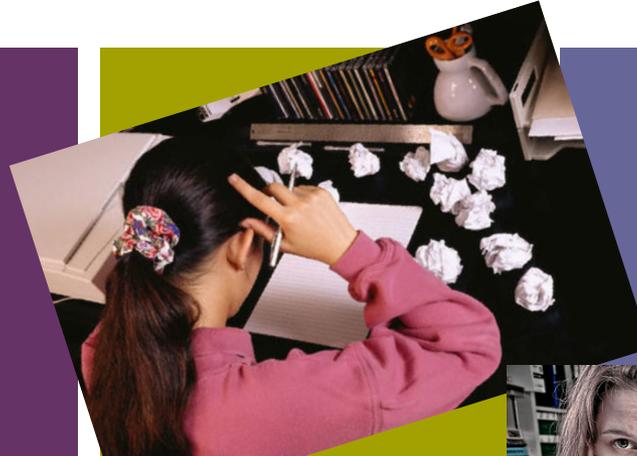


Identifying opportunities to enhance students' academic self-efficacy

Professional development workshop

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Dr Francine Garlin
Academic Course Advisor (First Year)
School of Business



“We must place ourselves inside the heads of our students and try to understand as far as possible the sources and strengths of their conceptions.”

~ Howard Gardner ~
The Unschooled Mind



Workshop outcomes

To develop an understanding of self-efficacy generally, and academic self-efficacy specifically.

To develop an understanding of the sources of self-efficacy thus enabling reflection on how students' self-efficacy may be enhanced.

To be able to apply an understanding of academic self-efficacy and its sources to educational practices.

Want to succeed in life? Try some self-efficacy

By Melinda Beck
Wall Street Journal

J.K. Rowling's book about a boy wizard was rejected by 12 publishers before a small London house picked up *Harry Potter and the Sorcerer's Stone*. Walt Disney was fired by a newspaper editor who said he "lacked imagination." Michael Jordan was cut from his high-school varsity basketball team sophomore year.

What makes some people rebound from defeats and go on to greatness while others throw in the towel? Psychologists call it "self-efficacy," the unshakable belief some people have that they have what it takes to succeed. First described by Stanford University psychologist Albert Bandura in the 1970s, self-efficacy has become a hallmark of the "positive psychology" movement now sweeping the mental-health field, which focuses on developing character strengths rather than alleviating pathologies.

Self-efficacy differs from self-esteem in that it's a judgment of specific capabilities rather than a general feeling of self-worth.

"It's easy to have high self-esteem — just aim low," says Bandura. On the other hand, he notes, there are people with high self-efficacy who "drive themselves hard but have low self-esteem because their performance always falls short of their high standards."

Still, such people succeed because they believe that persistent effort will let them succeed.

Sometimes, the rest of the world just hasn't caught up with an innovator's genius. Steve Jobs and Steve Wozniak were rebuffed by Atari and Hewlett-Packard when they tried to sell an early Apple computer.

Where does the determination to push on come from? In some cases it's inborn optimism — akin to the kind of resilience that enables some children to emerge unscathed from extreme poverty, tragedy or abuse. Self-efficacy can also be built by mastering a task; by modeling the behavior of others who have succeeded; and from what Bandura calls "verbal persuasion" — getting effective encouragement, distinct from empty praise.

The best part: anyone can do it. "You can develop a resilient mind-set at any age," says

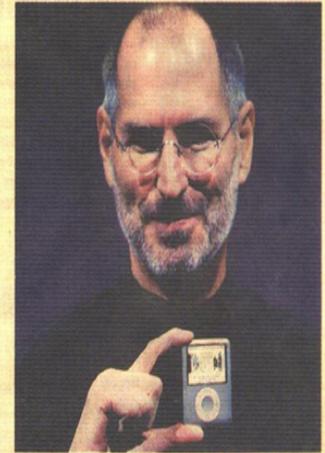
Robert Brooks, a Harvard Medical School psychologist who has studied resilience for decades.

One key, he says, is to avoid self-defeating assumptions. If you are fired or dumped by a girlfriend, don't magnify the rejection and assume you'll never get another job or another date.

And don't allow a rejection to derail your dreams. "One of the greatest impediments to life is the fear of humiliation," says Brooks, who says he's worked with people who say they've spent the last 30 years of their lives not taking any risks because they are afraid of making mistakes.

What if you really do lack the talent to succeed at what you're trying to do? That's a tricky question, psychologists say — one that's on display in the early episodes of *American Idol* each season.

Try to objectively assess how much you are likely to improve with training and hard work, and how much it's worth to you, or whether there are other ways to enjoy your passion — being a coach instead of a player, for instance.

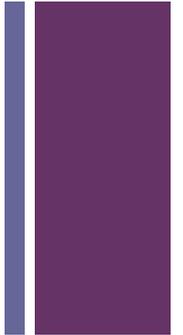


Getty Images

It took decades for Steve Jobs to make Apple a success. Believing in yourself can go a long way, experts say.

Beck, M. (First published Wall Street Journal online, 29/4/08 available at www://biz.yahoo.com/wallstreet/080429/sb120940892966150319_id.html?.v=1)

+ Influences on student self-perceptions



- Peers
 - Family
 - Social norms
 - Stereotypes
 - Socio-economic conditions
- and

us.

Abes, E.S., Jones, S.R., & McEwen, M.K. (2007) Reconceptualizing the model of multiple dimensions of identity: The role of meaning-making capacity in the construction of multiple identities. *Journal of College Student Development*, 48(1),
From Stimpson & Vouvalis (2012) *USU Annual Advisors Conference* 7.



Why is self-efficacy relevant?

“Self-efficacy has consistently found to be a strong predictor of academic achievement” (Hsieh, Sullivan & Guerra, 2007, p. 468).

Students high in self-efficacy are more likely to be motivated to attempt and persist in academic tasks, succeed, have greater levels of satisfaction with the uni/college and retention.

Students low in self-efficacy are prone to avoid academic tasks, struggle to cope with stress, give up easily, and may fail and/or drop out.



+ So, what is *Self-efficacy*?

Self-efficacy is a socio-psychological construct, key to Albert Bandura's Social Cognitive Theory (1977).

“People’s judgements of their capabilities to organize and execute courses of action required to attain designated types of performances” (Bandura , 1986, p. 391)

Bandura's Triadic Reciprocal Determinism

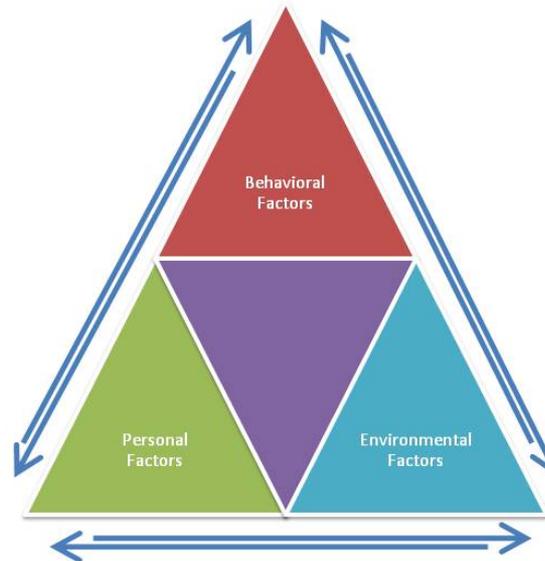


Image source:

<https://wikispaces.psu.edu/display/PSYCH484/7.+Self-Efficacy+and+Social+Cognitive+Theories>



+ So, what is *Self-efficacy*?

Self-efficacy is an individual's belief in her/his ability to successfully perform the tasks necessary to achieve a desired outcome.

Self-efficacy is:

- Directional
- Perceptual
- Contextual
- Motivational
- Dynamic



+ Academic Self-efficacy

An individual's confidence in his/her ability to successfully perform academic tasks at a specified level.

- Unit level
- Unit elements (e.g. Mathematical or technical content, writing)
- Specific academic tasks (e.g. Studying, completing specific assessment tasks such as tests, exams, presenting)





How academic self-efficacy has been measured



- Mathematics problem solving self-efficacy:

How confident are you that you can solve the mathematics problems? (Students presented with sample maths problems for a brief time)

- Self-efficacy for academic achievement:

How confident are you that you can [learn business statistics; learn academic writing skills]

- Self-efficacy for self-regulated learning:

How well can you finish homework assignment by deadlines

+ Academic tasks

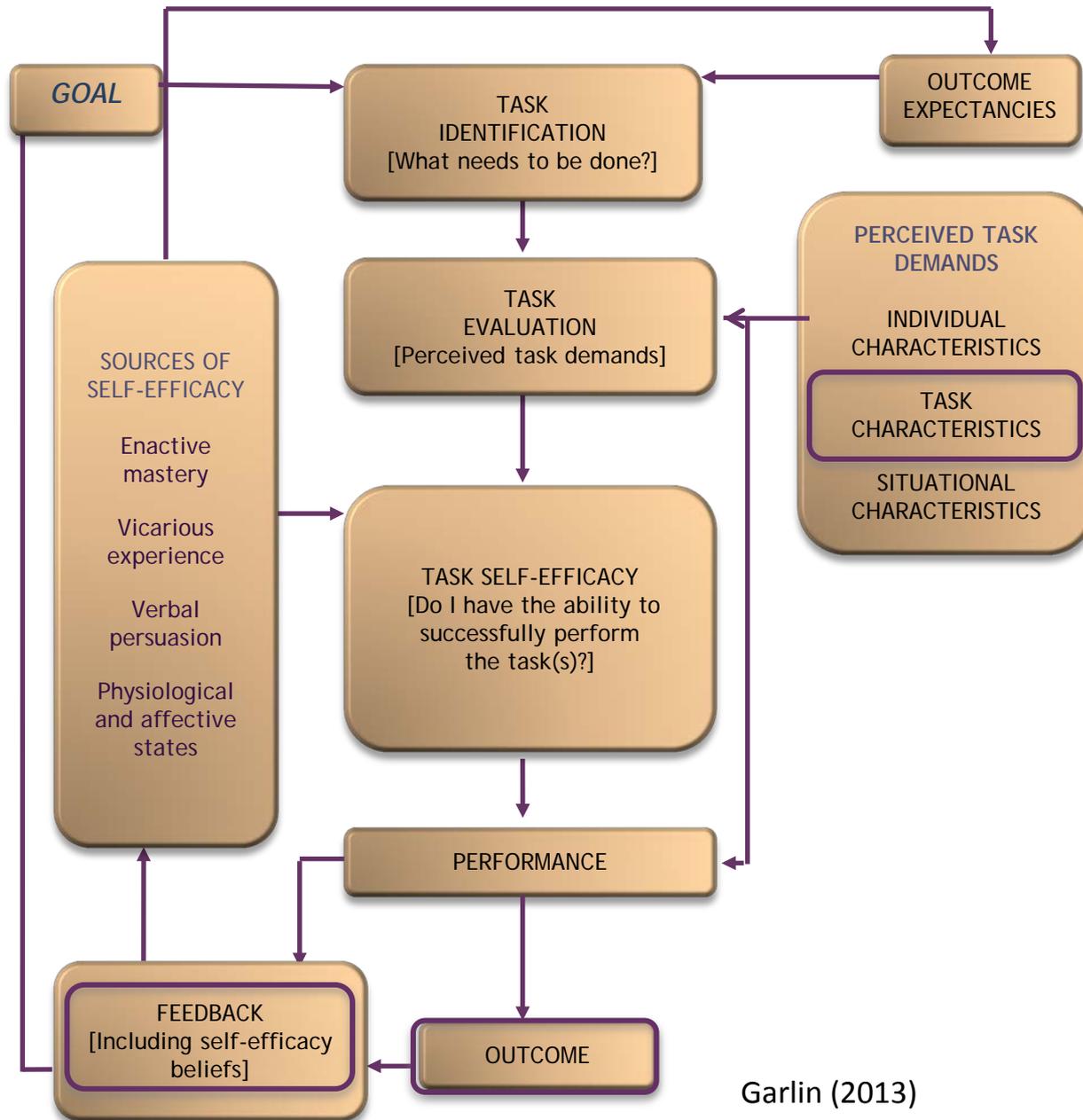
What determines the demands of an academic task?

Task enactment element	Task attribute
The task	Complexity Difficulty Ambiguity Valence
The student	Involvement Ability Knowledge Opportunity Self-efficacy
The situation	Physical surroundings Social surroundings Temporal aspects Antecedent states Task definition

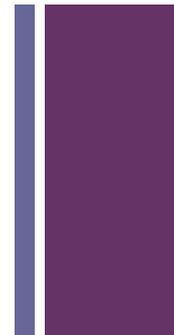
Adapted Garlin (2013)



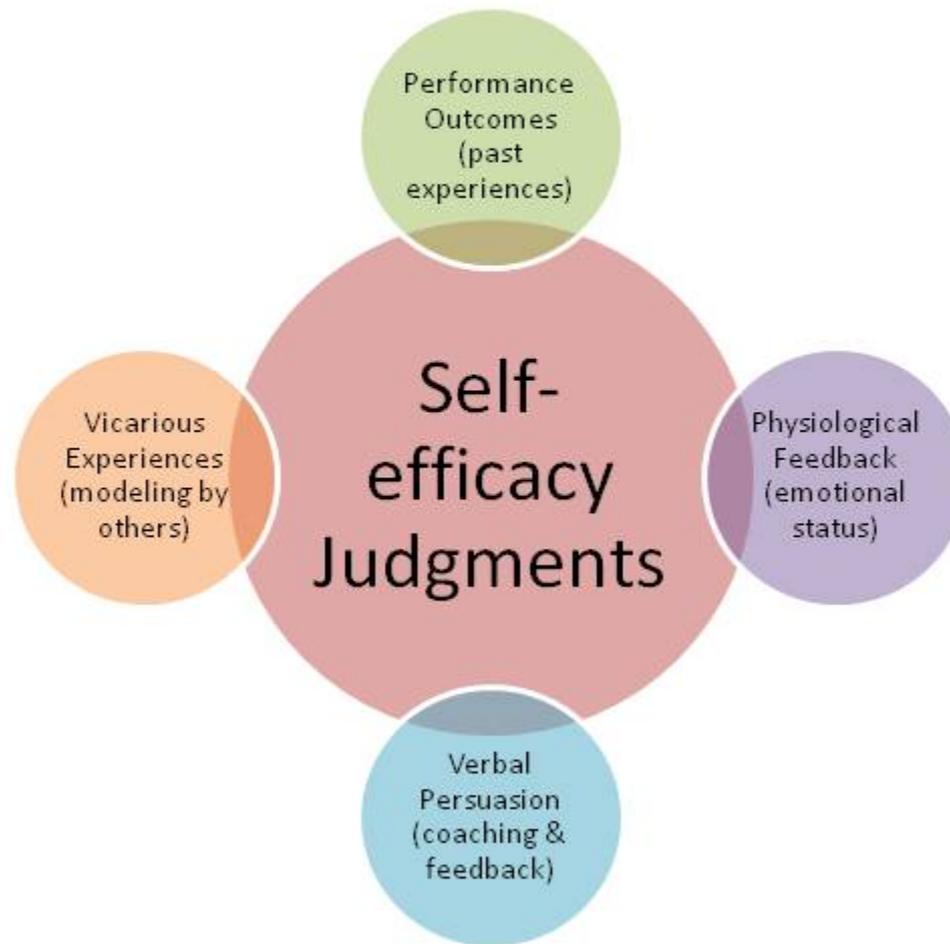
+ A model of self-efficacy formation and development



Garlin (2013)



Self-efficacy sources of Information



+ The sources of self-efficacy

*Perceived task demands**

Pre-existing self-efficacy beliefs

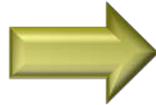
Effort expended

*Past pattern of attempts
(success/failure)*

*Amount of external aid**

*Situational factors**

**Context or non-ability factors*



Enactive mastery

- Personal attainment from direct experience
- The most influential source of self-efficacy



The sources of self-efficacy

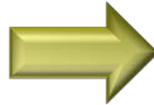
*Perceived task demands**

Nature of the tasks modeled – coping versus mastery

Pre-existing self-efficacy beliefs

The model is crucial:

- *Perceived similarity*
- *Aspirational?*
- *Emphasizes control*
- *Number and diversity of models*



Vicarious experience

- Modeling
- People gain knowledge about their abilities from observing others perform

*Situational factors**

**Context or non-ability factors*



The sources of self-efficacy

*Perceived task demands**

Availability of objective indicators

Pre-existing self-efficacy beliefs

Difference between feedback and current self-efficacy belief

Feedback has ability rather than effort content



Framing and structure of message: achieved short term progress versus shortfall from distant goal

Characteristics of persuader (knowledge credibility, expertise).

*Situational factors**

**Context or non-ability factors*

Performance feedback

- Verbal persuasion
- People gain knowledge about their abilities from observing others perform



The sources of self-efficacy

*Perceived task demands**

Pre-existing self-efficacy beliefs

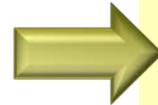
Level of arousal

Diagnosis of past experience

Mood-based recollections

*Situational factors**

**Context or non-ability factors*

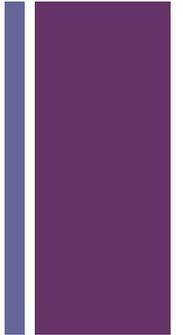


Physiological and affective states

- Well and energized versus unwell and tired
- Mood state



Ways to enhance student self-efficacy

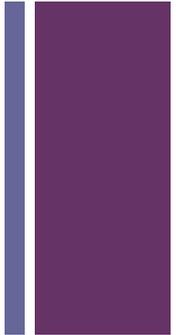


“It is particularly exciting to note that teaching strategies used in the classroom can and do make a difference to students’ self-efficacy” (Fencel & Scheel, 2005).

- Moderately difficult task (too easy, no self-efficacy trigger; too hard, those low in self-efficacy will be reinforced)
- Peer models
- Teach specific learning strategies (e.g. A plan of attack on an assignment).
- Interrogate students about their goals, and talk to them in the context of these goals. [NB: Unrealistic goals can lead to lower self-efficacy. Reasonable and challenging goals can lead to success and higher self-efficacy.
- Capitalize on students’ interests.



Ways to enhance student self-efficacy



- Encourage students to try.
- Give frequent, focussed feedback.
- Encourage accurate attributions – help students understand that they don't fail because they are dumb, they fail because they didn't follow instructions, they didn't follow through on the learning strategy, they didn't spend enough time on the task.
- “Cooperative learning structures, in which students work together have the dual outcome of improving both self-efficacy and academic achievement [moreso] than competitive ones (Bandura, 1997)

+ Ways to enhance student self-efficacy

- Don't focus on student's past failures
- Exam anxiety – try visualization with students
- Encourage well-being in students during exams.

