Identifying opportunities to enhance students’ academic self-efficacy

Professional development workshop
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“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.

Influences on student self-perceptions

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

us.

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)

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?

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<tr>
<th>Task enactment element</th>
<th>Task attribute</th>
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<td>The task</td>
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<td>Temporal aspects</td>
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<td>Antecedent states</td>
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<td>Task definition</td>
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Adapted Garlin (2013)
A model of self-efficacy formation and development

**GOAL**

**TASK IDENTIFICATION**
[What needs to be done?]

**TASK EVALUATION**
[Perceived task demands]

**TASK SELF-EFFICACY**
[Do I have the ability to successfully perform the task(s)?]

**PERCEPTION OF TASK DEMANDS**

**INDIVIDUAL CHARACTERISTICS**

**TASK CHARACTERISTICS**

**SITUATIONAL CHARACTERISTICS**

**PERCEIVED TASK EXPECTANCIES**

**PERFORMANCE**

**FEEDBACK**
[Including self-efficacy beliefs]

**OUTCOME**

Garlin (2013)
Self-efficacy sources of Information

Self-efficacy Judgments

- Performance Outcomes (past experiences)
- Vicarious Experiences (modeling by others)
- Physiological Feedback (emotional status)
- Verbal Persuasion (coaching & feedback)

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

Garlin (2013)
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

Garlin (2013)
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

Garlin (2013)
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

Garlin (2013)
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” (Fencl & 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.