Improving students’ perception of self-efficacy through peer, instructor, and self-evaluation of class participation.

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“People's level of motivation, affective states, and actions are based more on what they believe than on what is objectively the case.”

Albert Bandura
Self-Efficacy?

- Albert Bandura first coined the term in 1977
- Is one of the most researched concepts in psychology (Social/Clinical/Health)
- Significantly related to important outcomes
- Consists of 3 core elements
SELF-EFFICACY

“Self-efficacy is the belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations.”

Bandura, 1995, p. 2
Self-Efficacy in Changing Societies
Self-Efficacy (Bandura, 1977):

- Confidence in ability
- Effectively engage in behaviors
- Desired Goals
SELF-EFFICACY

WHAT DOES IT DO?
It influences

• THE CHOICES WE MAKE
• THE EFFORT WE PUT FORTH
• HOW LONG WE PERSIST
  WHEN WE CONFRONT OBSTACLES
  (AND IN THE FACE OF FAILURE)
• HOW WE FEEL
Self-Efficacy for Education

- Self-Efficacy for Education means the student is confident of his/her ability to successfully
  - Goal: educational success

- Self-efficacy scale used was adapted from the “Self-efficacy scale for learning” by Zimmerman, Kitsantas, and Campillo (2000).
## SELF-EFFICACY

**How it differs from self-concept**

<table>
<thead>
<tr>
<th>SELF-EFFICACY beliefs</th>
<th>SELF-CONCEPT beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>judgment of <strong>confidence</strong></td>
<td>judgment of <strong>self-worth</strong></td>
</tr>
<tr>
<td>context-sensitive</td>
<td>not context-sensitive</td>
</tr>
<tr>
<td>can be task-specific</td>
<td>not task-specific</td>
</tr>
<tr>
<td>made and used in reference to some type of goal</td>
<td>cognitive <strong>self-appraisal</strong> independent of goal</td>
</tr>
<tr>
<td>domain-specific</td>
<td>can be domain-specific</td>
</tr>
<tr>
<td>a question of <strong>can</strong></td>
<td>a question of <strong>being/feeling</strong> (Who am I? How do I feel?)</td>
</tr>
</tbody>
</table>

(Can I do this?)
Study’s Main Hypothesis

- Students’ participation in assignments which involve a complex peer review process, will increase the student’s accuracy in evaluating his or her performance for the course and will influence the perceived self-efficacy for scholarly endeavors.
Study Participants

- 17 undergraduate students enrolled in teacher education programs at UNC Pembroke
- 15 females, 2 males
- Ethnicity undisclosed
- Participants were recruited from two sections of an Introduction to Special Education course in January, 2009
- Attrition rate was approximately 30%
Instruments

• Scales administered at two points during the semester – beginning and end of semester:
  ▫ General self-efficacy scale
  ▫ Self-efficacy for college learning
  ▫ Student self evaluation
    • Beginning of the semester (plan, goals, study strategies, performance/grade expectations)
    • End of semester (evaluation of efficiency of strategies, what worked and what not, comparison of grade obtained with the one expected).
Method

• The experimental treatment used in this study was the requirement that the students complete three individual assignments through a complex of peer reviews through Expertiza software developed at NC State University (Gehringer, 2008) - independent variable.

• There was a two time measurement of the perceived self-efficacy and of the student self evaluation - dependent variables.
Advantages of using Expertiza for assignments

- It is a formative assignment (students need to be able to improve their work)
- It produces reusable products (the students and/or instructor can use them in the future)
- Develops students’ communication and collaboration skills (more important on the job than passing tests)
- Relies on student-generated content
- Increases students’ responsibility and self-confidence
Results

• The perception of self-efficacy increased for both the General Self-Efficacy Scale and the Self-Efficacy Scale for College Learning with 5.35% and 5.4% respectively.


**Discussion: Self-Efficacy**

- Self-efficacy for education might be instrumental in promoting educational gains.
- The participants’ number is very low to draw general conclusions but,
- Self-efficacy seems to be enhanced by the participation in peer review processes of important papers that can be used by future students or published;
- Results of self-efficacy scales should be analyzed in relation to other concurrent factors such as personality, past college experience, demographic characteristics, and ethnic/cultural factors.
Further research questions

- Does self-efficacy predict educational outcomes among teacher candidates?
- To what extent are sociodemographic characteristics related to these outcomes?
- How does self-efficacy impact the students’ self-evaluation accuracy and hence course expectations?
- Is there a relationship between the perceived self-efficacy results in college and future job performance as well as job retention?
“They are able who think they are able.”

Virgil
WE WHO CUT MERE STONES MUST ALWAYS BE ENVISIONING CATHEDRALS
“It is our duty as human beings to proceed as though the limits of our capabilities do not exist.”

Teilhard de Chardin