

Achieving High Self-Efficacy and its Effect on Learning

Brad, Cameron and Daniele



The Role of Self-Efficacy in Learning

Self-Efficacy is one's belief in his or her ability to succeed in certain situations.

Based on our gathered research, efficacy plays a major role in a student's ability to think critically and master the material.

The act of instilling this self-confidence in students falls upon themselves, the instructors, and the facilitating manner in which LAs play a part.

Learning Strategies

Teachers and students should set short term and long term goals.

-Achieving predetermined goals contributes to student's mastery experiences.

Working in groups is important in developing vicarious experiences.



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Teaching Strategies

Environments with minimal challenge and an abundance of praise lead to lazy and passive students instead of motivated and interested students.

Instructors can set up an environment of productive failure:

-Ultimately, students who have embraced the challenge and learned from work that they once perceived as "too hard" will not only benefit from interacting with the material more deeply but will gain confidence in taking on hard assignments in the future.

Group Facilitation

It is easy for students to be spoon-fed answers in a group facilitation setting. To avoid this, instructors and LAs can explore a student's thinking process when trying to solve a problem rather than the instructor making suggestions to the student to solve the problem.



Personal Experience: Student Perspective

In classes like Physics 212 where there are LAs:

- I wasn't always so confident in my application of the material. When the LAs were encouraging, but let me make those concept connections on my own, my self-efficacy began to rise.

In my CMPSC 101 class:

- Whenever I have a question on the material or I am stuck on a lab question, the TA/LA is there to help guide me back onto the right path which makes me believe in myself more that I am capable of doing the lab successfully.



Personal Experience: As an LA

Students who have low self-efficacy are those who ask questions frequently and seem to depend on the facilitator.

-These students do not think deeply through the information and ultimately do not master the material.

Students who have high self-efficacy ask well thought-out questions less frequently.

-These students appear to be less concerned with a grade they receive on one quiz and more concerned with learning the material.

Weaknesses of Articles

While we believe, as a group, that challenging environments are essential for creating strong learners, the course needs to be gauged to students appropriately.

-Practice problems and test questions should be in line with course goals and objectives.

-There is such a thing as too much failure. It's one idea to encourage students to think through problems on their own, but another to expect them to understand and apply the concepts with absolute minimum resources.



Conclusion

High levels of self-efficacy can be fostered in a positive learning environment where students are appropriately challenged in a way that their interest and motivation for the subject is sparked and they feel accomplished when achieving goals.

References

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