

Build Students' Science Identity

Goal: Promote the development of a science identity in your students.

Advantages:

As students start to see themselves as scientists they become more comfortable and competent with science content, skills, and practices and show a greater interest in science subjects.

Strategies

Use the tools of geoscience in your courses. Be explicit: Tell your students when they are doing what scientists do.

Provide opportunities in your courses for students to talk about science. This helps students to become comfortable using the language of science.

Be explicit about the process of science. Include examples of how scientists have generated new knowledge and how scientists work. Talk about scientific failures as well as scientific discoveries.

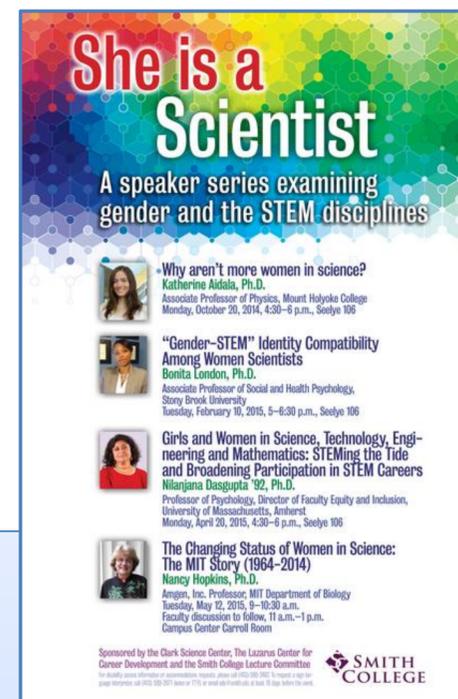
Implementation

- Regularly include some of the strategies in your courses – when you introduce a new topic, show a scientist whose work is relevant. Use a diverse set of examples over the course of the semester.
- Talk about your own experiences as a scientist.
- Invite scientists, including recent alumni if possible, to be visiting speakers in your courses and/or department.

Show your students examples of scientists.

In particular, show students examples of scientists who look like them. Role models are useful, but they represent people students are expected to become. Students may find it easier to relate to younger scientists.

Include topics that are relevant to your student's lives. Connect core concepts in your course to everyday life, such as relevant topics in the news or events on and off campus. Use these examples to show students the relevance of scientists' work.



References

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4. Hazari, Zahra, Philip M. Sadler and Gerhard Sonnert. 2013. The Science Identity of College Students: Exploring the Intersection of Gender, Race, and Ethnicity. Journal of College Science Teaching. 42(5):82-91.