Do InTeGrate materials increase scientific understanding among women?

Tiffany A. Rivera, Laura Rademacher, Mark Abolins, Christopher Berg, William Hansen, David McConnell, Elizabeth A. Nagy-Shadman, Darren T. Nelson, Mathieu Richaud

RESULTS

Fall 2015 “Control Group”

- No InTeGrate materials used
- Students with paired GLE, essay, and IAI data

Fall 2016 “Treatment Group”

- InTeGrate materials used
- Students with paired GLE, essay, and IAI data

CONCLUSIONS

- Relative to males, females scored lower on the GLE and essay in both InTeGrate and non-InTeGrate semesters.
- After InTeGrate materials, females had higher gains on both the GLE and the interdisciplinary essay question.
- Both males and females were influenced by a geoscience course to take action to create a more environmentally sustainable society. However, more females were motivated (relative to males) to do so after participating in a course with InTeGrate materials.
- Males and females are influenced by the same factors and to the same degree to make decisions to achieve an environmentally sustainable society.
- After InTeGrate materials, females are more likely than males to make decisions based on the influence by friends and family.
- We conclude that InTeGrate materials benefit females in their geoscientific understanding, increase their motivation to take action to create an environmentally sustainable society, and consider their social circles as one of their greatest influences in their decision making.
- Future development of InTeGrate materials should consider activities that include friends and family beyond the classroom to further engage female students with the geosciences.

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