

# The Benefits of an Embedded Educator on your Polar Research Team

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## Benefits to the Research Team

- Fulfilling the NSF Broader Impacts requirement
- Science, technology, engineering, and mathematics (STEM) educators bring with them many to the workplace STEM skills as well as teaching and communication skills.
- Educators know how to navigate through the K-12 education system which often seems like a never-ending maze to the outside community
- Opportunity to engage next generation of scientists and engineers
- Improve ability to communicate research to a broad audience
- More (lower cost) labor to collect/process data
- Different perspective on research question
- Time/effort saved on trying to learn whole new field (education theory)
- Time/effort saved on trying to locate/reach audience.

## Benefits to the Teachers and Students

- Teacher lives the experience and as a result they can teach science/engineering instead of teaching about science/engineering”
- Increase content knowledge
- Increase understanding of scientific & engineering process
- Teacher builds a network within the STEM research community
- Increase motivation and excitement in teaching
- Positive change in classroom environment for students
- More likely to receive correct/realistic info and increased access to information.
- Exposure to STEM role models for students and science careers
- Improved performance on high stakes tests.

**NOTE: Claims of benefits are supported by the education research. Contact me for citation list.**

### Programs that Can Provide Funding to Support Educators on Your Team

**NSF Research Experience for Teachers (RET)** - This can either be a supplement to an existing NSF award, or some Directorates offer RET site award programs. Contact NSF or visit <http://retnetwork.org> for more information about the program. NSF Engineering has a long history of supporting RETs.

**PolarTREC** - PolarTREC (Teachers and Researchers Exploring and Collaborating) is a program in which K-12 teachers spend 2-6 weeks participating in hands-on field research experiences in the polar regions. The goal of PolarTREC is to invigorate polar science education and understanding by bringing K-12 educators and polar researchers together. For more information about PolarTREC, visit <http://www.polartrec.com> or email Janet Warburton, PolarTREC PI at [warburton@arcus.org](mailto:warburton@arcus.org) or 907-474-1600.

**For more information or assistance in embedding an educator, please feel free to contact Tim Spuck at [tspuck@hotmail.com](mailto:tspuck@hotmail.com) or call me at 814-758-9527. Thank you.**