Alumni Survey Highlights
Summer Research Experience for Teachers (an IISME-Stanford Partnership)

October 2012

The Summer Research Experience for Teachers began in 2005. Since then, Stanford has sponsored 168 Summer Fellowships involving 108 individual science teachers.

This survey was conducted online from July-September 2012 by the Office of Science Outreach. 97 of 108 alumni (90%) responded. We were able to confirm the current employment of all but one non-respondent, even though they did not respond to the survey questions.

Teacher Retention

97 of 108 alumni (90%) are still classroom teachers. This represents an average annual attrition rate from teaching among program alumni of 2.5%, comparing very favorably with the annual national teacher attrition rate, reported to be 13.6% in 2004-05 and estimated at 14-15% in 2010-11. Of the IISME-Stanford “leavers:”

- two are now school administrators,
- two have returned to graduate school (in education and science),
- three have voluntarily left the workforce,
- two are employed in positions not related to education,
- one is deceased, and
- one could not be located.

Educational Outcomes

1) Since their first IISME-Stanford Fellowship, teachers reported these outcomes:

96% have implemented their Education Transfer Plans (ETPs) and 82% still use them.
78% have shared their ETPs or other materials developed at Stanford with their teaching colleagues (57% more than 3 times).
53% have received materials, supplies or equipment from Stanford to use in their classroom (43% more than 3 times).

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33% have made use of Stanford facilities or equipment during the school year for themselves or their students (17% more than 3 times).
30% have invited their mentor or others from Stanford to come to school and meet with their students, e.g., give a lecture, participate in a Career Day, help set up or teach a lab (21% more than 3 times).
27% have arranged for their students to visit Stanford during the school year.

2) Teachers drew on their IISME-Stanford Fellowship experience(s) in their CLASSROOM INSTRUCTION in these ways:

- 85% added new content/lessons.
- 81% added examples and illustrations to their lessons.
- 62% increased emphasis on problem solving and/or having students explore open-ended questions.
- 60% added new labs.
- 32% assigned more research projects.

3) Teachers drew on their IISME-Stanford Fellowship experience(s) in their SCHOOL SETTING in these ways:

- 61% created/sought more opportunities for their own professional development.
- 57% created/sought more opportunities for professional networking.
- 47% mentored/coached other teachers.
- 22% assumed new leadership roles within their department, school or district.
- 18% initiated a school-wide program or change.
- 14% initiated a new course.*

* Courses include biochemistry, biotechnology, organic chemistry, environmental chemistry, engineering or pre-engineering, advanced research investigations, robotics, advanced physics/materials science, AVID, AP physics, and a summer school course in electronic circuits and microcontrollers.

4) Teachers have INCREASED THE FREQUENCY of these professional practices since their first IISME-Stanford Fellowship:

- 72% networking with other teachers about teaching or other professional issues
- 67% sharing information, materials or resources with other teachers
- 64% participating in other professional development activities/ programs
- 60% mentoring/coaching other teachers
- 49% reading scientific or professional journals