2023 | Year 5

Get The Facts Out

Annual Report

Authors

Wendy Adams, *Executive Director*

Stephanie Chasteen, *External Evaluator*

About Get the Facts Out

Get the Facts Out (GFO) is a five-year, NSF-funded partnership of the Colorado School of Mines and four national societies: the American Physical Society, the American Chemical Society, the American Association of Physics Teachers, and the Association of Mathematics Teacher Educators. GFO is a unique project designed to reach STEM majors in a large fraction of all U.S. mathematics, chemistry, and physics departments and has the potential to address teacher shortages in these high-need STEM disciplines significantly.

Repairing the Reputation of the Teaching Profession

To change the conversation around STEM teacher recruitment at institutions across the country, GFO produces research-based content and reports that faculty can use to help improve their teacher recruitment efforts. The resources are designed to celebrate the positives of teaching and to provide students and faculty with facts that address misinformation and common misperceptions about teaching. The GFO Project Team continually works to update and improve these resources as well as provide support to the faculty who use them.

These resources, and all other content in this report, are intended to be used broadly to change the conversation around STEM teaching careers. We encourage anyone to use and distribute these materials for their intended purpose, within the terms of the Creative Commons license described here.

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Accomplishments

What are the major goals of the project?

Get the Facts Out (GFO) is a national information campaign that promises to increase the number of well-prepared math and science teachers nationwide. In turn, this will increase the number and the diversity of HS graduates who have both the interest and the preparation to persist as STEM majors. GFO is a cost-effective approach to recruiting that can be implemented by any IHE. It targets widespread negative perceptions that can be barriers to recruiting and promotes positive, accurate messaging about the teaching profession. This unique project is designed to reach STEM majors in a large fraction of all U.S. math, chemistry, and physics departments and has the potential to significantly address teacher shortages in these high-need STEM disciplines.

The project team includes leadership from professional societies in the mathematical and physical sciences, experts in behavioral change, and leaders in teacher education. Several IHEs were chosen to serve as study sites. The societies have leveraged their connections with disciplinary departments to implement this national campaign, which will be sustained by the societies after project funding ends. The study sites have been implementing local GFO campaigns and assisting researchers in gathering quantitative and qualitative data to document impact and inform revisions of the campaign resources.

The goals of the Get the Facts Out project are to:

1. change perceptions of the teaching profession among faculty, teachers, students, and parents,
2. increase the frequency of faculty engaging in practices in the Get the Facts Out toolkit, and
3. increase the number of math, chemistry, and physics majors who enroll in a certification program.

Year 5 Priority Initiatives:

1. Build out resources and support structures to empower faculty to start talking about teaching.
2. Continue to support and build on the GFO Community of Practice.
3. Work with disciplinary societies to incorporate accurate information about the teaching profession into existing disciplinary careers resources aimed at undergraduates.
4. Build on our new partnerships with disciplinary, two-year college societies or projects, AAEE, and NCTM.

Year 5 NAB Recommendations

NAB Recommendation: All of these are good ideas and worth doing, so we are not opposed to any of these priorities. However, there is some concern that doing too many things is spreading the team too thin, and the team should consider whether these activities will give the most bang for the buck in the final year of the project. See below for recommendations of possible other priorities, either for the coming year or for the future.

Possible other priorities for Year 5 and beyond

- Focus on increasing the number of presentations
- Focus on departmental and institutional level change (not just individual champions)
- Helping people do what they're already doing
- Engage other groups beyond math, physics, and chemistry college students
- Increase Social Media presence
- Build out additional messaging themes

AY 22/23 Strategic Plan outline, organized by Working Group (WG):

PI Team

The usual strategic planning activities

Planning and Management

Draft AY 23/24 strategic plan, draft NAB and Annual meeting agendas, plan and submit NSF annual report, make plans to integrate NAB feedback, draft plan for sustainability and growth, seek additional funding, and schedule 2022 NAB and Annual meetings

Societies

Implement each discipline's revised marketing plans, publish more GFO Newsletters, and strategize next steps for sustainability and growth, per each society's plans below.

- **APS:** Focus on several different elements in partnership with PhysTEC: 1. Give Change Agents (CAs) more agency in their work. CAs will focus on the registered Physics Champions; support their development process to become empowered to share GFO more broadly. Plan to engage in 2-3 targeted webinars and coffee chats, focusing on a specific topic each time; potentially post on YouTube. CAs will attend in-person section and regional AAPT and APS meetings, and encourage Champions to attend, as well. 2. Advertise GFO in APS publications such as APS News, the Forum on Education Newsletter, and other settings. 3. Interact more closely with APS Careers, who are implementing a Career Mentoring Fellows program across departments in the USA.
- **ACS:** Publish articles and/or announcements about GFO monthly in society newsletters, including Chemunity News, ACS Undergraduate Programs and Faculty Newsletter, ACS Matters, GP Chemist, and InChemistry. Most of these newsletters reach targeted audiences in education (K-12 teachers, faculty, undergraduates, etc.). As budget permits, run targeted ads in these

and other publications. CCAs will help write articles and organize and run events like presentations and coffee chats. Send direct emails to known chemistry champions (quarterly) and to faculty members of the Amer. Assoc. of Chemistry Teachers (bi-annually). Conduct more GFO-themed "coffee chats" for faculty, GFO giveaways at ACS exhibition booths, and bi-annual presentations to ACS Society Committee on Education.

- **AMTE:** In Y4, AMTE plans to formalize connections among other math organizations and projects that are working on math teacher recruitment. These include NCTM, CBMS, MTEP, SEC, 100Kin10, and the MAA's sub group on teacher recruitment. To this end, AMTE will convene an informal gathering with representatives of these organizations/projects that focus on math teacher recruitment. We suspect there are people working on common problems who might work deeper through collaboration. CA's will continue their dissemination activities at national math education conferences (workshops and giveaways), and will organize another AMTE Pre-Conference with MTEP. Collect more positive stories and videos of math teachers sharing about the joys of teaching math, teaming up with NCTM's media team again, and plans to participate in another episode or two of the Teaching Math Teaching podcast.
- **AAPT:** See report for grant # 1821462

Champion Engagement Strategy

Coordinate and prioritize all project activities that engage champions and support the GFO Community. Organize Fall GFO mini-conference. Identify webinar topics for 2-4 joint AAEE/GFO webinars. Maintain Champion Listserv. Maintain Champion listing on the website. Conduct regional data mining (for teacher salaries and costs of living) by request. Coordinate with the CA and Societies WGs to identify the best workshop/colloquia opportunities and assign presenters. Plan, coordinate, and post blog articles from various WGs or Champions every 2-3 weeks. Identify champion needs for the website or resources WGs.

Resource Development

Finalize GFO Users guide, Busting Myths and Teaching: The Best Kept Secret Facilitator's guides. Draft and user-test careers resources. Work with partner societies to more accurately represent teaching within their existing careers. Develop emotional messaging and resources that will engage and empower faculty to talk about teaching. Maintain and update website as needed. Share updated Salary Data with each Study site. Continue to post videos on our YouTube channel and on the GFO website and solicit more. Conduct Spring All-Change Agent meeting. Write a blog on teacher salaries and other topics.

Research Team

Conduct research planning. Attend and present GFO research presentations at societies' and other national meetings. Conduct site visits to Comprehensive Sites. Publish PTaP and PTaP.HE papers. Draft the Chem study paper. Repeat the Chem study at Mines. Create 5-7 blog articles on research topics for the website. Plan and engage in PD in STEM education research. Collect data from all Study Sites and prepare reports for each. Analyze FSI and SSE data and compare across Years 1-4. Analyze enrollment data from Y4 and collect it for Y5.

Evaluation

TBD Planning will be completed in July.

*** What was accomplished under these goals and objectives (you must provide information for at least one of the 4 categories below)?**

Major Activities:

PI Team

Approved AY 22-23 strategic plan, NAB and Annual meeting agendas, and NSF Annual report. Checked on each WG's progress towards their 22/23 objectives and held Virtual NAB and Annual meetings.

Most of our work this year has been focused on developing our GFO 2.0 funding proposal and thinking about how the societies can use their existing structures in this next round (ie is the Change Agent model actually useful for every society?)

Societies

Note: Mid-way through the year we merged the Societies WG and the PI Team. The membership is nearly the same. Facilitated EE's survey of the membership of AMTE (to supplement last year's surveys of the other partners). Published 5 Newsletters. Each includes event announcements, brief tips for implementing GFO resources, recent results from GFO research, and highlights of Champion activities.

Planning and Management

Drafted AY 22-23 strategic plan, drafted NAB and Annual meeting agendas, planned and submitted NSF annual report, and scheduled the NAB and Annual meetings.

Worked on the details of the new proposal.

Change Agents (CA) by Discipline

Created plans for AY 22-23 workshops and local efforts.

Conducted 31 presentations reaching ~345 faculty and ~350 students

Each society trialed the idea of virtual coffee chats to support discipline specific recruitment conversations with mixed success
Math CAs supported adopted GFO Math Champions – Other Champion support shifted to GFO Central
Specific CA were assigned to different WGs and provided feedback to each group.

GFO Central (Mines team plus Drew Isola AAPT Consultant)

Change Agent Support

- Organized and ran an All-Change-Agent meeting
- Supported AMTE CAs as they prepped their pre-conference
- Attended CA meetings & Coffee Chats and connected Math CA 1-to-1 with Champions

Champion Engagement Strategy

Coordinated and prioritized all project activities that engage C/champions

- 62 new Champions added to the Community page on the GFO website and onboarded via a series of emails and offer to attend a Champion Orientation
- 83 total attendees at 4 GFO Champion virtual orientations
- 109 new infographics created with teacher salary data from 404 school districts across the U.S.
- 58 data requests from champions
- 28 faculty presentations about GFO Central (not CAs or Champions) reaching **1110 faculty**
- 8 new blog articles posted to the website. The blog draws over 3000 reads/month.
- 799 Newsletter Subscribers with **358 institutions represented. Extremely high open rate 37%!** Had to move from MailChimp to HubSpot because we had too many subscribers for the free account.
- 336 subscribers to the Community@GettheFactsOut.org listserv: 140 posts. ~40% from Champions and 22% of conversations initiated by Champions
- 316 members on Facebook: 92 posts, 1022 reactions, 118 comments.
- 142 followers on Instagram: 42 posts
- Secured a Facebook for business page as per NAB recommendation. Allows us to schedule posts to FB and Instagram. Created and user-tested many additional memes
- Created champion badges and sent with a GFO mug to each champion based on star-level

Current Issue Data Mining

There are real issues facing the profession that have received strong media attention, more so that challenges faced by many other professions. This provides the impression that in comparison to other careers, teaching is not the best. But…

- Extensive research into teacher well-being after the pandemic. Found more recent data and evidence that teacher well-being is still stronger than other careers. Everyone has faced challenges and fortunately the profession has fared fine
- Research on school safety and the risks of the teaching profession compared to other careers. identified data that can be shared with folks who have concerns. Teaching does not appear in lists of the top 20 dangerous professions and schools do not appear on lists of the top 25 most dangerous workplaces.

Resources

- GFO User Guide - See Supplemental File
- State Specific Resource: Created custom slides for each state in the US that can be dropped into any of the student or faculty facing presentations and posted to the website on the new State Data Page
- "Teaching: The Best-Kept Secret" (faculty facing) and "Busting Myths about the Teaching Profession" (prospective teacher facing)
    - All slide decks updated and uploaded to the website including more detailed notes pages for each slide
    - User-Guides created for each presentation (15, 30, 50, 90, 240 minute versions)
- New Information packed Infographic format
    - tests better for comprehension and includes additional information about supplemental pay and retirement benefits.
    - Has built in space for Champion logo and contact info. See supplemental file.
    - Hired a programmer to automate generation from our data file.
- New Flyer Template See supplemental file
    - Actually it's a tri-fold brochure made for T@M that has six potential versions with different teachers Fully tested with students and ready to customize for any program's use
- Updated GFO Brochures with Facts recently tested in the past year and new logos.

Website:

- 4550 new resource downloads. Traffic and downloads continue to grow.
- Made dozens of significant updates including:
    - State Specific Data Map with slides for each state

- New and Improved Facts and Data page addressing 16 common questions/misperceptions with data to back it up.
- Some updates added to the Explore Teaching page reflecting any applicable facts from the Facts and Data page above
- Added new Google powered search engine
- Updating maps and tables to streamline infographic upload time
- Updated a host of plugins

Videos

Get the Facts Out YouTube channel

- Hired grad student media expert to give us a YouTube facelift.
- 1800 views in the past year
- 12 new subscribers
- 8 new videos posted

Research Team

Study Sites

- Continued to accept Study Sites and converted Kennesaw State University to a Comprehensive study site.
- Conducted 3 in-person site visits at comprehensive study sites.
- Repeated the controlled study of >1000 STEM freshmen at Mines using a different presenter for the Busting Myths Presentation. Found very similar results to last year. Perceptions greatly improved for the treatment group but not the control group showing Fig 1-5
- Conducted a parallel study with the PTaP.HE and faculty & Staff at Mines. Found perceptions Fig 6-7 greatly improved on content that was covered and not on the topics not covered.
- Analyzed PTaP, PTaP.HE, SSE, and FSI survey data for Year 4.
- Completed and delivered 35 Yr3 Study Site reports, includes PTaP (student survey) and PTaP.HE (faculty survey) data. Delivered 28 reports for Yr4 ("Yr4" in this case means Calendar Year 2022.)
- Completed Yr 4 PTaP and PTaP.HE data collection and began Yr 5 collection.
- Continue to collect and work with our enrollment data.

Research Papers/presentations

- FSI Reports completed for Years 1-4 and posted to the website
- SSE Reports completed for Years 1-4 and posted to the website
- Race and Ethnicity Report completed for Year 3 and posted to the website
- 2 blog articles
- Research section in most newsletters
- 10 research presentations at professional conferences (BCCE, SAAPT, WAAPT, AMTE, PhysTEC, UTeach x2, All Change Agent, Study Site update, Center 4 Success)
- PTaP and PTaP.HE Development and Validation Papers will be submitted in the next month

Evaluation

The EE met monthly with the EE WG. Yr5 the EE conducted interviews and analyzed data to create the following reports:

1. **GFO Community survey report.** Report on survey to GFO list, May 2, 2023.
2. **GFO Champion orientation evaluation**. Champion orientation event September 2022.
3. **GFO mini conference evaluation.** Evaluation of the mini-conference in October 2022.
4. **GFO website review.** Analysis of web traffic and use across April 1-September 30, 2022.
5. **GFO Champion journey report.** Detailed interviews with champions about their use of GFO and perceptions of teaching.
6. **GFO Champion use of resources.** Log of the ways that champions are using GFO resources.

Specific Objectives:

1.change perceptions of the teaching profession among faculty, teachers, students, and parents,
2.increase the frequency of faculty engaging in practices in the Get the Facts Out toolkit, and
3.increase the number of math, chemistry, and physics majors who enroll in a certification program.

Goal 1

At this point in the project we have collected strong evidence from a range of sources that the approach of sharing the facts about the profession through the carefully design GFO resources substantially changes student, faculty, and teacher perceptions.

- We continue to see strong gains from the Pre-post surveys from both GFO Central and Champion presentations.
- We also have collected data on middle school and high school student and teacher perceptions after experiencing a GFO presentations and see similar gains. Teachers in fact, spontaneously stand up and give a testimonial about their career if the

presentation is done in their class. This data on presentation effectiveness was included in last years' report so I am not including it here.

- See Major Activities section for new results on PTaP shifts from GFO presentations to students.
- See Significant Results (SR) section for PTaP.HE shifts from GFO presentations to faculty
- The External Evaluator collected data as part of two different reports that show indicators of perception change due to use of GFO resources.
    - See SR on Champion Journeys
    - See SR on Community Survey for impact of presentations on enrollment

Goal 2

We feel that we have strong evidence of meeting this goal as well. Much of it was presented last year and our EE's yr 4 report found the same. For the past two years we have focused substantial effort towards learning how to best support the GFO network and strengthen our community. We have learned some things and have some things still to learn.

- The most critical support and most time consuming that Champions need is identification of their local data. We look up current teacher salaries for Champions and build infographics and then the slides they need for their presentations. This year we also built out retirement, loan forgiveness and scholarships by state sets of slides for each state and added them to the website for Champions' use.
- We are providing support for all but Math Champions through GFO Central. In this way we can consistently onboard new Champions in a timely manner via email conversation with two different personnel (Bolter and Isola).
- We are providing virtual Champion Orientations every quarter which share meta information on messaging as well as how and why the presentations are designed as they are. A substantial amount of time is spent in each orientation discussing each Champions specific site and how they might want to begin and/or enhance their recruiting efforts.
- We are also communicating regularly with the community through several channels, the Newsletter, the listserv, Facebook, and Instagram.
- Our biggest challenge comes when reaching new Champions. We have substantially increased our reach and the use of the Website and resource downloads. But only a fraction of folks know to or take the time to register as a Champion. Most simply go to the site and avail themselves of the free resources. This is great but then they're missing the community supports. We are working on ways to do a better job advertising these supports

Community engagement We've seen substantial growth in community engagement. This is positive but there are so many STEM faculty in the US, we still have much work to do.

- In the current reporting period, GFO maintained an active Facebook group (316 members), Email discussion list (336 subscribers), Newsletter list (799 subscribers at over 350 institutions & 36-47% open rates - considered very high), Website (48,000 active users in yr4), Blog (8 new articles; ~40% of website pageviews), YouTube videos (34 total videos, over 1,800 views this year), 4 Champion Orientation events, Study Site Research update, and other events (e.g. presentations and tables at national conferences)
- The number of known champions has increased to 309 (from 212) at over 200 unique institutions (from 157)
- In the past year, GFO website visitors have downloaded 4550 (2,264 last period) resources.
- Comparing downloads and other website activity, it's very clear that our identified Champions is still a substantial underestimate of those using GFO resources. The benefits for registering are mainly a big Thank You! We have a points system and have added badging and a coffee mug to try and incentivize registration.

Goal 3

We have collected preliminary evidence that GFO increases student interest and enrollment

- See SR for GFO research on enrollment as well as the EE Community Survey
- Last year we shared data from the EE Champion survey that has found 1/3 of Champions reporting increases in enrollment from GFO.

Year 5 Priority Initiatives:

1. **Build out resources and support structures to empower faculty to start talking about teaching.** We have incorporated statistics and a call to action into all faculty-facing presentations. This has been well received. We have also piloted some resources that are directly faculty facing. There is still much (years) of work to do on this front.
2. **Continue to support and build on the GFO Community of Practice**. Described in detail in Goal 2 above
3. **Work with disciplinary societies to incorporate accurate information about the teaching profession into existing disciplinary careers resources aimed at undergraduates.** APS has been interacting regularly with the APS Careers division this year working to build relationships and plan ideas for this – much work to do.
4. **Build on our new partnerships with disciplinary, two-year college societies or projects, AAEE, and NCTM. We have worked extensively this year.** AAEE: Gave Keynote presentation at the 2022 annual meeting, conducted webinars. AAEE has participated in our webinars and currently planning our annual meetings concurrently to be held in Chicago. AMTE CAs made connections with the executive staff of NCTM, attended the conference and interacted heavily with membership and will be attending again this fall; connected with CBMS Working Group on teacher recruitment whose work ongoing as well as the SSMA President and the AMATYC

President

NAB Recommendations - Possible other priorities

- Focus on increasing the number of presentations: Done - GFO Central, Change Agents, and Champions presentations all increased. Calls to action have been added to the presentations, website, and each newsletter asking Champions to prioritize presentations.
- Focus on departmental and institutional level change (not just individual champions): We have a growing volume of evidence that working directly with one person in a department is an extremely effective way to change student perceptions and increase enrollment. We do agree that departmental and institutional level change would be even more powerful and will be addressing it in GFO 2.0
- Helping people do what they're already doing: This is what GFO has always done, helping teacher education faculty, Noyce PIs, UTeach sites recruit teachers using tested high-quality resources and strategies. We appreciate the framing and will continue with this focus
- Engage other groups beyond math, physics, and chemistry college students: This has occurred naturally by Champions. GFO 2.0 will explicitly address all STEM
- Increase Social Media presence: We have worked hard to do so and seen increased engagement as noted in above sections.
- Build out additional messaging themes: We used focus groups at Mines and site visits to test our existing messaging for 2023 as well as test some new messaging. The previous messaging is still testing very well and we've had some luck with additional messaging targeting coaching and other extracurriculars.

Significant Results:

This year significant results were found by both the Mines Research Team as well as the External Evaluator.

The **All Freshman Study** at Mines was repeated again this year (N>1000 in 2021 and 2022). As noted under Major Activities, this study is designed to measure the impact of just one 30-minute student presentation on students' perceptions of teaching.
Perceptions are measured again 3 months later. Results can be seen in Figures 1-5.
Two significant results from this study are:

1. Perceptions of the teaching profession became **significantly more positive** and **remained more positive** throughout the semester, regardless of the response to the statement "I want to become a Grade 7-12 teacher".
2. **25-30%** of students not interested in becoming a grade 7-12 math or science teacher **changed their minds** after one presentation.

Faculty and Staff PTaP.HE study. We also created a parallel study of the impact of a short 30-minute presentation on faculty. We recommend 50 minutes or more for a faculty presentation because they have a much deeper and broader set of misperceptions compared to students. Here we only had an hour for two big surveys plus the presentation. 25 faculty attended with full sets of data for 20. We found large and significant gains in perceptions on the PTaP.HE. This is very exciting and it was very clear that there were gains on the topics that were covered and not on the topics that we had to cut due to time constraints. The radar plots in Figure 8 show this nicely.

Enrollment Research. To measure actual changes in enrollment in teacher-preparation programs, we have begun collecting data from Study Sites and Champions on the numbers of students "enrolled" in their programs in each of the last four years. We have collected this enrollment information from 50 institutions with 25 of them indicating high usage of GFO resources. This data shows an increase in enrollment for 16 of these 25 sites. Given the alarming national decline in science and math teacher production (27% & 40% over 5 years according to Title II), holding steady is likely a very favorable outcome and increasing enrollment is rare.

The External Evaluator finds 1/3 of Champions report direct impacts from using GFO materials on student interest or enrollment. A recent survey of Champions about the GFO Community netted 92 responses and found some nice evidence that Champions feel GFO has had significant positive impact on their recruitment work.
Interestingly the EE found that about half of respondents don't know how to look for data at their institution that could answer this question.
Those who reported direct impacts of GFO on their students are using more GFO slides in their presentations, and using more local data.
In the Community survey also found that those who reported using the entire presentation, as recommended by GFO, were more likely to see direct impacts of GFO on student interest and enrollment. (Fig 10). This survey also finds that for those who use other GFO resources, instead of slide decks, 35% of them see direct impacts of GFO on their students' actions.

Most feel GFO has impacted their professional network. On the Community survey three-quarters of respondents agree/strongly agree with the statement "My engagement with GFO has meaningfully expanded my professional network around issues of advising, teacher recruitment, or use of GFO."
Additionally, **Two-thirds have directly interacted with other users of GFO (about GFO) 85% of Champions find the GFO data changed their perceptions and empowered their teacher recruitment efforts.**

- Analysis of 14 interviews conducted by the EE with GFO Champions about their Journey to becoming a teacher recruiter found a wealth of detailed information on who the Champions are, how they became involved with teacher recruitment, how they use GFO, and how they believe GFO impacted their work. 12 of the 14 interviewees articulated how their perceptions changed after exploring facts and data from GFO.
- The 6 the interviewees who report talking with fellow faculty members about GFO have some sort of seniority, e.g. full professor (person 14), been in the department a long time and "hired everyone" (person 13) or was chair (person 3). Person 12 said he was comfortable with doing so because he used to be a teacher. Person 5 mentioned a responsibility to share GFO information with faculty. Person 6 said she talked about teaching with other faculty because she was outgoing.
- Everyone who were former teachers (persons 1, 2, 9, 11, and 12) or had teachers in their family (persons 2, 8, 9, 14) thought positively about teaching. By contrast, person 6 specifically mentioned not having teachers in her family, and initially thought teaching was a bad job, but has since changed her opinion.
- Some generalizations include
    - GFO helps them know that they are being **ethical** in recruiting future teachers (that teachers are indeed happy and paid well), and gives them **confidence** in their ability to be effective due to the quality of the GFO material content and professional formatting.
    - They also feel that they have more **information** and detail about the teaching profession, GFO gives them **credibility** with other faculty, and they get talking points about how to communicate about the teaching profession.

Key Outcomes or Other Achievements:

Evaluation data and reports in Year 5 included:

1. **GFO Community survey report.** Report on survey to GFO list, May 2, 2023.
2. **GFO Champion orientation evaluation**. Champion orientation event September 2022.
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4. **GFO website review.** Analysis of web traffic and use across April 1-September 30, 2022.
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The Year 4 annual report provided a very deep look at the project data to that point. Because the full evaluation report is to be developed in the future with more complete data, this report only briefly summarizes the evaluation data in Year 5. Report uploaded as supplemental document.

The community survey in Spring 2023 was a broad survey of N=92 GFO community members (i.e., newsletter list and community google group). It found that GFO community members are engaged. Most feel that GFO has "meaningfully expanded" their professional network around teaching, with 75% agreeing or strongly agreeing with this statement. Those not attending events in the last year, however, report less of an impact on their network. Similarly, more than half have directly interacted with other users of GFO either a little (53%) or a lot (16%); usually through sharing or emailing with colleagues, or interacting with others at conferences. Email was noted particularly often as a mode of interaction. However, there is a subset who are less engaged in GFO: They are less likely to attend events and/or give student presentations and/or use local data. These less engaged users are also less likely to say that GFO had expanded their network, and less likely to have interacted with other users. They are somewhat more likely to be natural science and science education faculty. Many respondents were positive about GFO and grateful for the project.

Website analytics show good use and reach of the website. Notably:

- The page experiences good traffic: Over 5000 hits per month, and over 500 downloads per month. Most pages experience good traffic; at least 500 hits per 6 months.
- The retirement blog is the most visited page, followed by Home and Prospective teachers.
- Retirement and county specific salary data topped the downloads. • Users spend a long time on several of these pages.
- Three-quarters of sessions start on the Retirement plans blog post, Homepage, or Prospective teachers page.
- Many (20%) of users who start on Homepage continue to other GFO pages, but this is not true of those who start on the retirement page

Champion Journey Report presents data from14 interviews with GFO Champions, to understand where GFO fits into their "personal journey" in how they view and promote HS STEM teaching as a profession.

Champions' lived experiences form their attitudes towards teaching.

- Champions' **lived experiences** take the form of personal teaching experience, a teacher in the family, or interactions with practicing teachers.
- The **pandemic** typically did not influence these perceptions.

GFO supports Champions' self-efficacy: confidence, skill, and effectiveness**.**

- Most Champions decided to engage in teacher preparation long before learning about GFO.
- GFO helps them know that they are being **ethical** in recruiting future teachers (that teachers are indeed happy and paid well), and gives them **confidence** in their ability to be effective due to the quality of the GFO material content and professional formatting.
- They also feel that they have more **information** and detail about the teaching profession, GFO gives them **credibility** with other

faculty, and they get talking points about how to communicate about the teaching profession.

Perceptions vary by job role and background.

- Three main types of champions were identified: Champions focused on teacher education, STEM faculty focused on education, and STEM faculty not focused on education.
- The first two were driven by a personal mission to improve teacher education or improve STEM education
- STEM faculty not focused on education were driven by interest in advising students accurately, and were often deeply impacted by interacting with practicing teachers.
- Data about teacher shortages were important for STEM faculty, just as much so as accurate data about the profession.
- STEM faculty, especially advisors, are very reluctant to be seen as pushy about teaching; this reluctance arises internally rather than in response to GFO seeming pushy.

Major take-aways:

- Champions are using GFO resources in a wide variety of venues.
- Use in classrooms is very common (30 people): intro physics and other intro courses, especially, and also education-related courses and several upper-division courses.
- Champions are doing many student presentations in a variety of venues (24)
  - For example, student clubs, for high school and community college students, and university open houses (for accepted students).
  - Many gave student presentations without saying the venue, just saying it was for recruiting in some way.
- Several respondents specifically mentioned using GFO materials in recruiting for Noyce scholarships.
- Champions are doing many presentations to faculty and other educators (21).
  - For example, faculty or department meetings, professional development / education meetings, and a departmental faculty retreat. Several gave presentations without any details about the venue.
  - Some gave presentations to fellow teachers, school boards, and meetings of STEM teachers associations.
  - A couple gave conference presentations using GFO materials.
- Champions are also sharing GFO informally.
  - 20 shared with colleagues: e.g., via email or newsletter, in reports with STEM advisors, with the STEM Dean.
  - 21 shared with students: e.g., in conversations, at student fairs and career events, when talking with families or parents, and via emails and messages to students
- The posters, fliers and brochures are being shared. 14 have used the posters, e.g., hanging them up around the building, making a bulletin board. Many don't say how they used the posters. 13 use the fliers or brochures, posting them around campus, sharing them at recruiting events, and other unspecified uses.
- 7 people asked students and/or faculty to take surveys.
- 10 people share GFO through social media: Facebook, Twitter, sharing posts, the website, and videos.
- A few more uses include informing one Champion's own understanding, using the quiz, requesting local salary data, and unspecified uses.
- Probably about half of Champions use the GFO materials as-is, and the other half make some kinds of modifications.
  - FSI data finds that 58% say they modified and 42% said they did not. From the Appendix and Oct-sheet data in the tables below, 45% say they modified. But the real fraction is probably higher since some people may have modified but not said so.

Conclusions

GFO is a strong project with a clear vision: to develop resources and professional development to support positive perceptions of teaching among students, faculty, advisors, and teachers. This report and the detailed evaluation data in Year 4 demonstrate that it is achieving this vision:

- GFO strengthens local teacher recruitment efforts. GFO is used in a variety of ways at local institutions.
- GFO has multiple effective communication mechanisms, including website, YouTube, Facebook, newsletter, and blog.
- Faculty and student presentations are highly effective at conveying knowledge and changing perceptions.
- Awareness of GFO is high and growing.
- The number of Champions is continually growing and they are conducting activities, expanding the project reach, and incorporating local data.
- GFO Champions are very enthusiastic and grateful for the resources.
- GFO is having meaningful, direct impacts on student recruitment.

* What opportunities for training and professional development has the project provided?

Post-Doctoral Researchers and Research Associates

This project has had four Post-doctoral researchers. Three have been interested in professional development related to Physics Education Research. Post-doc Breakall, a Chemistry Education Researcher wanted to expand his DBER repertoire while Pearson and Logan had Astronomy research and Bio Physics research degrees respectively and wanted to move into PER. Pearson and Breakall have both taken permanent faculty positions and Logan has moved into a permanent technical writer position. Hue, the newest post-doc, is a condensed

matter physicist turned High School math and science teacher, who has come to us to become a Physics Education Researcher.
We have also hired four Teach@Mines graduates as Research Assistants. Grande's professional development has included qualitative work such as focus groups and interviews supervised by PI Adams, as well as quantitative work analyzing student perceptions data supervised by Dr. Breakall. Additionally, Grande has conducted several site visits and has become a sought-after national speaker. Lang, a Noyce Scholar and current math teacher, has worked with the project for five years. He's now a very experienced GFO presenter and expert at tabling. Ormes worked with the project as a graduate student in T@M developing media for GFO. She is now a Computer Science Teacher. Adams, a current Business teacher and Mines Econ grad, is shaping up our scoring spreadsheets for public view and doing final data analysis to close out this projects research efforts.

Communications and Marketing Specialist
Ashley Misiewicz came on board this spring. She brings an MA in Marketing and 12 years of experience. She brings a lot of knowledge to the team and we've been learning lots. She's also learned from Adams how to conduct focus groups and interviews to test her creations.

Project Coordinator
Allison Bolter has been the GFO project coordinator since the project was awarded NSF support. Bolter has engaged in extensive training and professional development over the past five years. This year she extended her duties to include leading the supervision and training of personnel who build the "A Teacher's Life by the Numbers" infographics. She also wrote her first blog article for the project last year. Bolter also engages in regular training on Mines human resource and finance policies since they've become very fluid this past 2 years.

Research Analysts
The project has maintained several part-time undergraduate researchers and recently began hiring new BS graduates to support the extensive research activities of GFO. These research analysts (RA) are or have been from different institutions including Mines, U. of North Texas, Brigham Young U., Virginia Commonwealth U., U. of Texas Rio Grande, U. of Southern California, and Florida State U.. GFO RAs have worked on various data collection and analysis activities as well as giving GFO presentations. They are being trained and supported by Adams, Breakall, and Bolter. In some cases, these assistants do not have a STEM degree so have required extensive training with Excel, quantitative analysis, and data visualization.

GFO/Mines personnel
All GFO/Mines personnel listed above meet with Adams a minimum of one hour per week and interact via email daily. In addition, they track their hours per project and provide weekly summaries of their activities. In this way, they receive regular timely feedback on all of their efforts.

STEM Faculty
In Y5 year we continue to enhance our faculty professional development efforts. We are working hard to further develop the GFO Community. We are working to communicate with and support this community through a range of mechanisms including one-on-one email, champion orientation webinars, 1individual zoom meetings, the GFO listserv, Facebook, Instagram, the GFO Newsletter, webinars, and a mini-conference.
Through workshops, Champion Orientations, coffee chats, one-on-one conversation, User Guide, and Presentation Guides we are working to support these folks in their recruitment efforts.

PI Project Management
PI Adams has gained extensive pm experience over the life of this grant but continues to enjoy support from GFO Sr. Advisor Gay Stewart and APS Director of Education Michael Wittmann and APS Head of Programs Monica Plisch. In addition, Adams finds thought partners in AAPT GFO coordinator Drew Isola, PC Bolter, Communications and Marketing Coordinator Misiewicz and Post doc Hue.

*** Have the results been disseminated to communities of interest? If so, please provide details.**
GFO is an Institutional and Community Transformation project; therefore, it's critical that we have an effective interactive dissemination and diffusion approach to facilitate faculty uptake of the GFO resources. This year we were forced to move back to a predominantly in person mode which is much more expensive than fully virtual. We have felt an extensive amount of additional engagement being back in person. We are still offering regular virtual opportunities through discipline specific coffee chats and Champion Orientations. We have also worked hard to communicate with our GFO Community described in previous sections.

GFO Central
As noted earlier, we have moved to depend on GFO Central to give most of the national presentations. In GFO 2.0 we have decided to move away from the Change Agent model, except for math. We have been transitioning slowly and now have two research assistants, both graduates of Teach@Mines, who have become expert presenters. PI Adams and Isola also attend some of these national opportunities but there are far too many for one person to cover. Frankly, the young research assistants/teachers are actually received more positively than PI Adams. Adams, however, remains the expert at building slide decks and builds out all GFO national presentations.

This year we had many invitations to present including Keynotes at Sumer AAPT, AAEE, UTeach Recruitment Summit, an APS Section meeting in Texas that included travel support.
Publications included a feature article on the "Back Page" of the APS News. Many others by GFO Central, ACS, and AMTE.

Association of Mathematics Teacher Educators

Yr 5 was AMTE's 3rd year working with the project. The AMTE/GFO Task Force (ie CAs) met monthly to strategize and plan efforts to share GFO with AMTE members and the broader mathematics education community.

- **GFO Workshops.** 6 local and 6 national
- Brainstormed how to transition CA and build sustainability in the AMTE GFO work.
- **Continue connecting with and mentoring new GFO Math Champions.** Currently, we have 84 math Champions total, and this year alone had 17 new Champions, a 25% increase from last year.
- **Planned the math session for the Fall GFO Mini-Conference -** building connections and capacity in the math education community to enhance teacher recruitment efforts.
- Connected with AMTE's Professional Learning Committee.
- **Made modifications to GFO materials.** The intent was not to change the primary messaging of the materials.
    - Recent data on college graduates' positive perceptions of their job.
    - Updated sample "Teacher's Life by the Number" Flyers based on inflation and housing and market values
    - U.S. Bureau of Labor Statistics JOLTS Report on annual and monthly quit rates by industry
    - 2021-2022 AAEE Educator Supply and Demand Report on various teaching positions
    - NCES Digest of Education Statistics drop in education degrees conferred
- **Held monthly coffee chats to support math champions.** Together, we identified important challenges, brainstormed, and shared solutions. Topics included:
    - Recruiting Strategies for the Fall Semester
    - Recent Teacher Retention Data
    - How to personalize GFO materials
    - Examine the "new and improved" Facts & Data section of the GFO website
    - Reflecting on MTEP-GFO preconference and how to start using GFO
    - Strategies and Lessons Learned Using GFO
    - How to present GFO to High School Students
- **GFO vendor table at AMTE Conference.**
- **Published GFO in AMTE Connections twice**
- **Held a joint pre-conference w/ Mathematics Teacher Education Partnership (MTEP) @ 2023 AMTE Conference.**

February 1, 2023 virtually via Zoom (52 participants) and in-person (71 participants) in New Orleans. Participants represented 86 different institutions, which included universities, colleges, state departments of education, K-12 school districts, NSF-funded projects, and private institutions. Survey respondents (N=46; SD= 0.52) rated 3.8 (out of 4.0) that they are interested in participating in future GFO events. Specific to GFO:

- Plenary Session: Planting the Seed to Cultivate More Pre-service Teachers: How Get the Facts Out Can Help. 93% of respondents said this session was somewhat or very useful.
- Session 1: Strategically Supporting and Developing a Teacher Recruitment Plan. 100% of respondents said this session was somewhat or very useful.
- Session 2: Building Interest in Mathematics Teaching: Presentations to Students (and Faculty) using the GFO Materials. 100% of respondents said this session was somewhat or very useful.
- **Collaborations with other math-related societies.**
    - Gary Martin invited to join CBMS (Conference Board of Mathematical Sciences) teacher recruitment working group
    - CBMS Dec meeting
    - SSMA President and AMATYC President (Feb 2023)

American Physical Society

CA'ss met monthly w/ APS Staff in 2022 to discuss project updates, local updates, implementation planning, the state of teacher preparation, and strategies for upcoming conferences and presentations. In 2023 CA Maier began leading monthly Coffee Chats which have small attendance but deep and fruitful discussions.

All nine currently supported PhysTEC Sites and the two Regional Networks continue to implement GFO at their institutions. The teams at Worcester Polytechnic Institute (WPI), University of Kansas, Bridgewater State University, Lewis University, and St. Mary's College of Maryland (SMCM) have been particularly active and successful in using GFO materials. WPI shared GFO materials with their Residence Life staff. University of Kansas saw an increase in their PTaP scores with students and found their department chair quoting GFO facts unprompted. Lewis University modified many materials to match their locale.

SMCM used GFO in an online version and had enough success to then develop GFO into a unit for courses. In addition, at every PhysTEC Site visit this year, GFO - not only for students, but for faculty from other disciplines like math and chemistry.

APS has focused on leveraging existing structures and communities. Where asking CAs to connect with new champions has been less successful, empowering PhysTEC Site Leaders to act as Champions has produced incredible results, as described above.

APS continues to engage PhysTEC member institutions through bimonthly emails, which are sent to over 700 faculty (30% open rate). Each included some mention of GFO. In addition, APS has advertised GFO in APS News.

American Chemical Society (ACS)

During Yr 5, areas of emphasis included:

- Supporting a team of CAs
- Hosting in-person and virtual GFO workshops and presentations
- Sustaining a web presence for GFO at www.acs.org/getthefactsout
- Disseminating information about GFO more broadly

CAs' communication occurred via videoconference and email. During Yr 5, chemistry change agents provided direction for chemistry-related project activities, conducted presentations, participated in broader GFO project activities, and disseminated information about GFO to a variety of networks.

Of particular note during yr 5:

- Two virtual coffee/lunch chats held for GFO chemistry champions and interested educators.
- An interactive presentation and meet-up at the 2022 Biennial Conference on Chemical Education at Purdue University (July 2022).
- A presentation at the Northeast Regional Meeting of the American Chemical Society (June 2023).

Promotion of GFO occurred through newsletters including *ACS Matters* (n = 150,000+), *ChemUnity News* (which goes to individuals interested in chemistry education), and a newsletter for chemistry faculty (n = 700+ chairs of chemistry departments). We also leveraged our network of ACS-Hach institutions (n=72), including information about GFO in regular communications with contacts at these IHEs. Information about GFO was also disseminated at ACS Education booths at the Fall 2022 and Spring 2023 ACS Meetings in Chicago and Indianapolis, respectively.

American Association of Physics Teachers: See report for grant # 1821462

* What do you plan to do during the next reporting period to accomplish the goals?

Consistent with the past three years, we have identified several strategic initiatives, these are new and enhanced activities for this coming year. Below that we have the strategic plan laid out by working group. This organization helps us track what needs to be done and who will accomplish it. These efforts are guided by the recommendations of the EE and are currently in draft form. Our annual meeting is in October, joint with the GFO/AAEE Conference, at which time we will seek additional recommendations from our NAB

Year 6 Top Priority Initiatives:

1. Document and publish GFO 1.0 outcomes including evidence to support what we've learned about each research question as articulated in the original proposal.
2. Obtain funding
3. Build and expand the GFO Community

AY 23/24 Strategic Plan outline, organized by Working Group (WG):

PI Team:

Approve 23-24 strategic plan, approve the NAB and Annual meeting agendas, approve NSF Final Annual Report, approve plan to seek additional funding, check on each WG's progress towards their 23-24 objectives.

APS:

In Y4, APS will focus on several different elements in partnership with PhysTEC. Most of our efforts are centered on recruiting PhysTEC site leaders to become GFO Champions. Advertise GFO in APS publications such as APS News, the Forum on Education Newsletter, and other settings. The APS project team and Physics Change Agents plan to integrate the Coffee Chats with the PhysTEC community by inviting legacy site leaders to attend; in this way the coffee chats become a recruitment tool for GFO as well as a community building space.

Continue to build relationship and trust with APS Careers, who are implementing a Career Mentoring Fellows program across departments in the USA. The long range goal is to have these Career Mentoring Fellows (target: 740) become GFO champions as part of their career mentoring work, so that they can share information about teaching as part of their work.

ACS:

Publish articles and/or announcements about GFO every month in several of the society's newsletters, including Chemunity News, ACS Undergraduate Programs and Faculty Newsletter, ACS Matters, GP Chemist, and InChemistry. Most of these newsletters reach targeted audiences in education (K-12 teachers, faculty, undergraduates, etc.). As budget permits, run targeted ads in these and other publications.

Send direct emails to known chemistry champions (quarterly) and to faculty members of the Amer. Assoc. of Chemistry Teachers (bi-annually) to engage them and invite them to activities and events. Conduct more GFO-themed "coffee chats" for faculty, GFO giveaways at ACS exhibition booths, and bi-annual presentations to ACS Society Committee on Education.

AMTE:

In Y4, AMTE plans to continue work towards formalize connections among other math organizations and projects that are working on math teacher recruitment. These include NCTM, CBMS, MTEP, SEC, 100Kin10, and the MAA's sub group on teacher recruitment. The purpose of these connections would be to identify dissemination opportunities that can broaden our reach and generally join forces to promote teaching as a career for mathematicians.

Continue its dissemination activities at national math education conferences (workshops and giveaways), and will organize another AMTE Pre-Conference with MTEP. Writing a manuscript that documents strategies and lessons learned to submit to the Mathematics Teacher Educator (MTE) Journal.

- Submitted GFO proposal for NCTM 2023 Annual Conference
- Submitted about strategies to talk about GFO to HS students at 2023 AAEE- GFO Annual Conference in October in Chicago, IL.

AAPT:

See report for grant # 1821462

Planning and Management

Draft NAB and Annual meeting agendas, Coordinate the GFO Annual Conference in partnership with AAEE, plan and submit final NSF annual report, submit GFO 2.0 IUSE proposal, submit GFO Annual Conference proposal, seek additional funding, and coordinate the full documentation of project outcomes and their publication in journal articles and the GFO website.

Champion Engagement Strategy

Coordinate and prioritize all project activities that engage champions and support the GFO Community of Practice. Organize Fall GFO/AAEE in person conference; Provide quarterly Champion Orientations; Maintain Champion Listserv; Create and publish bi-monthly Newsletter; Maintain Champion listing on the website; Conduct regional data mining (for teacher salaries and costs of living) by request; Coordinate with the PI Team to identify the best workshop/colloquia opportunities and assign presenters; Plan, coordinate, and post blog articles from various WGs or Champions every 2-3 weeks; Identify champion needs for the website or resource WGs.

Resource Development

Build out the Research page to host all GFO research results, research reports, evaluation reports, and publications. Draft and user-test career profiles for the GFO Site and potentially other existing Career Resources. Develop emotional messaging and resources that will engage and empower faculty to talk about teaching. Maintain and update website as needed.

Continue to post videos on our YouTube channel and on the GFO website. Write a blog on teacher salaries and other topics.

Research Team

Build a report that organizes research data by research question as written in the original proposal; Attend and present GFO research presentations at societies' and other national meetings; Conduct BYU Site visit; Publish PTaP and PTaP.HE papers; Draft the All Freshman study paper; Repeat the All Freshman study at Mines. Create 1-2 blog articles on research topics for the website. Plan and engage in PD in STEM education research. Collect data from any Study Sites interested in Fall '23 collection and prepare Yr 5 reports for each. Analyze FSI and SSE data for Yr 5 and compare across Years 1-5. Collect Y6 and Yr(-1,-2) enrollment data.

Evaluation

Evaluation data and reports forthcoming are:

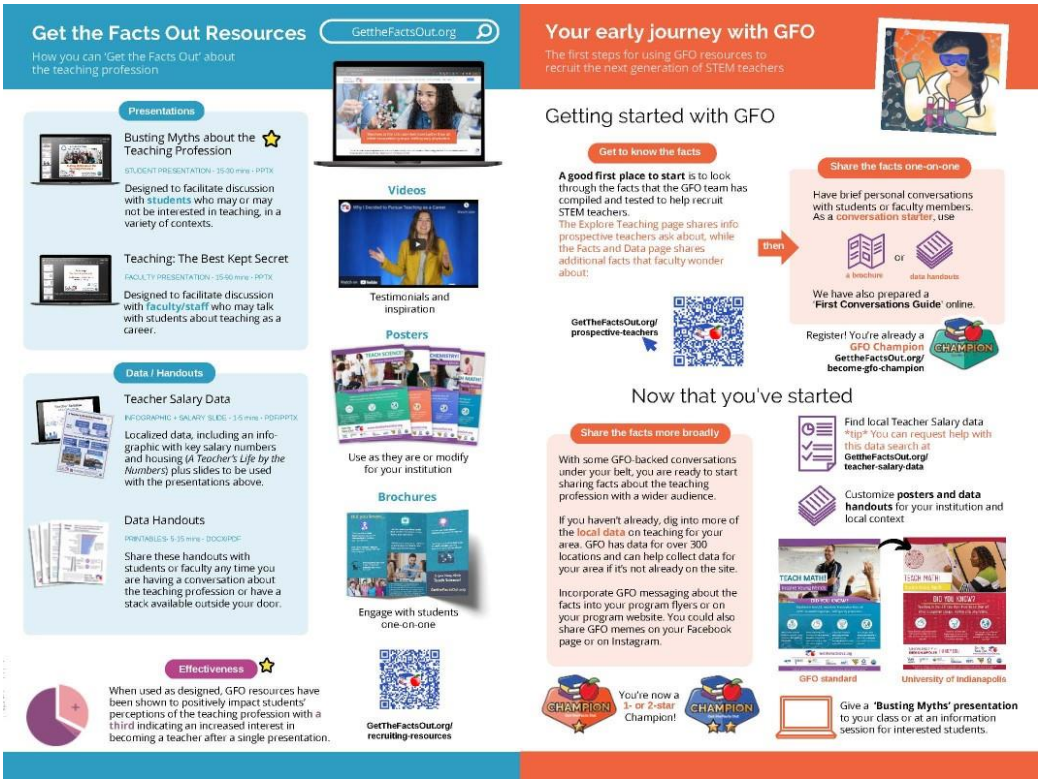
- **AMTE society awareness survey.** A follow-on survey for AMTE of awareness and perceptions of GFO. This survey is slated for Fall 2023.
- **Final GFO evaluation report.** A full analysis of outcomes across faculty and student surveys, and champion activity logs. This report is slated for development in Fall 2023.

Supporting Files

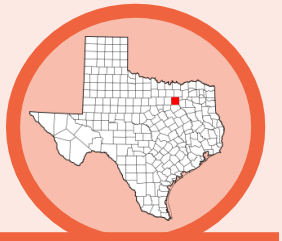
1. **External Evaluator's Annual Report Year 5:** GFO - 2023 - Annual evaluation report.pdf
2. **New Resources described in the Major Activities Section**

User Guide
Back and Front

User Guide
Inside pages



A TEACHER'S LIFE BY THE NUMBERS



Dallas County, TX

Teachers in the US **rate their lives better** than all other occupation groups, trailing only physicians.

SALARY

The **average** wage of all **full-time workers** in the county: **$80,440***

Base Salary →

1st Year Teacher with a B.A. **$61,100-$63,500**

15th Year Teacher with a M.A.+ **$68,450-$103,000**

Data from 2022-2024

Plus

FOR COACHING like head coach, debate, or band **$2,000-$11,500**

FOR CLUBS like robotics club or yearbook **$550-$13,000**

HOUSING

Median **home** value: **$319,793***

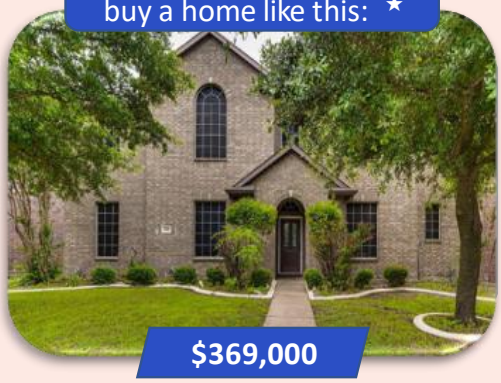
Fair Market rent for a **2-bedroom apartment: $1,352***

A salary of **$62,300** can buy a home like this: ★

$235,000

*With a 5% down payment, spending 36% of their income on housing

A salary of **$85,700** can buy a home like this: ★



$369,000

*With a 20% down payment, spending 36% of their income on housing

RETIREMENT

Most teaching jobs have better retirement benefits than other jobs you can get with the same degree.

59 Teacher average retirement age

4 YEARS EARLIER

63 All careers average retirement age

GettheFactsOut.org

Created by AA .6.23.23

*U.S. Bureau of Labor and Statistics, Zillow, U.S. Department of Housing and Urban Development

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation. NSF DUE 1821710 & 1821462.

Flyer Template #1
Inside flap, back, front

Flyer Template #1
Inside when opened

3. Figures Referenced in the Accomplishments sections

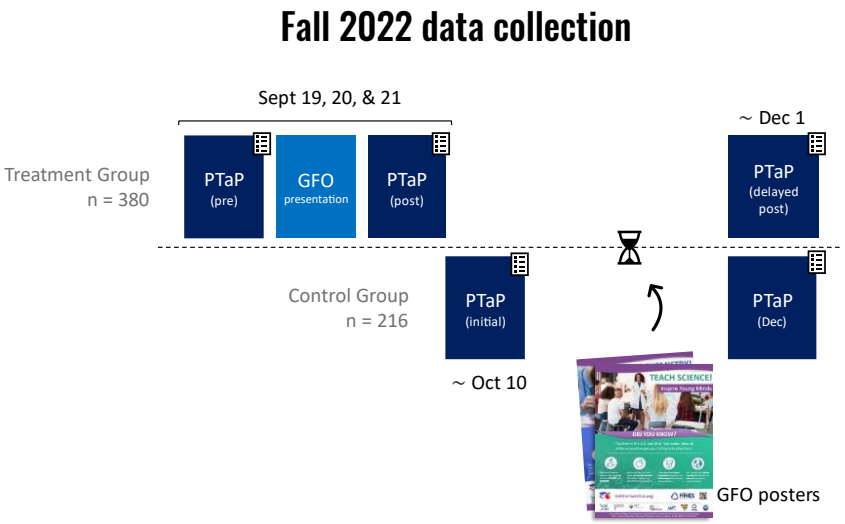


Figure 1

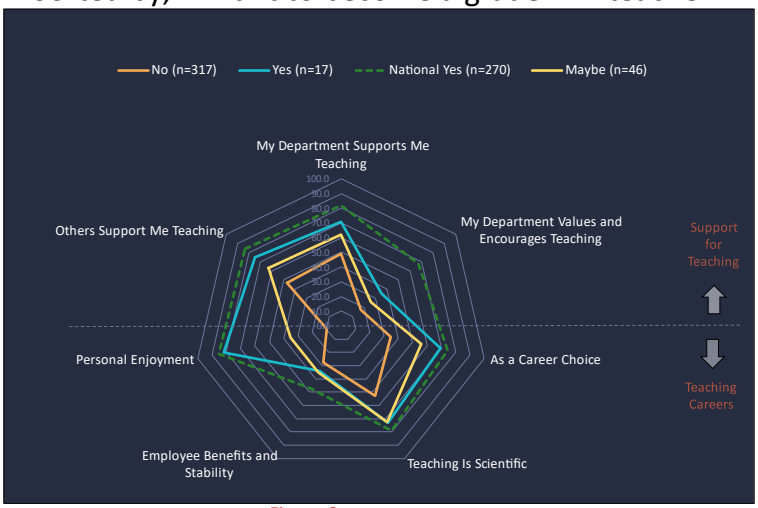


Figure 2

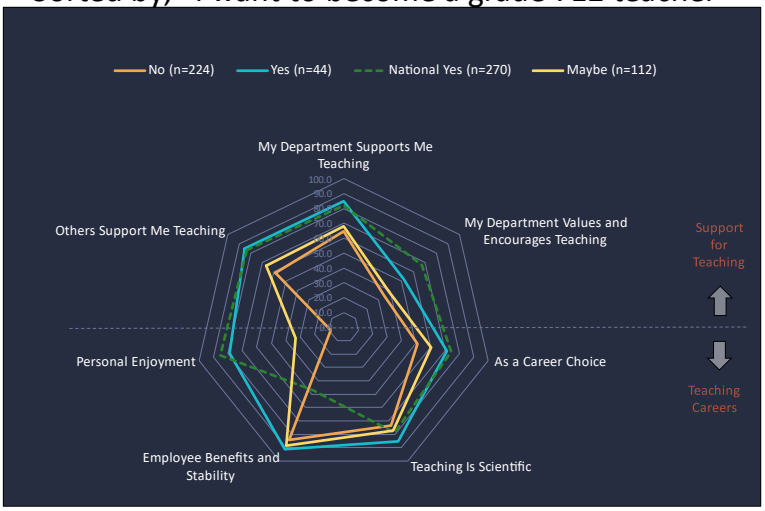


Figure 3

2022 **DEC** initial results – treatment group

Sorted by, "I want to become a grade 7-12 teacher"

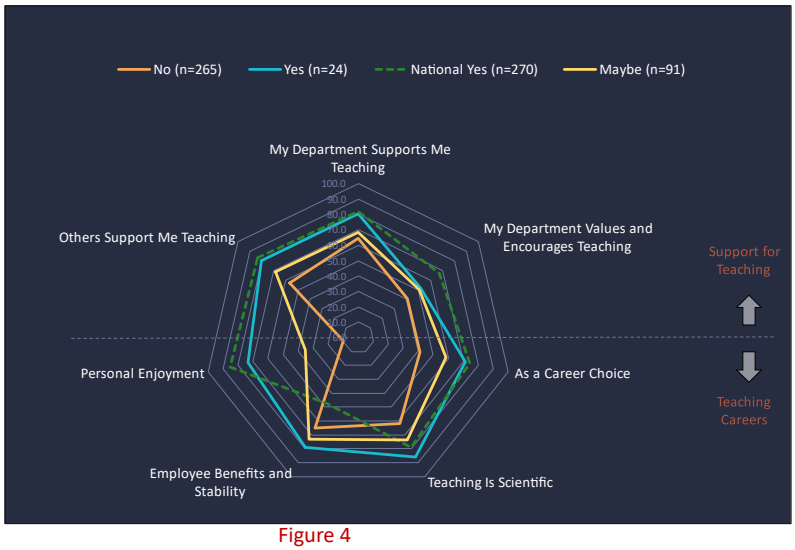


Figure 4

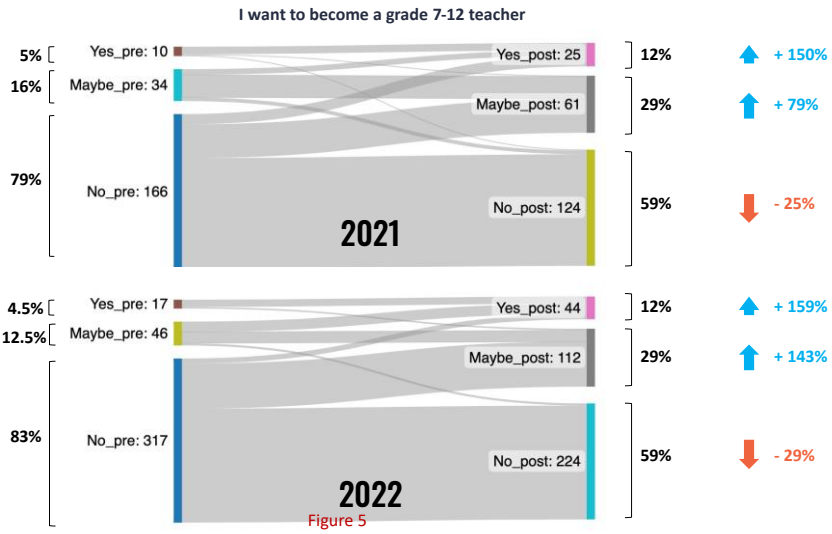


Figure 5

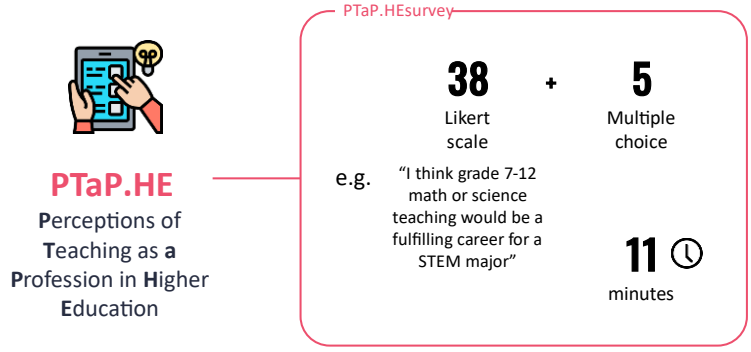


Figure 6

Fall 2022 data collection with faculty

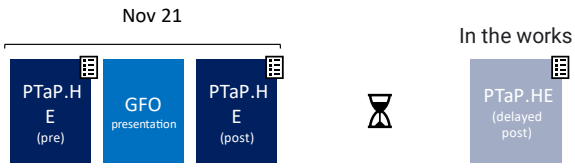


Figure 7

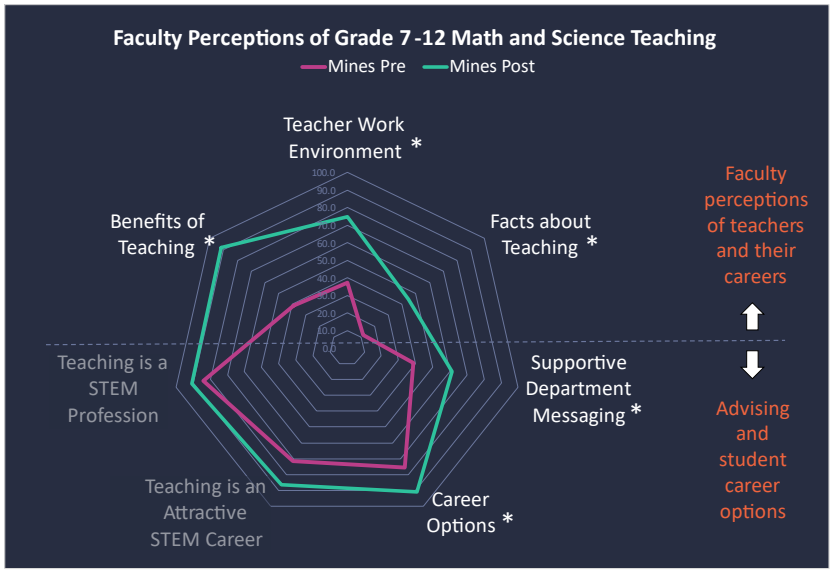
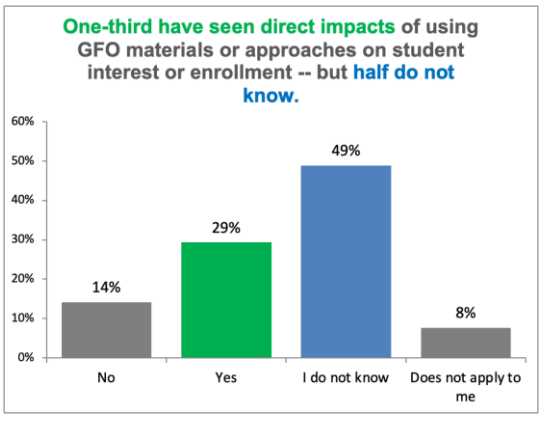


Figure 8

* Significant shifts ($p < 0.005$)



- Students continued to be engaged in following up with more information about the teacher prep program.
- Students take informational materials more frequently once they have had a few "myths" busted!
- Increased enrollment in education courses
- Started using data in fall 2022, spring enrollment in 1st course doubled.
- Some students have said that they changed their mind about teaching after watching the presentation (and subsequently have enrolled in our licensure pathway)
- students have moved into education tracks
- Estimating a few teacher program signups per presentation.

Figure 9

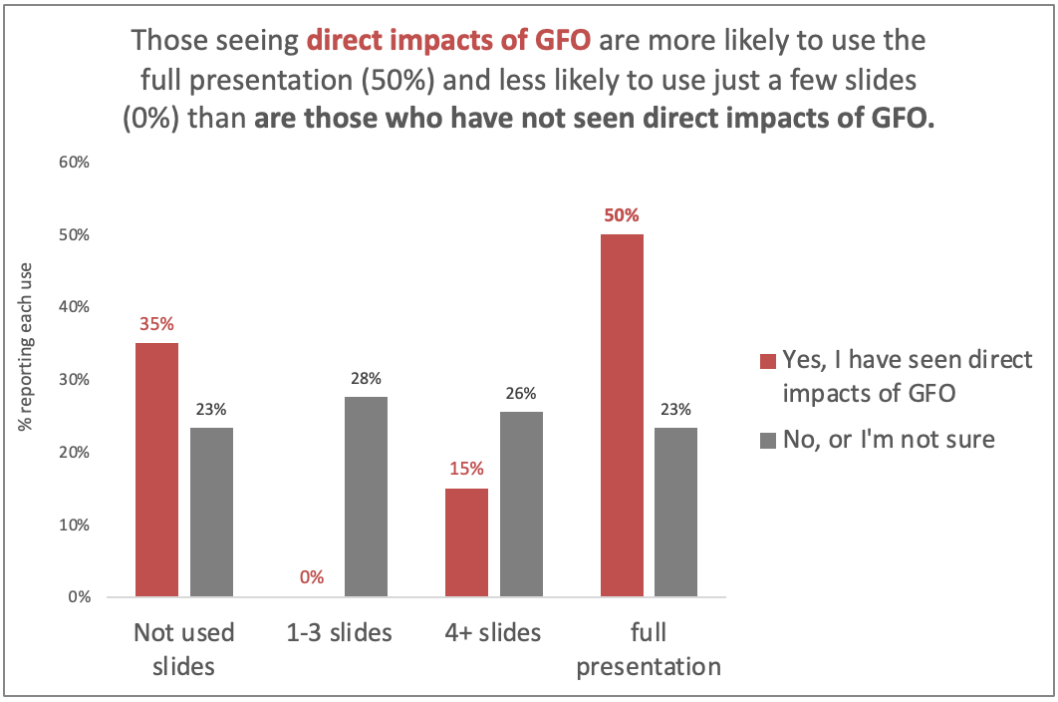
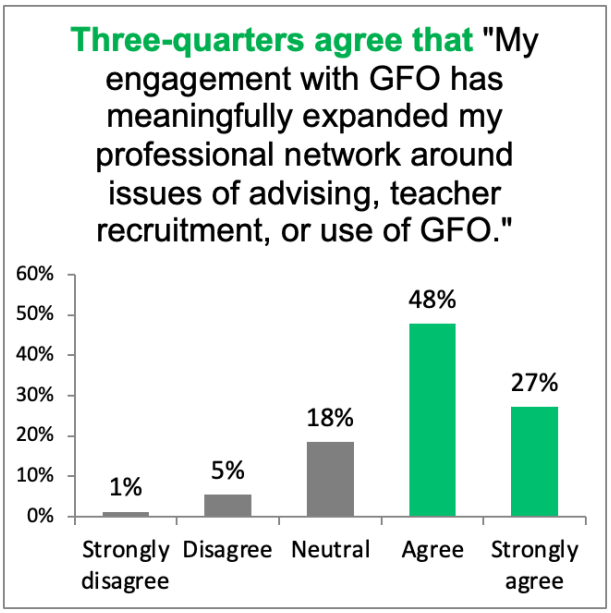


Figure 10



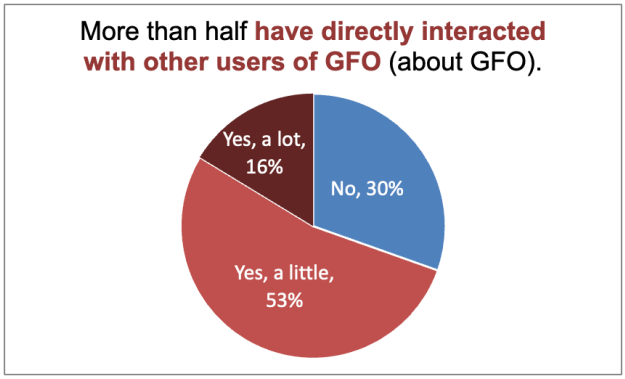


Figure 11

Products

Books

Book Chapters

Inventions

Journals or Juried Conference Papers

View all journal publications currently available in the NSF Public Access Repository for this award.

The results in the NSF Public Access Repository will include a comprehensive listing of all journal publications recorded to date that are associated with this award.

Breakall, Jared B. and Logan, Savannah L. and Adams, Wendy K.. (2021). Faculty perceptions of grade 7-12 math and science teaching as a career: Evidence from a reduced-basis factor analysis of the PTAP.HE Instrument. *2021 Physics Education Research Conference Proceedings*. 57 to 62. Status = Added in NSF-PAR Federal Government's License = Acknowledged. (Completed by Adams, Wendy on 07/07/2022) doi: https://doi.org/10.1119/perc.2021.pr.Breakall

Logan, Savannah L. and Breakall, Jared B. and Adams, Wendy K.. (2021). A comparison of student perceptions of the teaching profession at minority-serving and non-minority-serving institutions. *Physics Education Research Conference Proceedings*. 239 to 244. Status = Added in NSF-PAR Federal Government's License = Acknowledged. (Completed by Adams, Wendy on 07/07/2022) doi: https://doi.org/10.1119/perc.2021.pr.logan

Breakall, Jared B. and Logan, Savannah L. and Pearson III, Richard L. and Pyper, Brian A. and Adams, Wendy K.. (2020). Maybe we aren't that different after all: Faculty perceptions of grade 7-12 teaching as a career. *2020 Physics Education Research Conference Proceedings*. 51 to 56. Status = Added in NSF-PAR Federal Government's License = Acknowledged. (Completed by Adams, null on 07/15/2021) doi: https://doi.org/10.1119/perc.2020.pr.Breakall

Logan, Savannah L. and Breakall, Jared B. and Pearson, Richard L. and Adams, Wendy K.. (2020). College faculty support for grade 7-12 teaching careers: survey results and comparisons to student perceptions. *2020 Physics Education Research Conference Proceedings*. 291 to 296. Status = Added in NSF-PAR Federal Government's License = Acknowledged. (Completed by Adams, null on 07/15/2021) doi: https://doi.org/10.1119/perc.2020.pr.Logan

Pearson III, Richard L. and Logan, Savannah L. and Adams, Wendy K.. (2020). Faculty perception insights obtained from faculty interviews during the development of the Perceptions of Teaching as a Profession in Higher Education (PTaP.HE) instrument. *2020 Physics Education Research Conference Proceedings*. 394 to 399. Status = Added in NSF-PAR Federal Government's License = Acknowledged. (Completed by Adams, null on 07/15/2021) doi: https://doi.org/10.1119/perc.2020.pr.Pearson ...

Logan, Savannah L. and Pearson III, Richard L. and Adams, Wendy K.. (2020). GFO copywrite: development and testing of written and visual materials for recruiting STEM teachers. *PERC 2019*. . Status = Added in NSF-PAR Federal Government's License = Acknowledged. (Completed by Adams, Wendy on 07/28/2020) doi: https://doi.org/10.1119/perc.2019.pr.Logan

Adams, W. K. and Plisch, M. and Plantt, T.. (2019). Have a passion for teaching? Consider high school teaching. *American Journal of Physics*. 87 (5) 328 to 329. Status = Added in NSF-PAR Federal Government's License = Acknowledged. (Completed by Adams, Wendy on 06/23/2019) doi: https://doi.org/10.1119/1.5094433

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Other Conference Presentations / Papers

Joe Kozminski (2023). *"Get the Facts Out: Physics/STEM teacher prep at Lewis"*. SPS Zone 9 Meeting ("GFO Breakfast"). Romeoville, IL (and hybrid). Status = OTHER; Acknowledgement of Federal Support = Yes

Drew Isola and Mark Hannum (2022). *"The Physics Teacher Shortage: Where do you fit in?" - an informal discussion*. AAPT Summer Meeting. "The Physics Teacher Shortage: Where do you fit in. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Nielson (2022). *15 min Student Presentation Busting Myths*. General Chemistry for non-majors. Brigham Young University, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Nielson (2022). *15 min Student Presentation Busting Myths*. General Chemistry for non-majors (2). Brigham Young University, UT.

Status = OTHER; Acknowledgement of Federal Support = Yes

Ellen Yezierski (2023). *4/25/2023*. Faculty Meeting - Chemistry & Biochemistry Department. Oxford, OH. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee, Glenn Waddell, Amy Roth-McDuffie, Tim Hendrix, Gary Martin (2021). *AMTE Get the Facts Out Webinar*. AMTE members interested in AMTE GFO work. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Elizabeth Sturm (2022). *Becoming a Teacher*. Campus Visit Day. Lewis University, IL. Status = OTHER; Acknowledgement of Federal Support = Yes

Jane Long and Leslie West (2022). *Best Kept Secret*. Center for Career and Professional Development team meeting. Nacogdoches, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Jane Long and Brittney Falahola (2022). *Best Kept Secret Faculty Presentation*. Department of Mathematics & Statistics faculty meeting. Nacogdoches, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Best practices for building a marketing campaign targeting practicing teachers*. AAEE Webinar Series. virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Etta Gravely, Terri Chambers, and Jenn Neilson (2022). *Biennienal Conference on Chemistry Education GFO Workshop: Secondary Chemistry Teaching*. UTeach Co-directors Meeting. Austin, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Gary Martin, Amy Roth McDuffie, Jean Lee, Glenn Waddell (2023). *Building Interest in Mathematics Teaching: Presentations to Students (and Faculty) using the GFO Materials*. MTEP-GFO pre-conference. New Orleans, LA. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell (2022). *Busting Myths*. New Physics, Chemistry Teaching Students. BYU, Provo, Utah. Status = OTHER; Acknowledgement of Federal Support = Yes

Robin Smith (2023). *Busting Myths*. Step 1 section course. Tallahassee, FL. Status = OTHER; Acknowledgement of Federal Support = Yes

Elias Euler and Liz Ruzicka (2022). *Busting Myths - 30 minutes*. Physics and Chemistry Teaching Techniques. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Jeffrey J. Williams (2022). *Busting Myths 15 min*. PHYS 143 class. Bridgewater, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Allison Daubert (2022). *Busting Myths 15 min*. Modern Physics Class. Bridgewater, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Allison Daubert (2022). *Busting Myths 15 min*. Intro Physics Two class. Bridgewater, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall, Savannah Logan (2020). *Busting Myths About the Teaching Profession*. West Virginia University site visit. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall, Savannah Logan (2020). *Busting Myths About the Teaching Profession*. Student Seminar Colorado School of Mines GFO Site Visit. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall, Savannah Logan (). *Busting Myths About the Teaching Profession*. Presentation to the Colorado School of Mines Society of Physics Students. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall (2020). *Busting Myths About the Teaching Profession*. GFO Site Visit Focus Group. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Adria Brown (2021). *Busting Myths About the Teaching Profession*. Social for Colorado School of Mines students. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Emma Khorunzy (2021). *Busting Myths About the Teaching Profession*. SUMMET Week 4 (Summer Multicultural Engineering Training) for juniors from CO and OK. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Emma Khorunzy (2021). *Busting Myths About the Teaching Profession*. SUMMET week 5 (Summer Multicultural Engineering Training) for Juniors from CO and OK. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Emma Khorunzy (2021). *Busting Myths About the Teaching Profession*. SUMMET Week 6 (Summer Multicultural Engineering Training) for juniors from CO and OK. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Emma Khorunzhy (2021). *Busting Myths About the Teaching Profession*. Challenge Summer program BBQ. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell, Adam Bennion, Clint Goldman (2021). *Busting Myths About the Teaching Profession*. Introduction to teaching Physical Science and Physics 191 Careers in Physics Class. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Emma Khorunzhy (2021). *Busting Myths About the Teaching Profession*. Intro Chemistry & Intermediate Mechanics Class. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Emma Khorunzhy (2021). *Busting Myths About the Teaching Profession*. Intro Chemistry & Intermediate Mechanics Class (second presentation). Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Emma Khorunzhy (2021). *Busting Myths About the Teaching Profession*. Intro Chemistry & Intermediate Mechanics Class (Third presentation). Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Dawson Lang (2021). *Busting Myths About the Teaching Profession*. GFO All Change Agent Meeting. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Emma Khorunzhy (2021). *Busting Myths About the Teaching Profession*. SCED333/SCED598A – Educational Psychology and Assessment. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Dawson Lang, Emma Khorunzhy (2021). *Busting Myths About the Teaching Profession*. Teach@Mines Semesterly Ice Cream Social. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Busting Myths About the Teaching Profession*. St. Vrain Innovation Center Ethical Hacking course. Longmont, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Busting Myths About the Teaching Profession*. St. Vrain Innovation Center P-TEACH Understanding (Dis)Abilities. Longmont, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Busting Myths About the Teaching Profession*. St. Vrain Innovation Center P-TEACH Child Development course. Longmont, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Busting Myths About the Teaching Profession*. St. Vrain Innovation Center, Studio Film Production. Longmont, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Busting Myths About the Teaching Profession*. St. Vrain Innovation Center: Applied Robotics. Longmont, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Busting Myths About the Teaching Profession*. St. Vrain Innovation Center: TriCaster class. Longmont, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang (2022). *Busting Myths About the Teaching Profession*. SPS meeting. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Busting Myths About the Teaching Profession*. Teach@Mines Career Event. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee (2022). *Busting Myths About the Teaching Profession*. SOE Preview Day. Indianapolis, IN. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Lucy Grande (2022). *Busting Myths About the Teaching Profession*. Duane's Physical Science class. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Jordan Harshman (2021). *Busting Myths About the Teaching Profession*. Honors Chemistry Course. Auburn University, AL. Status = OTHER; Acknowledgement of Federal Support = Yes

Daniel Bolton (2021). *Busting Myths About the Teaching Profession*. Physics Education Research Group Meeting. CU Boulder, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Joe Kozminski (2021). *Busting Myths About the Teaching Profession*. General Physics 1 class (1st year physics and chemistry majors). Lewis University, IL. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2021). *Busting Myths About the Teaching Profession*. LA Pedagogy class. Texas A&M - Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2021). *Busting Myths About the Teaching Profession*. LA Pedagogy class: Section II. Texas A&M - Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Steven Maier (2021). *Busting Myths About the Teaching Profession*. Biochemistry class (upper level biology/chemistry students). NWOSU, OK. Status = OTHER; Acknowledgement of Federal Support = Yes

Josh Stowers (2021). *Busting Myths About the Teaching Profession*. Introduction to Biology Teaching Course. BYU, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Arthur Eisenkraft (2021). *Busting Myths About the Teaching Profession*. Student Orientation. UMass Boston, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Stephanie Casey (2022). *Busting Myths About the Teaching Profession*. STEM Education Webinar hosted by Washtenaw Community College and Eastern Michigan University. Eastern Michigan University, MI. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2022). *Busting Myths About the Teaching Profession*. Calculus 1 class. Texas A&M - Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2022). *Busting Myths About the Teaching Profession*. Physics 2 class. Texas A&M - Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Liza Bondurant (2022). *Busting Myths About the Teaching Profession*. Local High Schools where interns are placed. Delta State University, MS. Status = OTHER; Acknowledgement of Federal Support = Yes

Jeffrey Williams (2022). *Busting Myths About the Teaching Profession*. Mechanics Class. Bridgewater State University, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Jeffrey Williams (2021). *Busting Myths About the Teaching Profession*. Physics One. Bridgewater State University, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Jeffrey Williams (2022). *Busting Myths About the Teaching Profession*. Physics One. Bridgewater State University, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Jeffrey Williams (2022). *Busting Myths About the Teaching Profession*. Physics Two. Bridgewater State University, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Jon Anderson (2022). *Busting Myths About the Teaching Profession*. Meeting with 14 Science Student Teachers. University of Minnesota, MN. Status = OTHER; Acknowledgement of Federal Support = Yes

Marta Magiera (2021). *Busting Myths About the Teaching Profession*. Math Student Meet-Up. Marquette University, WI. Status = OTHER; Acknowledgement of Federal Support = Yes

Amy Wagler (2021). *Busting Myths About the Teaching Profession*. STEM Teaching Training Program Orientation. The University of Texas at El Paso, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Thomas Brown (2021). *Busting Myths About the Teaching Profession*. Math Club. Appalachian State University, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

Thomas Brown (2021). *Busting Myths About the Teaching Profession*. Intro Physics Class. Appalachian State University, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

Thomas Brown (2021). *Busting Myths About the Teaching Profession*. Intro Physics Class II. Appalachian State University, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

Thomas Brown (2021). *Busting Myths About the Teaching Profession*. Intro Physics Class III. Appalachian State University, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

Thomas Brown (2021). *Busting Myths About the Teaching Profession*. Second Year Physics Class. Appalachian State University, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

Thomas Brown (2021). *Busting Myths About the Teaching Profession*. Pre Service Teacher Staff development. Appalachian State University, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

Thomas Brown (2022). *Busting Myths About the Teaching Profession*. Intro Physics class. Appalachian State University, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

April Nelms (2021). *Busting Myths About the Teaching Profession*. Shiloh High School. University of North Georgia, GA. Status = OTHER; Acknowledgement of Federal Support = Yes

Christine Liebe (2022). *Busting Myths About the Teaching Profession*. Computer Science Teaching Techniques class for pre- service teachers. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Liz Ruzicka (2022). *Busting Myths About the Teaching Profession*. SUMMET (week 3). Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Busting Myths About the Teaching Profession*. Physics TA Training. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Adam Bennion (2022). *Busting Myths About the Teaching Profession*. Chemistry Major Class. Prove, Utah. Status = OTHER; Acknowledgement of Federal Support = Yes

Joe Kozminski (2022). *Busting Myths About the Teaching Profession*. First year calculus-based physics class. Romeoville, IL. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Elias Euler, and Dawson Lang (2022). *Busting Myths About the Teaching Profession*. Teach@Mines Ice Cream Social. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Etta Gravely and Dr. Tanya Malloy (2022). *Busting Myths About the Teaching Profession*. CHEM 108- Chemistry Orientation Class. Greensboro, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

Drew Isola (2022). *Busting Myths About the Teaching Profession*. Friday Seminar for Hope College Biology Dept. Holland, MI. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams and Liz Ruzika (2023). *Busting Myths About the Teaching Profession*. Semesterly Ice Cream Social and information session. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall (2023). *Busting Myths About the Teaching Profession*. SCED 363 Course. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Catherine Putnam (2022). *Busting Myths About the Teaching Profession - 15 minutes*. Calc 1 class. Cleveland, MS. Status = OTHER; Acknowledgement of Federal Support = Yes

Jeff Hovermill (). *Busting Myths About the Teaching Profession - 15 minutes*. Math Ed Majors Course. Flagstaff, AZ. Status = OTHER; Acknowledgement of Federal Support = Yes

TJ Noviello (2023). *Busting Myths About the Teaching Profession - 15 minutes*. Teacher preparation program -- recent recruit retreat. Worcester, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Steve Maier (2023). *Busting Myths About the Teaching Profession - 15 minutes*. Teach Oklahoma students from Ponca City visiting campus. Alva, OK. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2023). *Busting Myths About the Teaching Profession - 30 Minute*. GFO Site Visit. Kennesaw, GA. Status = OTHER; Acknowledgement of Federal Support = Yes

Elias Euler (2023). *Busting Myths About the Teaching Profession - 30 minutes*. GFO Site Visit. Morgantown, WV. Status = OTHER; Acknowledgement of Federal Support = Yes

Elias Euler (2023). *Busting Myths About the Teaching Profession - 30 minutes*. Teach@Mines Ed Psych/Field Experience Course. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Liz Ruzicka (2023). *Busting Myths About the Teaching Profession - 45 Minutes (2)*. Mines Summer Multicultural Engineering Training Program. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Liz Ruzicka and Connor McGovern (2023). *Busting Myths About the Teaching Profession - 45 Minutes (3)*. Mines Summer Multicultural Engineering Training Program. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Liz Ruzicka (2023). *Busting Myths About the Teaching Profession - 45 minutes*. Mines Summer Multicultural Engineering Training Program. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2023). *Busting Myths About the Teaching Profession - 50 minute (2)*. GFO Site Visit. Kennesaw, GA. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2023). *Busting Myths About the Teaching Profession - 50 minute (3)*. GFO Site Visit. Kennesaw, GA. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2023). *Busting Myths About the Teaching Profession - 50 minute (3)*. GFO Site Visit. Kennesaw, GA. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2023). *Busting Myths About the Teaching Profession - 50 minutes (4)*. GFO Site Visit. Kennesaw, GA. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2023). *Busting Myths About the Teaching Profession - 50 minutes (5)*. GFO Site Visit. Kennesaw, GA. Status = OTHER; Acknowledgement of Federal Support = Yes

Susanne Lintz, Holli Gover, TD Evans (2022). *Busting Myths About the Teaching Profession - 60 minutes*. The Teacher Academy at Northmont High School. Clayton, Ohio. Status = OTHER; Acknowledgement of Federal Support = Yes

Brynja Kohler (2023). *Busting Myths About the Teaching Profession -30 min*. InTech Collegiate High School Career Day. North Logan, Utah. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Savannah Logan (2020). *Busting Myths About the Teaching Profession: Teach@Mines*. Mines Admissions Session. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Robin Smith (2022). *Busting Myths Student Presentation - 15-minutes*. Step 1 students. Tallahassee, FL. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2022). *Busting Myths Student Presentation 15-minutes*. Step 1 course. Tallahassee, FL. Status = OTHER; Acknowledgement of Federal Support = Yes

Robin Smith (2022). *Busting Myths Student Presentation-15-minutes*. Presentation to students in Step 1, first course in the UTeach model. Tallahassee, FL. Status = OTHER; Acknowledgement of Federal Support = Yes

Soleste Hilberg and Sumita Jaggar (2023). *Busting Myths about Math and Science Teaching*. STEM ED Central Coast Conference. Monterey, CA. Status = OTHER; Acknowledgement of Federal Support = Yes

Richard L. Pearson III (2019). *Busting Myths about the Teaching Profession*. Chemistry Field Session Chemistry. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Savannah Logan (2019). *Busting Myths about the Teaching Profession*. Mathematics Field Session. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Jared Breakall (2021). *Busting Myths about the Teaching Profession*. BYU Student Seminar. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall, Wendy Adams (2021). *Busting Myths about the Teaching Profession*. Math Ed department students and Faculty. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall, Wendy Adams (2021). *Busting Myths about the Teaching Profession*. STEM Teaching Majors at BYU. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang (2021). *Busting Myths about the Teaching Profession*. SUMMET Week 2. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang (2021). *Busting Myths about the Teaching Profession*. SUMMET week 3(Summer Multicultural Engineering Training) for Juniors from CO and OK. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Emma Khorunzy (2021). *Busting Myths about the Teaching Profession*. Colorado School of Mines Fall Kickoff. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Meghan Marrero (2021). *Busting Myths about the Teaching Profession*. Recruitment Event for Scholarship program. Mercy, NY. Status = OTHER; Acknowledgement of Federal Support = Yes

Steven Maier (2021). *Busting Myths about the Teaching Profession*. NWOSU Recruitment Event. Enid, OK. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2021). *Busting Myths about the Teaching Profession*. Physics 101. Texas A&M - Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2021). *Busting Myths about the Teaching Profession*. Physics 333 (Waves) class. Texas A&M - Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2021). *Busting Myths about the Teaching Profession*. Physics 2425. Texas A&M - Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2021). *Busting Myths about the Teaching Profession*. Physics 2426. Texas A&M - Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Steven Maier (2021). *Busting Myths about the Teaching Profession*. Organic Chemistry I class - CHEM 3114. NWOSU, OK. Status = OTHER; Acknowledgement of Federal Support = Yes

Steven Maier (2021). *Busting Myths about the Teaching Profession*. Chemistry for non-majors - CHEM 1105. NWOSU, OK. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell (2022). *Busting Myths about the Teaching Profession*. Intro Class to Physics Teaching. Brigham Young University, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Legleiter (2022). *Busting Myths about the Teaching Profession*. Presentation with five or more Local Community Colleges.. Fort Hays State University, KS. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2022). *Busting Myths about the Teaching Profession*. Chem 1311 lecture class. Texas A&M University- Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2022). *Busting Myths about the Teaching Profession*. Intro Physics Class. Texas A&M - Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2022). *Busting Myths about the Teaching Profession*. Intro Physics class. TAMU-Commerce, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Julie Grotophorst (2022). *Busting Myths about the Teaching Profession*. High School Educators Rising Club. Greendale School District, WI. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee (2021). *Busting Myths about the Teaching Profession*. U-Indy SOE Preview Day. Indianapolis, IN. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Busting Myths about the Teaching Profession*. Longs Peak Middle School Career Friday. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Nielson (2022). *Busting Myths about the Teaching Profession*. Math 101. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Lucy Grande (2022). *Busting Myths about the Teaching Profession*. Math Educators Club. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Dawson Lang (2022). *Busting Myths about the Teaching Profession*. Teach@Mines Ice Cream Social. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *Busting Myths about the Teaching Profession*. Kennesaw State Site Visit. Kennesaw, Georgia. Status = OTHER; Acknowledgement of Federal Support = Yes

Beverly Smith (2022). *Busting Myths about the Teaching Profession*. East Tennessee State University - presentation to students. Johnson City, TN. Status = OTHER; Acknowledgement of Federal Support = Yes

Jeff Williams (2021). *Busting Myths about the Teaching Profession*. Bridgewater State University. Bridgewater State University, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Three lab sections of Biology 324 Cell Biology. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Lecture section of BIOL 333 Identification of Animals. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Pre-recorded presentation posted to the Anat & Phys 1 class, BIOL 341. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Present to lecture session of Biochemistry, CHEM 361. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Present to CHEM/BIOTECH 380 Junior Seminar. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Present to lecture session of algebra-based physics 1, mostly jr and sr life science majors. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Virtual live presentation to algebra physics 1, mostly life science majors. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Present to lecture section of Calc based physics 1, mix of half physics freshmen, half jr/sr life science. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Present to PHYS 301 Advanced Physics Lab. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Present to lab section 1 of PHYS 311 Electronics. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Present to lab section 2 of PHYS 311 Electronics. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. GEOL 485 Senior Seminar. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. BIOL 230 General Zoology. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2021). *Busting Myths about the Teaching Profession*. Plant and Earth Science Department Faculty Meeting. University of Wisconsin - River Falls. Status = OTHER; Acknowledgement of Federal Support = Yes

Thomas Brown (2022). *Busting Myths about the Teaching Profession*. Appalachian State University. Appalachian State University, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

Tony Musumba (2022). *Busting Myths about the Teaching Profession*. Physics and Astronomy Club meeting. Riverside City College, CA. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Roan (2022). *Busting Myths about the Teaching Profession*. Career Day. Pike High School, Indianapolis. Status = OTHER; Acknowledgement of Federal Support = Yes

Tracy Halmi (2022). *Busting Myths about the Teaching Profession*. Penn State First-Year Seminar. Penn State Behrend. Status = OTHER; Acknowledgement of Federal Support = Yes

Barbara Reisner (2022). *Busting Myths about the Teaching Profession*. Sophomore Organic Course. James Madison University. Status = OTHER; Acknowledgement of Federal Support = Yes

Barbara Reisner (2022). *Busting Myths about the Teaching Profession*. Junior Chemistry Major Class. James Madison University. Status = OTHER; Acknowledgement of Federal Support = Yes

Barbara Reisner (2022). *Busting Myths about the Teaching Profession*. First Year Chemistry Majors Laboratory. James Madison University. Status = OTHER; Acknowledgement of Federal Support = Yes

Paul Miller (2022). *Busting Myths about the Teaching Profession*. Orientation for Physics Majors. West Virginia Universit. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *Busting Myths about the Teaching Profession*. Chemistry PTaP Study. Colorado School of Mines. Status = OTHER; Acknowledgement of Federal Support = Yes

Christine Liebe (2023). *Busting Myths about the Teaching Profession*. Computer Science Practices & Technological Impacts on Society class. Colorado School of Mines, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Joe Kozminski (2023). *Busting Myths about the Teaching Profession*. Physics Club at College of DuPage. Lewis University, IL. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Stanfield (2022). *Busting Myths about the Teaching Profession*. Phys 101 Class. Texas A&M - Commerce. Status = OTHER; Acknowledgement of Federal Support = Yes

Christopher Fischer (2022). *Busting Myths about the Teaching Profession*. Introductory Seminar. Lawrence, KS. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell (2022). *Busting Myths about the Teaching Profession*. Physics 291 Careers in Physics Class. Provo, Utah. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Docktor (2022). *Busting Myths about the Teaching Profession*. Weekly Physics Department Seminar. La Crosse, Wisconsin. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams and Drew Isola (2022). *Busting Myths about the Teaching Profession*. GFO New Champion Orientation. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Amy Greene (2023). *Busting Myths about the Teaching Profession*. Edu183 Course. Albright College. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams and Connor McGovern (2023). *Busting Myths about the Teaching Profession*. Teach@Mines Career Fair. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams and Elias Euler (2023). *Busting Myths about the Teaching Profession*. SCED415 class presentation. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Sarah Dyess (2023). *Busting Myths about the Teaching Profession*. Professional Development for current Teacher Candidates. Huntsville, AL. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2022). *Busting Myths about the Teaching Profession - 15 minutes*. Upper level physics (Optics). River Falls, WI. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2022). *Busting Myths about the Teaching Profession - 15 minutes*. class for calc-based physics at UWRF. River Falls, WI. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2022). *Busting Myths about the Teaching Profession - 15 minutes*. calc based physics 1 class at UWRF. River Falls, WI. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2022). *Busting Myths about the Teaching Profession - 15 minutes*. algebra-based physics 1. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett (2022). *Busting Myths about the Teaching Profession - 15 minutes*. algebra physics 1 (2). River Falls, WI. Status = OTHER; Acknowledgement of Federal Support = Yes

Valerie Long (2022). *Busting Myths about the Teaching Profession - 30 minutes*. Freshman Math Seminar. Indiana, PA. Status = OTHER; Acknowledgement of Federal Support = Yes

Sarah Dyess (2023). *Busting Myths about the Teaching Profession - 30 minutes*. UAH Education Day. Huntsville, AL. Status = OTHER; Acknowledgement of Federal Support = Yes

Sarah Dyess (2023). *Busting Myths about the Teaching Profession - 30 minutes (2)*. UAH Education Day (2 presentations). Huntsville, AL. Status = OTHER; Acknowledgement of Federal Support = Yes

Richard Pearson (2021). *Busting Myths about the Teaching Profession / Teaching: The Best Kept Secret!*. Virtual Physics Department Colloquium. Embry-Riddle Aeronautical University, FL. Status = OTHER; Acknowledgement of Federal Support = Yes

Linda Venenciano (2021). *Busting Myths about the Teaching Profession / Teaching: The Best Kept Secret!*. Series of meetings with 2-year and 4-year college counselors and math faculty. University of Hawaii, Manoa. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *Busting Myths about the Teaching Profession and Focus Group*. Kennesaw State Site Visit. Kennesaw, Georgia. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *Busting Myths about the Teaching Profession and Focus Group*. University of Wisconsin - La Crosse Site Visit. La Crosse, WI. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *Busting Myths about the Teaching Profession and Focus Group - 1 student*. Kennesaw State Site Visit. Kennesaw, Georgia. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *Busting Myths about the Teaching Profession and Focus Group - MAT students*. Kennesaw State Site Visit. Kennesaw, Georgia. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *Busting Myths about the Teaching Profession and Focus Group - group of students*. Kennesaw State Site Visit. Kennesaw, Georgia. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee (2022). *Busting Myths to IUPUI Faculty using Student-Facing Presentation*. IUPUI STEM faculty. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Robin Smith and MaLynn Kelso (2023). *Busting myths*. Step 1 section course. Tallahassee, FL. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell (2022). *Busting myths about the teaching professio*. REU and RET seminar. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Liz Ruzicka (2022). *Busting myths about the teaching profession*. SUMMET. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Elizabeth Ruzicka (2022). *Busting myths about the teaching profession*. SUMMET (week 2). Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee, Amy Roth McDuffie, Gary Martin, Tim Hendrix, and Glenn Waddell (2022). *Busting myths about the teaching profession*. AMTE Coffee Chat. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Richard Pearson (2022). *Busting myths about the teaching profession - 15 minutes*. EP345 course for A&A majors. Daytona Beach, FL. Status = OTHER; Acknowledgement of Federal Support = Yes

Ellen Yezierski (2021). *Career Exploration: High School Chemistry Teaching*. First year CHM and BCHM undergraduate majors at Miami University. Oxford, OH. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee, Travis Miller (2021). *Changing the Narrative of the Teaching Profession Through Data*. Hoosier Association of Science Teachers Inc, Indiana Council Teachers of Mathematics Virtual 2021 Conference. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee (2023). *Changing the Narrative of the Teaching Profession Through Data*. HASTI-ICTM - State Science and Math Conference. Indianapolis, IN. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee (2022). *Changing the Narrative of the teaching profession*. ELED 451 class. Indianapolis, IN. Status = OTHER; Acknowledgement of Federal Support = Yes

Sarah Formica (2021). *Did You Know... Busting Myths about Teaching*. CU Boulder Physics faculty meeting. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

IUSE PI Summit (2022). *Explore Mines - Teach@Mines*. Explore Mines Student Event. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Drew Isola (2022). *Faculty-facing workshop ("Teaching: The best-kept secret")*. OSTA Awards dinner Keynote Speaker. Oklahoma City, OK. Status = OTHER; Acknowledgement of Federal Support = Yes

Jeff Williams and Allison Daubert (2023). *GFO 15 min*. Physics class. Bridgewater State University, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Drew Isola, and David May (2022). *GFO All Change Agent Meeting*. All Change Agent Meeting. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Drew Isola, Wendy Adams , and Allie Bolter (2023). *GFO Champion Orientation 90 min*. GFO Champion Orientation. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang (2023). *GFO Exhibitor table*. UTeach. Austin, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall, Savannah Logan (2021). *GFO Faculty Focus Group to Test Videos*. GFO-CSULB Faculty Focus Group to Test Videos. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Etta Gravely (2022). *GFO Interactive Presentation*. Biennial Conference on Chemical Education. Purdue University. Status = OTHER; Acknowledgement of Federal Support = Yes

Doug Petkie (2023). *GFO Poster*. APS-NES. Maui, Hawaii. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Nielson (2021). *GFO Seminar for Chemistry students*. Department of Chemistry and Biochemistry seminar for students. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall, Savannah Logan (2021). *GFO Student Focus Group to Test Videos*. GFO-CSULB Site Visit Student Focus Group. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall (2021). *GFO Video Focus Group*. CSU-Long Beach site visit. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Ellen Yezierski (2020). *GFO Workshop for CHM and BCHM Students*. CHM and BCHM Students. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

David May (2022). *GFO faculty workshop for CSULB*. Chairs and advisors for STEM and STEM education at CSULB. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Tonya Coffey (2022). *GFO for Faculty*. App State Program Directors. Boone, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

David May (2022). *GFO student workshop at CSULB*. GFO site visit to CSULB, 2022. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Terri Chambers, Etta Gravely. Jennifer Nielson, William Hunter, and Ellen Yezierski (2022). *GFO with Champions and Interested Educators*. Chemistry Coffee/Lunch Chat. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Terri Chambers, Etta Gravely. Jennifer Nielson, William Hunter, and Ellen Yezierski (2023). *GFO with Champions and Interested Educators*. Chemistry Coffee/Lunch Chat (2). Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

David May (2022). *GFO workshop for faculty at WVU*. GFO site visit for WVU 2022. Morgantown, WV. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2023). *Get The Facts Out: Research Presentation*. Association of Mathematics Teacher Educators Annual Pre- Conference. New Orleans, Louisiana. Status = OTHER; Acknowledgement of Federal Support = Yes

Tonya Coffey (2022). *Get the Fact Out*. Advisors in the College of Arts and Sciences. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell (2020). *Get the Facts Out*. Virtual Workshop. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy K. Adams (2020). *Get the Facts Out*. Presentation at Teach@Mines Ice Cream Social. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Savannah Logan, Jared Breakall (2020). *Get the Facts Out*. Ed Psych class at Colorado School of Mines. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Amy Roth McDuffie (2021). *Get the Facts Out*. Mathematics Education Graduate seminar for Washington State University and University of Idaho. Pullman, WA. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee (2021). *Get the Facts Out*. School of Education Leadership and UIndy Marketing for SOE. Indianapolis, IN. Status = OTHER; Acknowledgement of Federal Support = Yes

Glenn Waddell, Natasha Gerstenschlager, Nick Fortune (2021). *Get the Facts Out*. Kentucky AMTE Regional Meeting. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Nielson (2021). *Get the Facts Out*. Presentation for course of students exploring a MathEd career. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Tonya Coffey (2022). *Get the Facts Out*. James Center Advising Team. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee, Amy Roth McDuffie, Gary Martin, Tim Hendrix and Glenn Waddell (2022). *Get the Facts Out*. AMTE Webinar. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2021). *Get the Facts Out - Changing the Conversation around STEM Teacher Recruitment*. Utah Association of Education Employment. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell (2020). *Get the Facts Out Student*. Physics 191 careers in physics course. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell (2020). *Get the Facts Out Students*. 191 Physics career course. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Nielson, Duane Merrell (2021). *Get the Facts Out workshop*. Presentation to Career Services directors at BYU. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell (Physics) (2021). *Get the Facts Out, REU students*. REU summer students. Provo, Utah. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee, Amy Roth-McDuffie, Gary Martin, Glenn Waddell, Tim Hendrix (2021). *Get the Facts Out: AMTE Webinar*. Webinar for AMTE Members. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee, Glenn Waddell (2021). *Get the Facts Out: CT-AMTE Webinar*. Connecticut AMTE. Fairfield, CT. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2020). *Get the Facts Out: Changing the Conversation Around STEM Teacher Recruitment*. PhysTEC NAB. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Terri M Chambers, Jennifer Nielson, Willy Hunter, Etta Gravely (2021). *Get the Facts Out: Chemistry Connection*. Webinar. Washington. Status = OTHER; Acknowledgement of Federal Support = Yes

Drew Isola and Elias Euler (2023). *Get the Facts Out: Developing Your Teacher Recruitment Plan 75 min*. Annual PhysTEC Conference. Las Vegas, NV. Status = OTHER; Acknowledgement of Federal Support = Yes

Timothy Hendrix, Gary Martin, Stephanie Casey, Chuck Fessler (2021). *Get the Facts Out: Faculty Workshop for Michigan AMTE Affiliate*. Michigan AMTE Affiliate Webinar. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Nielson (2021). *Get the Facts Out: MathEd 377*. MathEd 377 course (the semester before student teaching) at BYU. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams and Ty Valentine (2022). *Get the Facts Out: Repairing the Reputation of the Teaching Profession*. AAEE Keynote opening session. Baltimore, MD. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams and Ty Valentine (2022). *Get the Facts Out: Repairing the Reputation of the Teaching Profession*. AAEE Breakout Session. Baltimore, MD. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2023). *Get the Facts Out: Repairing the Reputation of the Teaching Profession*. UT Recruitment Summit - Lunch Plenary. Austin, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Glenn Waddell, Jr. (2023). *Get the Facts Out: Research, Resources, and Strategies for Recruiting STEM Teachers - One Hour*. UTeach Conference 2023. Austin TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *Get the Facts Out: Site Visit at Kennesaw State University*. 6 student focus groups. Kennesaw, Georgia. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *Get the Facts Out: Site Visit at University of Wisconsin La Crosse*. Site Visit at University of Wisconsin La Crosse. La Crosse, Wisconsin. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell, Wendy K. Adams, Jennifer Nielson, Jared Breakall (2021). *Get the Facts Out: Students, Advisors, Faculty*. Physics and Physical Science Teaching Majors presentation during site visit. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2020). *Get the Facts Out: Teaching, The Best Kept Secret!*. 100Kin10 Steal this Session. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Timothy Hendrix, Glenn Waddell, Liza Bondurant (2021). *Get the Facts Out: Teaching, the Best Kept Secret*. Mississippi Association of Mathematics Teacher Educators (MAMTE) Annual Meeting. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Glenn Waddell and Gay Stewart (2022). *Get the Facts Out: User-Tester, Research-Based Resources for STEM Teacher Recruitment*. UTEACH STEM Educators Conference. Austin, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Sarah Formica (2021). *Get the Facts Out: Workshop for STEM Students*. Principles of Physics I class at UNG. Dahlonega, GA. Status = UNDER_REVIEW; Acknowledgement of Federal Support = Yes

Sarah Formica (2021). *Get the Facts Out: Workshop for STEM Students*. Zoom presentation for STEM students in the LA pedagogy class. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee (2020). *Get the Facts Out: Workshop for Secondary School of Education Majors*. Mandatory SOE Secondary Major Orientation Meeting. Indianapolis, IN. Status = OTHER; Acknowledgement of Federal Support = Yes

Glenn Waddell (2023). *Get the Facts Out; Research, Resources, and Strategies for Recruiting STEM Teachers - 60 minutes*. UTeach Conference. Austin, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Jared Breakall and Savannah Logan (2020). *Get the Facts out - Faculty*. Colorado School of MInes GFO Site Visit. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Willy hunter (2023). *Get the facts out -25 minutes*. Midwest Noyce Regional Meeting. Little Rock AR. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Blodgett and Dr. Joel Donna (2023). *Inspire Young Minds - TEACH!*. Biology 110 Freshman Seminar career in teaching week. River Falls, WI live. Status = OTHER; Acknowledgement of Federal Support = Yes

Tonya Coffey (2022). *Intro to GFO*. STEM Program Directors at AppState. Boone, NC. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell (2020). *Intro to teaching*. Physics 276 course. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Leslie West and Dr. Jane Long (2022). *JacksTeach - Get the Facts Out*. College of Sciences and Math Advisors. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Melanie Pivarski (2023). *Myth Busting*. 2023 Roosevelt NOYCE Summer Institute. Roosevelt University, IL. Status = OTHER; Acknowledgement of Federal Support = Yes

Etta Gravely, Ginger Redd, Tyrette Carter, Calisha Petty (2021). *NC A & Teach Scholars: Success and Growth Opportunities*. Southeastern Regional Robert Noyce Conference/ Administrators. Virtual- University of South Alabama , AL. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee, : Tim Hendrix, Glenn Waddell, Gary Martin and Amy Roth McDuffie (2022). *November Coffee Chat*. AMTE Coffee Chat. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Mark Hannum (2022). *Overview of GFO - its products and resources as a exemplar of NOYCE projects for potential PI*. NSF workshop: Noyce Teacher Scholarship Program for prospective PI. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *PTaP Study (Busting Myths 30min)*. PTaP Study - Mines Chemistry 101. Colorado School of Mines, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *PTaP Study (Busting Myths Student)*. PTaP Study - Mines Chemistry 101 (Day 2). Colorado School of Mines, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *PTaP Study (Busting Myths Student)*. PTaP Study - Mines Chemistry 101 (Day 3). Colorado School of Mines, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall (2021). *Past, Present, and Future Research*. Faculty members at SUU. Cedar City, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams and Steve Maier (2022). *Perceptions, Myths, and Positive Messaging: Flipping the narrative to advocate for science teacher education*. ASTE annual Conference. Salt Lake City, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Annelise Roti Roti (2022). *Physics Teaching: the Need, the Work, the Dream*. SUNY Geneseo Physics Colloquium. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2023). *Planting the Seed to Cultivate More Pre-service Teachers: How "Get the Facts Out" Can Help*. Association of Mathematic Teacher Educators Annual Pre-Conference. New Orleans, Louisiana. Status = OTHER; Acknowledgement of Federal Support = Yes

Steven Maier (2022). *Recruiting Teachers*. AAPT Summer Meeting 2022. Grand Rapids, MI. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee and Drew Isola (2023). *Repairing the Reputation of the Teaching Profession: Best Practices for STEM Teacher Recruitment*. American Association of Colleges of Teacher Education. Indianapolis, IN. Status = OTHER; Acknowledgement of Federal Support = Yes

Richard Pearson (2020). *Results of faculty interviews durign the development of the Perceptions of TEaching as a profession in Higher Education (PTaP.HE) instrument*. PERC 2020. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Todd D. Oberg (2023). *Roundtable with GFO resources*. Illinois Council of Teachers of Mathematics Annual Meeting. Illinois College. Status = OTHER; Acknowledgement of Federal Support = Yes

Gary Martin, Amy Roth McDuffie, Jean Lee, Glenn Waddell (2023). *Strategically Supporting and Developing a Teacher Recruitment Plan*. MTEP-GFO pre-conference. New Orleans, LA. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell (2022). *Student Get the facts out*. Physics Class. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Steve Maier (2023). *Table using GFO resources*. Teacher Fair. Northwestern Oklahoma State University. Status = OTHER; Acknowledgement of Federal Support = Yes

Todd D. Oberg (2023). *Table with GFO resources*. Central IL STEM Fair. Rochester, IL. Status = OTHER; Acknowledgement of Federal Support = Yes

Ty Valentine (2023). *Table with GFO resources*. St. Vrain School District Innovation Center Career Fair. Longmont, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Melanie Pivarski (2023). *Table with GFO resources*. Major Madness. Roosevelt University. Status = OTHER; Acknowledgement of Federal Support = Yes

Melanie Pivarski (2023). *Table with GFO resources*. Career Fair. Roosevelt University. Status = OTHER; Acknowledgement of Federal Support = Yes

TJ Noviello (2023). *Table with GFO resources*. Career Corner. Worcester Polytechnic Institution. Status = OTHER; Acknowledgement of Federal Support = Yes

Joe Kozminski (2023). *Table with GFO resources*. Campus Visit Day. Lewis University, IL. Status = OTHER; Acknowledgement of Federal Support = Yes

Liz Ruzicka (2023). *Table with GFO resources*. Explore Mines Organization fair. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Liz Ruzicka (2022). *Table with GFO resources*. Celebration of Mines. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Liz Ruzicka (2023). *Table with GFO resources*. Discover Mines. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Connor McGovern and Jia Wern Hue (2023). *Table with GFO resources*. Launch Resource Fair. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Connor McGovern and Dawson Lang (2023). *Table with GFO resources*. Colorado Education Recruitment Fair. Denver, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Connor McGovern (2023). *Table with GFO resources*. Launch Resource Fair (2). Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang and Connor McGovern (2023). *Table with GFO resources*. Launch Resource Fair (3). Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2020). *Teach@MInes*. Preview Mines. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Emma Khorunzy (2021). *Teach@MInes*. Discover Mines. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Adams, W. K., Plantt, T., and Norfleet, E. (2020). *Teach@Mines*. Teach@Mines Colorado School of Mines Foundation Lunch Bunch, Golden, CO. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Taylor Plantt and Eric Norfleet (2020). *Teach@Mines Lunch Brunch*. Mines Alumni monthly meeting. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Emma Khorunzhy (2021). *Teach@Mines Table at Discover Mines. Students walk around and learn about different Mines' programs*. Discover Mines. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

David May (2022). *Teachers quit at lower rates than most other professionals, 10 min.*. American Association of Physics Teachers Summer Meeting 2022. Grand Rapids, MI. Status = OTHER; Acknowledgement of Federal Support = Yes

Julie Talbot (2022). *Teaching High School Physics*. Class for freshman physics majors. Carrollton, GA. Status = OTHER; Acknowledgement of Federal Support = Yes

Michael Odell (2022). *Teaching Opportunities in East Texas, DFW, and Houston*. Class for Student Teachers Prior to Job Fairs. Tyler, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Terri Chambers, Jennifer Nielson (2021). *Teaching the Best Kept Secret*. Webinar as part of the Two Year College Chemistry Consortium Spring Webinar Series. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Dawson Lang (2023). *Teaching the Best Kept Secret (60 minutes)*. Texas American Association of Physics Teachers Spring Meeting 2023. Commerce, Texas. Status = OTHER; Acknowledgement of Federal Support = Yes

Elias Euler (2023). *Teaching the Best Kept Secret - 15 mins*. GFO Site Visit. Morgantown, WV. Status = OTHER; Acknowledgement of Federal Support = Yes

Elias Euler (2023). *Teaching the Best Kept Secret - 50 minutes*. GFO Site Visit. Morgantown, WV. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Jared Breakall (2020). *Teaching the Best Kept Secret!*. BYU Physics and Chemistry Faculty Meeting. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams and Jared Breakall (2021). *Teaching the Best Kept Secret!*. BYU Site visit. MAE required meeting. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall, Savannah Logan (2020). *Teaching the Best Kept Secret!*. Colorado School of Mines site visit. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Jean Lee (2021). *Teaching the Best Kept Secret! and Get the Facts Out*. UA LittleRock, CSC Deans' Committee. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2021). *Teaching the Best Kept Secret! and Teach@Mines*. CASA (Center for Academic Advising) meeting. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams and Drew Isola (2022). *Teaching the Best Kept Secret, then customizing the Busting Myths*. GFO Champion Orientation. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Ellen Yezierski (2020). *Teaching: Best Kept Secret*. Executive Committee of the Younger Chemistry Education Scholars. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Nielson, Wendy Adams, Jared Breakall, Duane Merrell (2020). *Teaching: The Best Kept Secret*. GFO workshop for faculty advisors and career service advisors. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Nielson, Terri Chambers, Wendy Adams Spencer (2019). *Teaching: The Best Kept Secret*. ACS Society Committee on Education members. Webinar. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2020). *Teaching: The Best Kept Secret*. All Change Agent Meeting. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Teaching: The Best Kept Secret*. AAPT Summer Meeting. Grand Rapids, MI. Status = OTHER; Acknowledgement of Federal Support = Yes

Jane Long (2022). *Teaching: The Best Kept Secret*. Faculty meeting for Department of Chemistry and Biochemistry. Nacogdoches, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Susanne Lintz, Amy Sipes, Holli Gover, TD Evans, Noelle Leingang, Sally Moore (2022). *Teaching: The Best Kept Secret*. Professional Development Day. Clayton, Ohio. Status = OTHER; Acknowledgement of Federal Support = Yes

John Bragelman and Patty Wagner (2023). *Teaching: The Best Kept Secret*. Departmental Colloquium. Dahlonega, GA / virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Adams, W. K., Breakall J. B., & Nielson, J. (2020). *Teaching: The Best Kept Secret!*. Brigham Young University Math and Science Advising. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Adams, W. K., Breakall J. B., & Nielson, J. (2020). *Teaching: The Best Kept Secret!*. Brigham Young University Chemistry and Mathematics Departments. Provo, UT. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Ellen Yezierski, Jean Lee (2020). *Teaching: The Best Kept Secret!*. AAAS-ARISE Workshop. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Jared Breakall and Savannah Logan (2021). *Teaching: The Best Kept Secret!*. Mines Physics Department Colloquium. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Duane Merrell, Jennifer Nielson (2021). *Teaching: The Best Kept Secret!*. University and Public school Partnership with Brigham Young University,. Midway, Utah. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2021). *Teaching: The Best Kept Secret!*. GFO Mini-conference. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jeremy Zelkowski (2021). *Teaching: The Best Kept Secret!*. NSF Master Teacher Fellowship. The University of Alabama, AL. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2021). *Teaching: The Best Kept Secret!*. GFO Mini Conference. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Teaching: The Best Kept Secret!*. St. Vrain School district Administrator's Meeting. Longmont, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee (2022). *Teaching: The Best Kept Secret!*. Induction/Mentoring Support for UIndy Teach (STEM)^3 Scholars in their first and second year teaching.. Indianapolis, IN. Status = OTHER; Acknowledgement of Federal Support = Yes

Leah Frazee (2021). *Teaching: The Best Kept Secret!*. Mathematics Education Group Faculty Presentation. Central Connecticut State University, CT. Status = OTHER; Acknowledgement of Federal Support = Yes

Jill Cochran (2021). *Teaching: The Best Kept Secret!*. Mathematics and Natural Sciences School Meeting. Berry College, GA. Status = OTHER; Acknowledgement of Federal Support = Yes

David May (2022). *Teaching: The Best Kept Secret!*. GFO site visit at WVU - Faculty. West Virginia University, WV. Status = OTHER; Acknowledgement of Federal Support = Yes

Liza Bondurant (2022). *Teaching: The Best Kept Secret!*. MCTM. Delta State University, MS. Status = OTHER; Acknowledgement of Federal Support = Yes

David May (2022). *Teaching: The Best Kept Secret!*. Site visit to CSU Long Beach - Department Chairs and STEM Education Advisors.. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Leah Frazee (2022). *Teaching: The Best Kept Secret!*. The School of Education's Central Teaching Education Network Faculty Meeting. Central Connecticut State University, CT. Status = OTHER; Acknowledgement of Federal Support = Yes

Lucia Grande (2022). *Teaching: The Best Kept Secret!*. University of Wisconsin - La Crosse Site Visit. La Crosse, WI. Status = OTHER; Acknowledgement of Federal Support = Yes

Todd Oberg (2022). *Teaching: The Best Kept Secret!*. Teacher Educator Gathering Session. Mathematics Teacher Educators mini-conference, IL. Status = OTHER; Acknowledgement of Federal Support = Yes

Tracy Halmi (2022). *Teaching: The Best Kept Secret!*. Faculty Meeting. Penn State Behrend. Status = OTHER; Acknowledgement of Federal Support = Yes

Jennifer Nielson (2023). *Teaching: The Best Kept Secret!*. Northeast Regional Meeting of the American Chemical Society. Boston, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee (2023). *Teaching: The Best Kept Secret!*. Clinical and Tenure Track Faculty meeting. University of Indianapolis. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee, Glen Waddell, Gary Martin, Tim Neubert (2023). *Teaching: The Best Kept Secret!*. AMTE Coffee Chat. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jillian DiBonaventura (2023). *Teaching: The Best Kept Secret!*. Massachusetts Association of Colleges for Teacher Education Conference. Worcester, Massachusetts. Status = OTHER; Acknowledgement of Federal Support = Yes

TJ Noviello and Rudra Kafle (2022). *Teaching: The Best Kept Secret!*. Physics Department Faculty Retreat. Boylston, MA. Status = OTHER; Acknowledgement of Federal Support = Yes

Dr. Ellen Granger and Robin Smith (2022). *Teaching: The Best Kept Secret!*. Monthly SAC meeting. Tallahassee, FL. Status = OTHER; Acknowledgement of Federal Support = Yes

Earl Legleiter (2022). *Teaching: The Best Kept Secret!*. College of Education Lunch. Hays, KS. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Teaching: The Best Kept Secret!*. Teach@Mines Faculty/Staff Research Study. Golden, CO. Status = OTHER; Acknowledgement of Federal Support = Yes

Jessie Store (2022). *Teaching: The Best Kept Secret! Busting Myths About the Teaching Profession*. Teacher Cadet program at Gratiot Technical Education Center. Alma College, MI. Status = OTHER; Acknowledgement of Federal Support = Yes

Steven Maier (2022). *Teaching: The Best Kept Secret! 60 minutes*. Oklahoma Association for Colleges of Teacher Education - OACTE annual conference. Norman, OK. Status = OTHER; Acknowledgement of Federal Support = Yes

Ellen Yezierski (2021). *Teaching: The Best Kept Secret! Benefits Compared to Industry and University Teaching*. Meeting with professional advising staff from the Miami College of Arts and Science and one chief departmental advisor (faculty) from PHY. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Steven Maier (2023). *Teaching: The Best Kept Secret! 60 minutes*. Teacher Education Faculty retreat. Enid, OK. Status = OTHER; Acknowledgement of Federal Support = Yes

Drew Isola and Dawson Lang (2022). *Teaching: The Best Kept Secret! Workshop*. AAPT Summer Meeting. Grand Rapids, MI. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2022). *Teaching: The Best Kept Secret! and GFO 2.0*. Committee on Chemistry in Two Year Colleges Board Meeting. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams (2020). *Teaching: The best Kept Secret!*. West Virginia University advising. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Jared Breakall, Savannah Logan (2020). *Teaching: The best Kept Secret!*. Presentation to Faculty at WVU. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Wendy Adams, Jared Breakall, Savannah Logan (2020). *Teaching: The best Kept Secret!*. HBCUTeach Presentation. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Drew Isola (2022). *Teaching: The best-kept secret*. OSTA Conference. Edmonds, OK. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee and Amy Roth McDuffie (2022). *Teaching: The best-kept secret*. AMTE Affiliate Connections Committee. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee and Tim Hendrix (2022). *Teaching: The best-kept secret*. Conference Board of the Mathematical Sciences, One Hundred and Twenty-eighth Meeting of the Council. Alexandria, VA. Status = OTHER; Acknowledgement of Federal Support
= Yes

Wendy Adams and Steven Maier (2022). *Teaching: The best-kept secret*. GFO Mini-Conference. Virtual. Status = OTHER; Acknowledgement of Federal Support = Yes

David May and Dawson Lang (2022). *Teaching: The best-kept secret - Workshop*. Noyce Summit. Washington DC. Status = OTHER; Acknowledgement of Federal Support = Yes

David May (2022). *Teaching: The best-kept secret! Changing the conversation about STEM teaching careers (IUSE)*. IUSE PI Summit. Washington, DC. Status = OTHER; Acknowledgement of Federal Support = Yes

Clay Roan (2023). *The Teaching Profession*. Future Educator Camp. Indianapolis, IN. Status = OTHER; Acknowledgement of Federal Support = Yes

Glenn Waddell (2021). *This was a conversation and mini presentation about sharpening our own recruitment efforts using the GFO messaging.*. University of Nevada; NevadaTeach. Reno, NV. Status = OTHER; Acknowledgement of Federal Support = Yes

Joe Kozminski, James Hofmann, and Dorene Huvaere (2023). *Update on Teacher Recruitment Strategies Coming out of COVID*. American Association of Physics Teachers Winter Meeting 2023. Portland, OR. Status = OTHER; Acknowledgement of Federal Support = Yes

Steven Maier (2022). *Using GFO Materials to Recruit Teacher Education Candidates*. Oklahoma Teacher EducationCconference (OACTE). Norman, OK. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee, Gary Martin and Glenn Waddell (2022). *We Need More Math Teachers! Changing the Narrative about Mathematics Teaching as a Career*. National Council of Teachers of Mathematics. Los Angeles, CA. Status = OTHER; Acknowledgement of Federal Support = Yes

Jean Lee (2023). *We Need More Teachers! Changing the Narrative about Teaching as a Career, 45 min*. Teacher Education course at Christel House Academy. Indianapolis, IN. Status = OTHER; Acknowledgement of Federal Support = Yes

Elias Euler (2023). *What's New with GFO*. American Association of Physics Teachers Winter Meeting 2023. Portland, Oregon. Status = OTHER; Acknowledgement of Federal Support = Yes

Roger Wolbert (2023). *Why Become a Secondary STEM Teacher - 15 minutes*. MAA's Allegheny Mountain Chapter Conference. Edinboro, PA. Status = OTHER; Acknowledgement of Federal Support = Yes

Michael Odell (2023). *Why become a teacher?*. Patriot Preview Day. Tyler, TX. Status = OTHER; Acknowledgement of Federal Support = Yes

Melanie Pivarski (2023). *table with GFO resources*. Student Involvement Fair. Roosevelt University. Status = OTHER; Acknowledgement of Federal Support = Yes

Other Products

Audio or Video Products

- *5 Surprising Facts About Teaching:* https://www.youtube.com/watch?v=U-X7cbaIqkg&t=10s
- Building a Marketing Campaign to Target Prospective Teachers*:* https://www.youtube.com/watch?v=jvFFOr02RbM
- David Wirth: 2021 PhysTEC Teacher of the Year: https://www.youtube.com/watch?v=UwNWsqg-ttA&t=79s
- Duane Merrell: Teacher Spotlight*:* https://www.youtube.com/watch?v=xnvQozAK7Os
- Teachers Retire 4 Years Earlier: Fact #5*:* https://www.youtube.com/watch?v=H-sjTKGCTiA
- The Facts: How we research and report data on teacher salaries: https://www.youtube.com/watch?v=V4l9pLG2Z7c
- Video Solution for GFO Asynchronous Community College Courses: AAPT 2021 https://www.youtube.com/watch?v=GiWVUtpIrgg&t=22s

- *Welcome to Get the Facts Out: https://www.youtube.com/watch?v=86JlnvwlxdI*

Educational aids or Curricula

- Jessie Store created a bulletin board using the GFO resources in the math building at Alma College.
- Leslie West created a bulletin board using GFO resources display at main entrance of the math and chemistry building at Stephen F Austin State University.
- Robin Smith created a bulletin board using GFO resources at Florida State University/FSU-Teach.
- A Teacher's Life by the Numbers (TLN) Infographic is an one-page document provides a quick, visual representation of teachers' lives at different career points in its specific county(ies). It is posted on the GFO website Teacher Salary Page and shared by GFO Champions and personnel local to the infographic:

Alabama - Jefferson County	*Alabama - Limestone County*
Alabama - Madison County	*Arizona - Coconino County*
Arizona - Pima County	*Arkansas - Benton County*
Arkansas - Washington County	*California - Alameda County*
California - Merced County	*California - Orange County*
California - Riverside County	*California - Sacramento County*
California - San Joaquin County	*California - Santa Cruz County*
California - South Bay Los Angeles County	*California - Tulare County*
California - San Diego County	*Colorado - Denver County*
Colorado - El Paso County	*Colorado - Jefferson County*
Colorado - Larimer County	*Colorado - Weld County (Rural)*
Colorado - Weld County	*Connecticut - New Haven County*
District of Columbia	*Florida - Bay County*
Florida - Broward County	*Florida - Duval County*
Florida - Escambia County	*Florida - Gadsden County*
Florida - Hillsbough County	*Florida - Leon County*
Florida - Miami-Dade County	*Florida - Monroe County*
Florida - Polk County	*Florida - Santa Rosa County*
Florida - Wakulla County	*Georgia - Clarke County*
Georgia - Clayton County	*Georgia - Dekalb County*
Georgia - Douglas County	*Georgia - Forsyth County*
Georgia - Gwinnett County	*Georgia - Rockdale County*
Illinois - Sangamon County	*Indiana - Boone County*
Indiana - Hamilton County	*Indiana - Madison County*
Indiana - Marion County	*Iowa - Polk County*
Louisiana - Lincoln Parish	*Louisiana - Orleans Parish*
Maine - Aroostook County	*Maine - Cumberland County*
Maine - Penobscot County	*Maryland - Anne Arundel County*
Maryland - Baltimore City and County	*Massachusetts - Worcester County*
Michigan - Isabella County	*Michigan - Gratiot County*
Michigan - Mecosta County	*Michigan - Kalamazoo County*
Michigan - Washtenaw County	*Michigan - Monroe County*
Minnesota - Hennepin County	*Michigan - Wayne County*
Minnesota - Rice County	*Minnesota - Ramsey County*
Montana - Yellowstone County	*Mississippi - DeSoto and Lafayette County*
New Jersey - Passiac County	*New Jersey - Essex County*
New York - Monroe County	*New York - Erie County*
Ohio - Cuyahoga County	*New York - Nassau and Suffolk County*
Oregon - Multonomah County	*Ohio - Franklin County*
Pennsylvania - Cumberland County	*Pennsylvania - Clarion County*
Pennsylvania - Erie County	*Pennsylvania - Dauphin County*
Pennsylvania - Washington County	*Pennsylvania - Indiana County*
Texas - Travis County	*South Carolina - Laurens County*
Utah - Cache County	*Texas - Williamson County*
Washington - Pierce County	*Virginia - Roanoke County*
Washington - Yakima County	*Washington - Spokane County*
West Virginia - Monongalia, Marion, Preston, and Marshall Counties	*West Virginia - Kanawha County*

Wisconsin - Waukesha County	*Wisconsin - Ozaukee County*
Wyoming - Laramie county	*Wyoming - Campbell County*
	Wyoming - Natrona County

Other Publications

Stephanie Ryan (2023). *A Conversation with Super-Teacher Jonte Lee*. Article about Chemistry Teacher Jonte Lee in in Chemistry ACS Student Magazine. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

Stephanie Chasteen (2022). *Consider giving a GFO faculty workshop to empower your local faculty.*. Blog article on website; https://getthefactsout.org/consider-giving-a-gfo-faculty-workshop-to-empower-your-local-faculty/. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

Stephanie Chasteen (2022). *GFO has reached about 20,000 people since 2018, with Champions leading the pack in outreach to students.*. Blog article on website; https://getthefactsout.org/gfo-has-reached-20000-people/. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

Stephanie Chasteen (2022). *GFO student presentations are highly effective.*. Blog article on website; https://getthefactsout.org/gfo-student-presentations-are-highly-effective/. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

The GFO Newsletter Team (2023). *Get the Facts Out Newsletter | April 2023*. Newsletter distributed via email and on website; https://getthefactsout.org/wp-content/uploads/Get-the-Facts-Out-Newsletter-April-2023.htm. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

The GFO Newsletter Team (2022). *Get the Facts Out Newsletter | July 2022*. Newsletter distributed via email and on website; https://us7.campaign-archive.com/?u=502af9db3395cd26ce7819dc6&id=ad5cddebd3. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

The GFO Newsletter Team (2022). *Get the Facts Out Newsletter | November 2022*. Newsletter distributed via email and on website; https://us7.campaign-archive.com/?u=502af9db3395cd26ce7819dc6&id=09b4b30513. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

The GFO Newsletter Team (2022). *Get the Facts Out Newsletter | October 2022*. Newsletter distributed via email and on website; https://us7.campaign-archive.com/?u=502af9db3395cd26ce7819dc6&id=a68af06e51. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

Tim Hendrix (2022). *Getting the Facts Out - About Teacher Recruitment*. AMTE Connections: Vol. 32, Issue 1 - https://amte.net/connections/2022/09/getting-facts-out-about-teacher-recruitment. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

Stephanie Chasteen (2023). *How are members of the GFO Community using GFO Resources and Messaging?*. Blog article on website; https://getthefactsout.org/how-are-members-of-the-gfo-community-using-gfo-resources-and-messaging/. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

Stephanie Chasteen (2022). *How people are sharing the messages of Get the Facts Out*. Blog article on website; https://getthefactsout.org/how-people-are-sharing-gfo-messages/. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

Drew Isola (2023). *In Case You Missed It*. Blog article on website; https://getthefactsout.org/icymi/. Status = OTHER; Acknowledgement of Federal Support = Yes

Jared Breakall and Lucia Grande (2023). *Life as a Middle School Math Teacher*. Blog article on website; https://getthefactsout.org/life-as-a-middle-school-math-teacher/. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

Terri Chambers (2023). *Partnership for Progress*. written on pre-service teacher preparation for the APS Forum on Education's Spring 2023 Newsletter.. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

Glen Waddell, Gary Martin, Jean Lee, Tim Hendrix, Amy Roth McDuffie (2022). *Second Annual Get the Facts Out/ Mathematics Teacher Education Partnership Pre-Conference*. AMTE Connections: Vol. 32, Issue 2 - https://amte.net/connections/2022/11/second-annual-get-facts-outmathematics-teacher-education-partnership-pre. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

The GFO Newsletter Team (2022). *The latest resources for drawing students to the teaching profession*. Newsletter distributed via email and on website; https://us7.campaign-archive.com/?u=502af9db3395cd26ce7819dc6&id=e27f8a7312. Status = PUBLISHED; Acknowledgement of Federal Support = Yes

Patent Applications

Technologies or Techniques

Thesis/Dissertations

Websites or Other Internet Sites

- *ACS Get the Facts Out Page:* https://www.acs.org/education/educators/get-the-facts-out.html
  - The ACS project team deemed it important to establish a web presence on the disciplinary web site to identify chemistry-related efforts and as a mechanism for driving members of the chemistry community to the GFO project web site. Working collaboratively with members of the ACS Web Presence team, the web site www.acs.org/getthefactsout was launched in the fourth quarter of 2019. ACS has continued to maintain this web presence throughout 2022-2023.
- *Get the Facts Out:* https://GettheFactsOut.org/
  - GFO website which houses all of the resources, strategies, and data that GFO has built/collected over the past five years. This site has prospective teacher facing and teacher recruiter facing sections.
- *Get the Facts Out Facebook Group*: https://www.facebook.com/groups/GettheFactsOut
  - This Facebook group is where we post memes with tested messaging and other resources that teacher educators might be interested in, including science and math jokes.
- *Get the Facts Out Facebook page:* https://www.facebook.com/groups/945329862505357/user/100040874924804/
  - GFO Facebook Page. The NAB recommends a page over a group so we have been working to create an active "page"
- *Get the Facts Out Instagram:* https://www.instagram.com/GettheFactsOut/
  - Memes are posted here for Champions to share on their Instagram page
- *Get the Facts Out YouTube Channel:* https://www.youtube.com/channel/UCLj0yYLoz68D74tqVMq6veA
  - This Channel hosts GFO recruitment videos, videos of presentations, and videos by Champions

Participants/Organizations

What individuals have worked on the project?

Name	Most Senior Project Role	Nearest Person Month Worked
Adams, Wendy	PD/PI	8
Plisch, Monica	Co PD/PI	0
Stockero, Shari	Co PD/PI	1
Taylor, Terri	Co PD/PI	1
Whitmann, Michael	Co-Investigator	1
Breakall, Jared	Faculty	0
Brown, Thomas	Faculty	0
Gravely, Etta	Faculty	1
Hendrix, Tim	Faculty	0
Hunter, William	Faculty	1
Lee, Jean	Faculty	1
Maier, Steven	Faculty	0
Martin, Gary	Faculty	0

Merrell, Duane	Faculty	0
Nielson, Jennifer	Faculty	1
Noviello, Thomas	Faculty	0
Roth McDuffie, Amy	Faculty	0
Stewart, Gay	Faculty	0
Waddell, Glenn	Faculty	0
Yezierski, Ellen	Faculty	1
Adams, Alex	K-12 Teacher	1
Lang, Dawson	K-12 Teacher	1
Euler, Elias	Postdoctoral (scholar, fellow or other postdoctoral position)	9
Bolter, Allie	Other Professional	7
Grande, Lucy	Other Professional	4
May, David	Other Professional	5
Misiewicz, Ashley	Other Professional	2
Roti Roti, Annelise	Other Professional	1
Hawkins, Ryan	Non-Student Research Assistant	0
Hutson, Katie	Non-Student Research Assistant	0
Miller, Kaitlin	Non-Student Research Assistant	2
Erlander, Carsten	Undergraduate Student	0
Kelly, Nora	Undergraduate Student	0
McGovern, Connor	Undergraduate Student	0
Ruzicka, Elizabeth	Undergraduate Student	0
Chasteen, Stephanie	Consultant	2
Ferguson, Mark	Consultant	0
Levine, Zach	Consultant	0
McKagan, Sarah	Consultant	0
Ryan, Stephanie	Consultant	0

Full details of individuals who have worked on the project:

Wendy K Adams
Email: wkadams@mines.edu
Most Senior Project Role: PD/PI
Nearest Person Month Worked: 8
Contribution to the Project: Lead PI Team, Lead Research Team, Lead Resource Development Team, keep track of all the bits and pieces of everything so that nothing falls through the cracks. Hire and supervise Mines staff
Funding Support: None
Change in active other support: No
International Collaboration: No
International Travel: No

Monica J Plisch

Email: plisch@aps.org
Most Senior Project Role: Co PD/PI
Nearest Person Month Worked: 0
Contribution to the Project: Plisch periodically meets with PI Adams to provide advice
Funding Support: None
Change in active other support: No
International Collaboration: No
International Travel: No

Shari Stockero
Email: stockero@mtu.edu
Most Senior Project Role: Co PD/PI
Nearest Person Month Worked: 1
Contribution to the Project: Coordinate AMTE's participation in the grant, including attending PI and change agent meetings, helping to coordinate math-focused project activities and processing financial transactions.
Funding Support: n/a
Change in active other support: No
International Collaboration: No
International Travel: No

Terri M Taylor
Email: t_taylor@acs.org
Most Senior Project Role: Co PD/PI
Nearest Person Month Worked: 1
Contribution to the Project: Terri organizes and participates in GFO PI team meetings, GFO change agent meetings, organizes the communications and meetings with GFO chemistry champions, and organizes and conducts virtual coffee chats for chemistry community. She works with GFO change agents and ACS staff to identify opportunities for GFO promotion and providing support as needed, writes and prepares copy for promotion/marketing, and helps write/edit newsletter/article copy.
Funding Support: Dr. Chambers' (Taylor) work with GFO falls within her position responsibilities at ACS.
Change in active other support: No
International Collaboration: No
International Travel: No

Michael Whitmann
Email: wittmann@aps.org
Most Senior Project Role: Co-Investigator
Nearest Person Month Worked: 1
Contribution to the Project: Wittmann is a Co-PI and leads APS's activities for the project. He chairs the Societies Working Group and meets regularly with the PI to lead the entire project.
Funding Support: Some of Dr. Wittmann's time is supported by PhysTEC NSF #1707790. PhysTEC utilizes GFO very heavily and requires many of their fellows and funded sites to use these resources for their recruitment efforts.
International Collaboration: No
International Travel: No

Jared Breakall
Email: jared.breakall@snow.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 0
Contribution to the Project: Breakall worked with the project again this past summer now that he's a full time faculty at Snow College. He has led the Mines controlled study, has trained several of the research assistants on various tasks, and is leading the writing of the PTaP manuscript.
Funding Support: none
International Collaboration: No
International Travel: No

Thomas Brown
Email: browntm@appstate.edu
Most Senior Project Role: Faculty **Nearest Person Month Worked:** 0
Contribution to the Project: GFO Change Agents are contracted to recruit and support GFO champions with expert advice and guidance.
Funding Support: N/A
International Collaboration: No
International Travel: No

Etta Gravely

Email: gravely@ncat.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 1
Contribution to the Project: Chemistry change agent. She participates in GFO change agent meetings, advises on GFO chemistry activities, participates in all-change agent update meetings, participates in virtual coffee chats for chemistry community, communicates and meets with GFO chemistry champions, and conducts GFO presentations.
Funding Support: none
International Collaboration: No
International Travel: No

Tim Hendrix
Email: hendrixt@meredith.edu
Most Senior Project Role: Faculty **Nearest Person Month Worked:** 0
Contribution to the Project: Math change agent and past Executive Director of AMTE. Tim worked as a change agent sharing GFO materials nationally. Tim is just joined the Evaluation Working group as our Change Agent representative and participated in GFO efforts at AMTE Annual Conference, presented at national conferences, attended AMTE GFO team meetings and coffee chats .
Funding Support: none
International Collaboration: No
International Travel: No

William Hunter
Email: wjhunte@ilstu.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 1
Contribution to the Project: Chemistry change agent. He participates in GFO change agent meetings, advises on GFO chemistry activities, participates in all-change agent update meetings, participates in virtual coffee chats for chemistry community, is an evaluation team member, communicates and meets with GFO chemistry champions, and conducts GFO presentations.
Funding Support: none
International Collaboration: No
International Travel: No

Jean Lee
Email: jslee@uindy.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 1
Contribution to the Project: Jean serves as the head of the AMTE GFO Task Force/Change Agent. She has expertly led the new AMTE change agents from a group of strong skeptics to some of GFO's strongest advocates! Jean participated in GFO efforts at AMTE Annual Conference, presented at national conferences, attended AMTE GFO team meetings and coffee chats.
Funding Support: None
International Collaboration: No
International Travel: No

Steven Maier
Email: sjmaier@nwosu.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 0
Contribution to the Project: Steven became a Physics Change Agent this year and now co-leads the group. He runs a very active GFO campaign at his institution and has been an asset in best practices for communication about the profession. GFO Change Agents are contracted to recruit and support GFO champions with expert advice and guidance.
Funding Support: none
International Collaboration: No
International Travel: No

Gary Martin
Email: martiwg@auburn.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 0
Contribution to the Project: Gary is an AMTE Change Agent. He participated in GFO efforts at AMTE Annual Conference, presented at national conferences, attended AMTE GFO team meetings and coffee chats. He participates in regular AMTE Change Agent meetings. Glenn also supports new math champions.
Funding Support: none
International Collaboration: No

International Travel: No

Duane Merrell
Email: duane_merrell@byu.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 0
Contribution to the Project: Engaging in a very active local campaign at Brigham Young University. Presented at national AAPT meetings Also active member of the National Advisory Board and attended the annual meeting.
Funding Support: none
International Collaboration: No
International Travel: No

Jennifer Nielson
Email: jnielson@chem.byu.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 1
Contribution to the Project: Chemistry change agent. She participates in GFO change agent meetings, advises on GFO chemistry activities, participates in all-change agent update meetings, participates in virtual coffee chats for chemistry community, communicates and meets with GFO chemistry champions, and conducts GFO presentations.
Funding Support: none
International Collaboration: No
International Travel: No

Thomas Noviello
Email: tnoviello@wpi.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 0
Contribution to the Project: GFO Change Agent (4) GFO Change Agents are contracted to recruit and support GFO champions with expert advice and guidance.
Funding Support: N/A
International Collaboration: No
International Travel: No

Amy Roth McDuffie
Email: mcduffie@wsu.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 0
Contribution to the Project: Amy is an AMTE Change Agent. She participated in GFO efforts at AMTE Annual Conference, presented at national conferences, attended AMTE GFO team meetings and coffee chats. Amy also supports new math champions.
Funding Support: none
International Collaboration: No
International Travel: No

Gay Stewart
Email: gbstewart@mail.wvu.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 0
Contribution to the Project: Sr. Advisor to GFO. Conducted active local campaign and presented nationally at UTeach and AAPT meetings. Consulted in the Project Planning team.
Funding Support: none
International Collaboration: No
International Travel: No

Glenn Waddell
Email: gwaddell@unr.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 0
Contribution to the Project: Glen is an AMTE Change Agent. He participated in GFO efforts at AMTE Annual Conference, AMTE Change Agent meetings and has presented GFO nationally with other AMTE change agents. Glenn also supports new math champions.
Funding Support: none
International Collaboration: No
International Travel: No

Ellen Yezierski

Email: yeziere@miamioh.edu
Most Senior Project Role: Faculty
Nearest Person Month Worked: 1
Contribution to the Project: Chemistry change agent. Served the year as the change agent representative on Champion Engagement Strategy Working group. She participates in GFO change agent meetings, advises on GFO chemistry activities, participates in all-change agent update meetings, participates in virtual coffee chats for chemistry community, is an evaluation team member, communicates and meets with GFO chemistry champions, and conducts GFO presentations.
Funding Support: none
International Collaboration: No
International Travel: No

Alex Adams
Email: adams@mines.edu
Most Senior Project Role: K-12 Teacher
Nearest Person Month Worked: 1
Contribution to the Project: Alex is shaping up the scoring sheets for the PTaP/.HE data so it can be published and made publicly available. He is conducting an array of analyses of all GFO data that has been collected in the past 5 years and helping with pre/post workshop analysis. He is also data mining for teacher salaries and creating infographics with the data mined information.
Funding Support: N/A
International Collaboration: No
International Travel: No

Dawson Lang
Email: dawsontlang@mymail.mines.edu
Most Senior Project Role: K-12 Teacher
Nearest Person Month Worked: 1
Contribution to the Project: Conducted several Busting Myths About the Teaching Profession presentations for students and faculty at National Conferences; Western Regional Noyce Conference, Spring 2023 Joint TSAAPT/TSAPS/Zone 13 SPS, UTeach Summit, Noyce Summit
Funding Support: none
International Collaboration: No
International Travel: No

Elias Euler
Email: eeuler@mines.edu
Most Senior Project Role: Postdoctoral (scholar, fellow or other postdoctoral position)
Nearest Person Month Worked: 9
Contribution to the Project: Conduct site visits, develop and test resources, give research presentations
Funding Support: none
International Collaboration: No
International Travel: No

Allie Bolter
Email: ambolter@mines.edu
Most Senior Project Role: Other Professional
Nearest Person Month Worked: 7
Contribution to the Project: Provides administrative support for the project including management of sub awards, hiring of personell on the Mines side, coordination of events, provide research support including leading the teacher salary data mining and supervising undergraduate assistants, assistance with focus groups and data analysis, assist PI where needed.
Funding Support: 3 months Teach@Mines. Some Teach@Mines work is for GFO
International Collaboration: No
International Travel: No

Lucy Grande
Email: luciagrande@mines.edu
Most Senior Project Role: Other Professional
Nearest Person Month Worked: 4
Contribution to the Project: Lucy presents at many national conferences, conducts a local PTaP study at Mines each year, conducts most all GFO site visits, and implements much website development and management for GFO.
Funding Support: Teach@Mines - Some Teach@Mines work is GFO
International Collaboration: No
International Travel: No

David May

Email: davidmay@mines.edu
Most Senior Project Role: Other Professional
Nearest Person Month Worked: 5
Contribution to the Project: This year David became the GFO project manager. He is the working group organizer for Societies and Campion Engagement Strategy as well as the PI Team. He has led the organization of all the Champion engagement activities and now works with the research team taking the lead on this year's enrollment study. He's also written two papers, conducted site visits, and presented at national conferences. David's role with GFO ended Dec 31, 2022 and was no longer working on the project in 2023.
Funding Support: none

International Collaboration: No
International Travel: No

Ashley Misiewicz
Email: amisiewicz@mines.edu
Most Senior Project Role: Other Professional
Nearest Person Month Worked: 2
Contribution to the Project: Ashley is the GFO communications and marketing coordinator assisting with the creation of many GFO resources, templates, and strategizing on the best way to distribute.
Funding Support: Teach@Mines - Some Teach@Mines work is for GFO
International Collaboration: No
International Travel: No

Annelise Roti Roti Email: rotiroti@aps.org
Most Senior Project Role: Other Professional
Nearest Person Month Worked: 1
Contribution to the Project: Assists with coordinating APS GFO program activities, mostly through PhysTEC, including serving on the Societies Working Group and supporting the Physics Change Agents.
Funding Support: none
International Collaboration: No
International Travel: No

Ryan Hawkins
Email: yanalanhawkins@mines.edu
Most Senior Project Role: Non-Student Research Assistant
Nearest Person Month Worked: 0
Contribution to the Project: Ryan data mined for teacher salaries around the country and created infographics with the data mined information.
Funding Support: N/A
International Collaboration: No
International Travel: No

Katie Hutson
Email: hutsonkatie123@gmail.com
Most Senior Project Role: Non-Student Research Assistant
Nearest Person Month Worked: 0
Contribution to the Project: Kate data mined for teacher salaries.
Funding Support: N/A
International Collaboration: No
International Travel: No

Kaitlin Miller
Email: kmiller3@mines.edu
Most Senior Project Role: Non-Student Research Assistant
Nearest Person Month Worked: 2
Contribution to the Project: Kaitlin is the lead on the national Data Push for all GFO study sites. She has helped analyzed all of the PTaP data from Year 3 and 4 and completed those sections for the Study Site Reports, and helps with the Pre/Post workshop analysis.
Funding Support: None
International Collaboration: No
International Travel: No

Carsten Erlander
Email: cerlander@mines.edu
Most Senior Project Role: Undergraduate Student

Nearest Person Month Worked: 0
Contribution to the Project: Carsten is data mining teacher salaries and creating infographics for GFO
Funding Support: N/A
International Collaboration: No
International Travel: No

Nora Kelly
Email: cameronkelly@mines.edu
Most Senior Project Role: Undergraduate Student
Nearest Person Month Worked: 0
Contribution to the Project: Nora has helped with the data mining of teacher salaries and automating the creation of infographics after data mining
Funding Support: N/A
International Collaboration: No
International Travel: No

Connor McGovern
Email: cmcgovern@mines.edu
Most Senior Project Role: Undergraduate Student
Nearest Person Month Worked: 0
Contribution to the Project: Connor presents to Mines' students about GFO through out the year, creates GFO resources and helps with the GFO web development.
Funding Support: Teach@Mines - some Teach@Mines work is GFO
International Collaboration: No
International Travel: No

Elizabeth Ruzicka
Email: elizabethruzicka@mines.edu
Most Senior Project Role: Undergraduate Student
Nearest Person Month Worked: 0
Contribution to the Project: Liz presents to Mines' students about GFO through out the year.
Funding Support: Teach@Mines - some Teach@Mines work is GFO
International Collaboration: No
International Travel: No

Stephanie Chasteen
Email: stephanie@chasteenconsulting.com **Most Senior Project Role:** Consultant
Nearest Person Month Worked: 2
Contribution to the Project: External Evaluator
Funding Support: none
International Collaboration: No
International Travel: No

Mark Ferguson
Email:mark@bluesteelrealestate.com
Most Senior Project Role: Consultant
Nearest Person Month Worked: 0
Contribution to the Project: Work with Resource Development WG to develop emotionally compelling messaging. Provided template and expert advice for the new GFO YouTube Channel and guidance for Social Media platforms. Attended the annual meeting and serves on the National Advisory Board.
Funding Support: none
International Collaboration: No
International Travel: No

Zach Levine
Email: zlevine@teach.org
Most Senior Project Role: Consultant
Nearest Person Month Worked: 0
Contribution to the Project: Attended the annual meeting virtually and served on the National Advisory Board
Funding Support: none
International Collaboration: No
International Travel: No

Sarah McKagan
Email: sam.mckagan@gmail.org

Most Senior Project Role: Consultant
Nearest Person Month Worked: 0
Contribution to the Project: Serves as the Lead National Advisory Board member, prepared the NAB report/recommendations, attended the annual meeting.
Funding Support: none
International Collaboration: No
International Travel: No

Stephanie Ryan
Email: sryan@ryaneducationconsulting.com
Most Senior Project Role: Consultant
Nearest Person Month Worked: 0
Contribution to the Project: ACS Project coordinator beginning 6/15/19. Chemistry-specific research. Participation in Chemistry Change Agent Meetings, Societies WG, helped with the GFO Newsletter and Champion Engagement Strategy WG. Consultation on marketing/dissemination opportunities.
Funding Support: none
International Collaboration: No
International Travel: No

What other organizations have been involved as partners?

Name	Type of Partner Organization	Location
240 Tutoring	Other Nonprofits	Houston, TX
Adams County School District	School or School Systems	Commerce City, CO
Andrews University	Academic Institution	Berrien Springs, MI
Laurens School District 55	School or School Systems	Laurens, SC
Lee College	Academic Institution	Baytown, TX
Lewis & Clark College	Academic Institution	Portland, OR
Lewis University	Academic Institution	Romeoville, IL
Louisiana Tech University - UTeach Tech Program	Academic Institution	Ruston, Louisiana
MSD Decatur Township Schools	School or School Systems	Decatur, IN
Marquette University	Academic Institution	Milwaukee, WI
Maryville College	Academic Institution	Maryville, TN
Mathematical Association of America	Other Nonprofits	Washington, DC
Mattawan Consolidated Schools	School or School Systems	Mattawan, MI
Anne Arundel County Public Schools	School or School Systems	Annapolis, MD
Mercy College	Academic Institution	Dobbs Ferry, NY
Meredith College	Academic Institution	Raleigh, NC
Metropolitan State University of Denver	Academic Institution	Denver, CO
Miami University of Ohio	Academic Institution	Oxford, OH
Middle Tennessee State University	Academic Institution	Murfreesboro, TN
Mineral County School District	School or School Systems	Hawthorne, NV
Mississippi State University	Academic Institution	Starkville, MS

Missouri University of Science and Technology	Academic Institution	Rolla, MO
Monroe County Community School Corporation	School or School Systems	Bloomington, IN
Monroe County Local Early Intervention Coordinating Council	Other Nonprofits	Rochester , NY
Appalachian State University	Academic Institution	Boone, NC
Montclair State University	Academic Institution	Montclair, NJ
Morehead State University	Academic Institution	Morehead, KY
Morgan State University	Academic Institution	Baltimore, Maryland
New Castle Area School District	School or School Systems	Lawrence County, PA
New Jersey Center for Teaching and Learning	Other Nonprofits	Mahwah, NJ
Nicholls State University	Academic Institution	Thibodaux, LA
North Carolina A&T State University	Academic Institution	Greensboro, NC
North Central College	Academic Institution	Naperville, IL
Northern Arizona University	Academic Institution	Flagstaff, AZ
Northern Kentucky University	Academic Institution	Highland Heights, KY
Arizona State University	Academic Institution	Tempe, AZ
Northmont City School District	School or School Systems	Englewood, OH
Northwest Missouri State University	Academic Institution	Maryville, MO
Northwestern Oklahoma State University	Academic Institution	Alva, OK
Northwestern State University	Academic Institution	Natchitoches, LA
Oral Roberts University	Academic Institution	Tulsa, OK
Oregon State University	Academic Institution	Corvallis, OR
Pacific Lutheran University	Academic Institution	Parkland, WA
Pacific University	Academic Institution	Forest Grove, OR
Penn State Behrend	Academic Institution	Erie, PA
Penn State University	Academic Institution	State College, PA
Association of Mathematics Teacher Educators	Other Nonprofits	Houghton, MI
Pennsylvania Western University	Academic Institution	Pennsylvania
Prairie View A&M University	Academic Institution	Prairie View, TX
Prince George's Community College	Academic Institution	Largo, MD
Riverside City College	Academic Institution	Riverside, CA
Roanoke City Public Schools	School or School Systems	Roanoke, VA
Rockdale County Public Schools	School or School Systems	Conyers, GA
Roosevelt University	Academic Institution	Chicago, IL
Rowan University	Academic Institution	Glassboro, NJ
STEMteachersNYC	Other Nonprofits	New York, NY
SUNY Buffalo State College	Academic Institution	Buffalo, NY

Auburn University	Academic Institution	Auburn, Alabama
SUNY Geneseo	Academic Institution	Geneseo, NY
Sacred Heart University	Academic Institution	Fairfield, CT
Saint Leo University	Academic Institution	St. Leo, FL
Santa Margarita Catholic High School	School or School Systems	Rancho Santa Margarita, CA
Seattle University	Academic Institution	Seattle, WA
Shepherd University	Academic Institution	Sheperdstown, WV
Slippery Rock University	Academic Institution	Slippery Rock, PA
South Dakota State University	Academic Institution	Brookings, SD
Southern Connecticut State University	Academic Institution	New Haven, CT
Southern University and A&M College	Academic Institution	Baton Rouge, LA
Augsburg University	Academic Institution	Minneapolis, MN
Southern University, LA	Academic Institution	Baton Rouge, LA
Spelman College	Academic Institution	Atlanta, GA
Springdale Public Schools	School or School Systems	Springdale, AR
St. John's School	School or School Systems	Houston, TX
St. Mary's College of Maryland	Academic Institution	St. Mary's City, MD
St. Vrain School District	School or School Systems	Longmont, CO
Taylor University	Academic Institution	Upland, IN
Texas A&M University - Commerce	Academic Institution	Commerce, TX
Texas Christian University	Academic Institution	Fort Worth, TX
Texas Lutheran University	Academic Institution	Seguin, TX
Augustana University	Academic Institution	Sioux Falls, SD
The Citadel	Academic Institution	Charleston, SC
The College of New Jersey	Academic Institution	Ewing Township
The Ohio State University	Academic Institution	Columbus, OH
The University of Alabama	Academic Institution	Tuscaloosa, AL
The University of Alabama in Huntsville	Academic Institution	Huntsville, AL
The University of Mississippi	Academic Institution	Oxford, MS
The University of Texas at Arlington	Academic Institution	Arlington, TX
The University of Texas at El Paso	Academic Institution	El Paso, TX
Tooele County School District	School or School Systems	Tooele, TX
Tougaloo University	Academic Institution	Tougaloo, MS
Aurora University	Academic Institution	Aurora, Illinois
Towson University	Academic Institution	Towson, MD
Tyler Jr. College	Academic Institution	Tyler, TX

UMass Boston	Academic Institution	Boston, MA
University of Akron	Academic Institution	Akron, OH
University of Arizona	Academic Institution	Tuscon, AZ
University of Arkansas	Academic Institution	Fayetteville, AR
University of California - Berkeley	Academic Institution	Berkeley, CA
University of California - Irvine	Academic Institution	Irvine, CA
University of California - Merced	Academic Institution	Merced, CA
University of California - Santa Cruz	Academic Institution	Santa Cruz, CA
Azusa Pacific University, CA	Academic Institution	Azusa, California
University of Central Florida	Academic Institution	Orlando, Florida
University of Cincinnati	Academic Institution	Cincinnati, OH
University of Colorado - Boulder	Academic Institution	Boulder,CO
University of Colorado - Colorado Springs	Academic Institution	Colorado Springs, CO
University of Connecticut	Academic Institution	Mansfield, CT
University of Delaware	Academic Institution	Newark, DE
University of Detroit Mercy	Academic Institution	Detroit, MI
University of Florida	Academic Institution	Gainesville, FL
University of Hartford	Academic Institution	West Hartford, CT
University of Hawai'i at Mānoa	Academic Institution	Honolulu, HI
Adelphi University	Academic Institution	Manhattan, NY
Baylor University	Academic Institution	Waco, TX
University of Hawaii at Hilo	Academic Institution	Hilo, HI
University of Houston	Academic Institution	Houston, TX
University of Houston - Clear Lake	Academic Institution	Clear Lake, TX
University of Illinois at Urbana-Champaign	Academic Institution	Champaign, IL
University of Indianapolis	Academic Institution	Indianapolis, IN
University of Kansas	Academic Institution	Lawrence, KS
University of Kentucky	Academic Institution	Lexington, KY
University of Maryland	Academic Institution	College Park, MD
University of Massachusetts	Academic Institution	Amherst, Massachusetts
University of Massachusetts Lowell	Academic Institution	Lowell, Massachusetts
Berry College	Academic Institution	Berry, Georgia
University of Mississippi	Academic Institution	Oxford, MS
University of Nevada	Academic Institution	Reno, NV
University of North Carolina - Chapel Hill	Academic Institution	Chapel Hill, North Carolina
University of North Georgia	Academic Institution	Dahlonega, GA

University of North Texas	Academic Institution	Denton, TX
University of Oregon	Academic Institution	Eugene, OR
University of Saint Joseph	Academic Institution	Hartford, Connecticut
University of Tennessee - Martin	Academic Institution	Martin, TN
University of Texas - Austin	Academic Institution	Austin, TX
University of Texas - El Paso	Academic Institution	El Paso, TX
Boise State University	Academic Institution	Bosie, ID
University of Texas - Rio Grande Valley	Academic Institution	Edinburg, TX
University of Texas Permian Basin	Academic Institution	Odessa, TX
University of Texas at Austin	Academic Institution	Austin, TX
University of Texas at Tyler	Academic Institution	Tyler, TX
University of Texas-Rio Grande Valley	Academic Institution	Edinburg, Texas
University of Washington Bothell	Academic Institution	Bothell, WA
University of West Florida	Academic Institution	Pensacola, FL
University of West Georgia	Academic Institution	Carrollton, Georgia
University of Western Florida	Academic Institution	Pensacola, Florida
University of Wisconsin - La Crosse	Academic Institution	La Crosse, WI
Boulder Valley School District	School or School Systems	Boulder, CO
University of Wisconsin - River Falls	Academic Institution	River Falls, Wisconsin
University of Wisconsin-Platteville	Academic Institution	Platteville, WI
University of Wyoming	Academic Institution	Laramie, WY
University of the District of Columbia	Academic Institution	Washington, D.C.
University of the Pacific	Academic Institution	Stockton, CA
Utah State University	Academic Institution	Logan, Utah
Vassar College	Academic Institution	Poughkeepsie, NY
Wartburg College	Academic Institution	Denver, CO
Waynesburg University	Academic Institution	Waynesburg, PA
Wellesley College	Academic Institution	Wellesley, MA
Bridgewater State University	Academic Institution	Bridgewater, MA
West Chester University	Academic Institution	Chester County, Pennsylvania
West Virginia University	Academic Institution	Morgantown, WV
Western Colorado University	Academic Institution	Gunnison, Colorado
Western Kentucky University	Academic Institution	Bowling Green, Kentucky
Western Washington University	Academic Institution	Bellingham, Washington
Westmont College	Academic Institution	Santa Barbara, CA
Winthrop University	Academic Institution	Rock Hill, SC

Worcester Polytechnic Institute	Academic Institution	Worcester, MA
Wright State University	Academic Institution	Dayton, OH
Bringham Young University	Academic Institution	Provo, UT
Bringham Young University - Idaho	Academic Institution	Rexburg, ID
Bucknell University	Academic Institution	Lewisburg, PA
Butler County Community College	Academic Institution	Butler Township, PA
CUNY College of Staten Island	Academic Institution	Staten Island, NY
Alabama A&M University	Academic Institution	Huntsville, AL
Caddo Parish Public Schools	School or School Systems	Shreveport, LA
Cal State University - Channel Islands	Academic Institution	Camarillo, California
Cal State University - Chico	Academic Institution	Chico, California
California Polytechnic State University - Pomona	Academic Institution	Pomona, CA
California Polytechnic State University - San Luis Obisbo	Academic Institution	San Luis Obispo, CA
California State University - East Bay	Academic Institution	Hayward, CA
California State University - Fullerton	Academic Institution	Fullerton, CA
California State University - Northridge	Academic Institution	Northridge, CA
California State University, Fresno	Academic Institution	Fresno, CA
California State University, Long Beach	Academic Institution	Long Beach, CA
Albright College	Academic Institution	Reading, PA
California State University, Monterey Bay	Academic Institution	Monterey Bay, CA
California State University, Sacramento	Academic Institution	Sacramento, CA
California State University, San Bernardino	Academic Institution	San Bernardino, CA
California State University, San Marcos	Academic Institution	San Marcos, CA
Case Western Reserve University	Academic Institution	Cleveland, OH
Central Connecticut State University	Academic Institution	New Britain, Connecticut
Central Washington University	Academic Institution	Ellensburg, WA
Cherry Creek Schools	School or School Systems	Greenwood Village, CO
Chicago State University	Academic Institution	Chicago, IL
Christel House	Academic Institution	Indianapolis, IN
Alma College	Academic Institution	Alma, MI
Cinco Ranch High School	School or School Systems	Cinco Ranch, TX
Claflin University	Academic Institution	Orangeburg, SC
Clark Atlanta University	Academic Institution	Atlanta, GA
Clarke County School District	School or School Systems	Athens, GA
Clemson University	Academic Institution	Clemson, SC
Cleveland State University	Academic Institution	Cleveland, OH

Colgate University	Academic Institution	Hamilton, NY
Colorado School of Mines	Academic Institution	Golden, CO
Colorado State University	Academic Institution	Fort Collins, CO
Columbus State University	Academic Institution	Columbus, GA
American Academy	School or School Systems	Colorado
Concordia College	Academic Institution	Moorhead, MN
Curry College	Academic Institution	Milton, MA
Davis & Elkins College	Academic Institution	Elkins, WV
Decatur Central High School	School or School Systems	Indianapolis, IN
Delta State University	Academic Institution	Cleveland, MS
Douglas County School District	School or School Systems	Castle Rock, CO
Drexel University	Academic Institution	Philadelphia, PA
Duchesne High School	School or School Systems	Duchesne, UT
East Carolina University	Academic Institution	Greenville, NC
East Tennessee State University	Academic Institution	Johnson City, TN
American Association for Employment in Education (AAEE)	Other Nonprofits	Sycamore, IL
Eastern Kentucky University	Academic Institution	Richmond, Kentucky
Eastern Michigan University	Academic Institution	Ypsilanti, MI
Eastern Washington University	Academic Institution	Cheney, WA
Embry-Riddle Aeronautical University	Academic Institution	Daytona Beach, FL
Englewood Schools	School or School Systems	Englewood, CO
Fisk University	Academic Institution	Nashville, TN
Fitchburg State University	Academic Institution	Fitchburg, MA
Florida Gulf Coast University	Academic Institution	Fort Myers, FL
Florida International University	Academic Institution	Miami, FL
Florida State University	Academic Institution	Tallahassee, FL
American Chemical Society	Other Nonprofits	Washington, DC
Fort Hayes State University	Academic Institution	Hays, Kansas
Frederick County Public Schools	School or School Systems	Frederick, MD
Georgetown University	Academic Institution	Washington, D.C.,
Georgia Tech Research Institute	Academic Institution	Atlanta, GA
Gettysburg College	Academic Institution	Gettysburg, PA
Greendale School District	School or School Systems	Milwaukee County, WI
Hofstra University	Academic Institution	Hempstead, NY
Idaho State University	Academic Institution	Pocatello, ID
Illinois College	Academic Institution	Jacksonville, IL

Illinois State University	Academic Institution	Normal, IL
American Physical Society	Other Nonprofits	College Park, MD
Illinois Wesleyan University	Academic Institution	Bloomington, IL
Indiana State University	Academic Institution	Terre Haute, IN
Indiana University - Purdue University Indianapolis	Academic Institution	Indianapolis, IN
Indiana University of Pennsylvania	Academic Institution	Indiana County, PA
Jackson State University	Academic Institution	Jacksons, MS
James Madison University	Academic Institution	Harrisonburg, VA
Jeffco Public Schools	School or School Systems	Golden, CO
Jefferson Academy	School or School Systems	Broomfield, CO
Kennesaw State University	Academic Institution	Kennesaw, GA
Kentucky Department of Education	Other Nonprofits	Frankfort, KY

Full details of organizations that have been involved as partners:

240 Tutoring
Organization Type: Other Nonprofits
Organization Location: Houston, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Adams County School District
Organization Type: School or School Systems
Organization Location: Commerce City, CO
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Adelphi University
Organization Type: Academic Institution
Organization Location: Manhattan, NY
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Alabama A&M University
Organization Type: Academic Institution
Organization Location: Huntsville, AL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Albright College
Organization Type: Academic Institution
Organization Location: Reading, PA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Alma College
Organization Type: Academic Institution
Organization Location: Alma, MI
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

American Academy

Organization Type: School or School Systems
Organization Location: Colorado
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

American Association for Employment in Education (AAEE)
Organization Type: Other Nonprofits
Organization Location: Sycamore, IL
Partner's Contribution to the Project:
Collaborative Research
Other: Host webinars and conferences that GFO presents at they are also using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

American Chemical Society
Organization Type: Other Nonprofits
Organization Location: Washington, DC
Partner's Contribution to the Project:
Facilities
Collaborative Research
More Detail on Partner and Contribution: Identified chemistry change agents, recruited quantitative sties, disseminated GFO resources through ACS channels.

American Physical Society
Organization Type: Other Nonprofits
Organization Location: College Park, MD
Partner's Contribution to the Project:
Facilities
Collaborative Research
More Detail on Partner and Contribution: Identified physics change agents, developed the website, recruited quantitative sties, disseminated GFO resources through APS and PhysTEC channels, participated in overall project planning.

Andrews University
Organization Type: Academic Institution
Organization Location: Berrien Springs, MI
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Anne Arundel County Public Schools
Organization Type: School or School Systems
Organization Location: Annapolis, MD
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Appalachian State University Organization
Type: Academic Institution
Organization Location: Boone, NC
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the math and chemistry faculty and students each year.

Arizona State University
Organization Type: Academic Institution
Organization Location: Tempe, AZ
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Association of Mathematics Teacher Educators
Organization Type: Other Nonprofits
Organization Location: Houghton, MI
Partner's Contribution to the Project:
Collaborative Research

More Detail on Partner and Contribution: AMTE is our mathematics society partner. AMTE has created a task force of 5 change agents who work to Get the Facts Out to mathematics teacher educators across the U.S. and support new GFO mathematics champions.

Auburn University
Organization Type: Academic Institution
Organization Location: Auburn, Alabama
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Augsburg University
Organization Type: Academic Institution
Organization Location: Minneapolis, MN
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics, math and chemistry faculty and students each year.

Augustana University
Organization Type: Academic Institution
Organization Location: Sioux Falls, SD
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Aurora University
Organization Type: Academic Institution
Organization Location: Aurora, Illinois
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Azusa Pacific University, CA
Organization Type: Academic Institution
Organization Location: Azusa, California
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Baylor University
Organization Type: Academic Institution
Organization Location: Waco, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Berry College
Organization Type: Academic Institution
Organization Location: Berry, Georgia
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Boise State University
Organization Type: Academic Institution
Organization Location: Bosie, ID
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Boulder Valley School District
Organization Type: School or School Systems
Organization Location: Boulder, CO
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Bridgewater State University

Organization Type: Academic Institution
Organization Location: Bridgewater, MA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Brigham Young University
Organization Type: Academic Institution
Organization Location: Provo, UT
Partner's Contribution to the Project:
Facilities
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Qualitative Site. Researchers visit this IHE once per year during the grant period to conduct focus groups and give a workshop on the GFO resources. Additionally, once per year the GFO Research Team collects perceptions survey data from faculty and students in physics, chemistry and math.

Brigham Young University - Idaho
Organization Type: Academic Institution
Organization Location: Rexburg, ID
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Bucknell University
Organization Type: Academic Institution
Organization Location: Lewisburg, PA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Butler County Community College
Organization Type: Academic Institution
Organization Location: Butler Township, PA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

CUNY College of Staten Island
Organization Type: Academic Institution
Organization Location: Staten Island, NY
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Caddo Parish Public Schools
Organization Type: School or School Systems
Organization Location: Shreveport, LA
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Cal State University - Channel Islands
Organization Type: Academic Institution
Organization Location: Camarillo, California
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Cal State University - Chico
Organization Type: Academic Institution
Organization Location: Chico, California
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

California Polytechnic State University - Pomona
Organization Type: Academic Institution

Organization Location: Pomona, CA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

California Polytechnic State University - San Luis Obisbo
Organization Type: Academic Institution
Organization Location: San Luis Obispo, CA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics, math and chemistry faculty and students each year.

California State University - East Bay
Organization Type: Academic Institution
Organization Location: Hayward, CA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

California State University - Fullerton
Organization Type: Academic Institution
Organization Location: Fullerton, CA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the chemistry faculty and students each year.

California State University - Northridge
Organization Type: Academic Institution
Organization Location: Northridge, CA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

California State University, Fresno
Organization Type: Academic Institution
Organization Location: Fresno, CA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

California State University, Long Beach
Organization Type: Academic Institution
Organization Location: Long Beach, CA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Qualitative Site. Researchers visit this IHE once per year during the grant period to conduct focus groups and give a workshop on the GFO resources. Additionally, once per year the GFO Research Team collects perceptions survey data from faculty and students in physics, chemistry and math.

California State University, Monterey Bay
Organization Type: Academic Institution
Organization Location: Monterey Bay, CA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the math and chemistry faculty and students each year.

California State University, Sacramento
Organization Type: Academic Institution
Organization Location: Sacramento, CA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

California State University, San Bernardino

Organization Type: Academic Institution
Organization Location: San Bernardino, CA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

California State University, San Marcos
Organization Type: Academic Institution
Organization Location: San Marcos, CA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Case Western Reserve University
Organization Type: Academic Institution
Organization Location: Cleveland, OH
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Central Connecticut State University
Organization Type: Academic Institution
Organization Location: New Britain, Connecticut
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Central Washington University
Organization Type: Academic Institution
Organization Location: Ellensburg, WA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Cherry Creek Schools
Organization Type: School or School Systems
Organization Location: Greenwood Village, CO
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Chicago State University
Organization Type: Academic Institution
Organization Location: Chicago, IL
Partner's Contribution to the Project:
Facilities
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Qualitative Site. Researchers visit this IHE once per year during the grant period to conduct focus groups and give a workshop on the GFO resources. Additionally, once per year the GFO Research Team collects perceptions survey data from faculty and students in physics, chemistry and math.

Christel House
Organization Type: Academic Institution
Organization Location: Indianapolis, IN
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Cinco Ranch High School
Organization Type: School or School Systems
Organization Location: Cinco Ranch, TX
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Claflin University
Organization Type: Academic Institution
Organization Location: Orangeburg, SC

Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Clark Atlanta University
Organization Type: Academic Institution
Organization Location: Atlanta, GA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Clarke County School District
Organization Type: School or School Systems
Organization Location: Athens, GA
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Clemson University
Organization Type: Academic Institution
Organization Location: Clemson, SC
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Cleveland State University
Organization Type: Academic Institution
Organization Location: Cleveland, OH
Partner's Contribution to the Project:
Financial support
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics, math and chemistry faculty and students each year.

Colgate University
Organization Type: Academic Institution
Organization Location: Hamilton, NY
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Colorado School of Mines
Organization Type: Academic Institution
Organization Location: Golden, CO
Partner's Contribution to the Project:
Facilities
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Qualitative Site. Researchers visit this IHE once per year during the grant period to conduct focus groups and give a workshop on the GFO resources. Additionally, once per year the GFO Research Team collects perceptions survey data from faculty and students in physics, chemistry, and math.

Colorado State University
Organization Type: Academic Institution
Organization Location: Fort Collins, CO
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the math faculty and students each year.

Columbus State University
Organization Type: Academic Institution
Organization Location: Columbus, GA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Concordia College
Organization Type: Academic Institution

Organization Location: Moorhead, MN
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Curry College
Organization Type: Academic Institution
Organization Location: Milton, MA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Davis & Elkins College
Organization Type: Academic Institution
Organization Location: Elkins, WV
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Decatur Central High School
Organization Type: School or School Systems
Organization Location: Indianapolis, IN
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Delta State University
Organization Type: Academic Institution
Organization Location: Cleveland, MS
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Douglas County School District
Organization Type: School or School Systems
Organization Location: Castle Rock, CO
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Drexel University
Organization Type: Academic Institution
Organization Location: Philadelphia, PA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Duchesne High School
Organization Type: School or School Systems
Organization Location: Duchesne, UT
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

East Carolina University
Organization Type: Academic Institution
Organization Location: Greenville, NC
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

East Tennessee State University
Organization Type: Academic Institution
Organization Location: Johnson City, TN
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Eastern Kentucky University
Organization Type: Academic Institution

Organization Location: Richmond, Kentucky
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution:

Eastern Michigan University
Organization Type: Academic Institution
Organization Location: Ypsilanti, MI
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the chemistry faculty and students each year.

Eastern Washington University
Organization Type: Academic Institution
Organization Location: Cheney, WA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Embry-Riddle Aeronautical University
Organization Type: Academic Institution
Organization Location: Daytona Beach, FL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Englewood Schools
Organization Type: School or School Systems
Organization Location: Englewood, CO
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Fisk University
Organization Type: Academic Institution
Organization Location: Nashville, TN
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics, math and chemistry faculty and students each year.

Fitchburg State University
Organization Type: Academic Institution
Organization Location: Fitchburg, MA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Florida Gulf Coast University
Organization Type: Academic Institution
Organization Location: Fort Myers, FL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Florida International University
Organization Type: Academic Institution
Organization Location: Miami, FL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Florida State University
Organization Type: Academic Institution
Organization Location: Tallahassee, FL
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data

from the physics faculty and students each year.

Fort Hayes State University
Organization Type: Academic Institution
Organization Location: Hays, Kansas
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution:

Frederick County Public Schools
Organization Type: School or School Systems
Organization Location: Frederick, MD
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Georgetown University
Organization Type: Academic Institution
Organization Location: Washington, D.C.,
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Georgia Tech Research Institute
Organization Type: Academic Institution
Organization Location: Atlanta, GA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Gettysburg College
Organization Type: Academic Institution
Organization Location: Gettysburg, PA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Greendale School District
Organization Type: School or School Systems
Organization Location: Milwaukee County, WI
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Hofstra University
Organization Type: Academic Institution
Organization Location: Hempstead, NY
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Idaho State University
Organization Type: Academic Institution
Organization Location: Pocatello, ID
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the chemistry faculty and students each year.

Illinois College
Organization Type: Academic Institution
Organization Location: Jacksonville, IL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Illinois State University

Organization Type: Academic Institution
Organization Location: Normal, IL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Illinois Wesleyan University
Organization Type: Academic Institution
Organization Location: Bloomington, IL
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics, math and chemistry faculty and students each year.

Indiana State University
Organization Type: Academic Institution
Organization Location: Terre Haute, IN
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Indiana University - Purdue University Indianapolis
Organization Type: Academic Institution
Organization Location: Indianapolis, IN
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Indiana University of Pennsylvania
Organization Type: Academic Institution
Organization Location: Indiana County, PA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Jackson State University
Organization Type: Academic Institution
Organization Location: Jacksons, MS
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

James Madison University
Organization Type: Academic Institution
Organization Location: Harrisonburg, VA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the chemistry faculty and students each year.

Jeffco Public Schools
Organization Type: School or School Systems
Organization Location: Golden, CO
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Jefferson Academy
Organization Type: School or School Systems
Organization Location: Broomfield, CO
Partner's Contribution to the Project:
Other: Staff from this school are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Kennesaw State University
Organization Type: Academic Institution
Organization Location: Kennesaw, GA
Partner's Contribution to the Project:
Collaborative Research

More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the chemistry faculty and students each year.

Kentucky Department of Education
Organization Type: Other Nonprofits
Organization Location: Frankfort, KY
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: Collaborate with possible New Champion Engagement Strategy and Change Agent model for GFO 2.0 and staff is using GFO resources and providing feedback on their experiences

Laurens School District 55
Organization Type: School or School Systems
Organization Location: Laurens, SC
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Lee College
Organization Type: Academic Institution
Organization Location: Baytown, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Lewis & Clark College
Organization Type: Academic Institution
Organization Location: Portland, OR
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Lewis University
Organization Type: Academic Institution
Organization Location: Romeoville, IL
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Louisiana Tech University - UTeach Tech Program
Organization Type: Academic Institution
Organization Location: Ruston, Louisiana
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

MSD Decatur Township Schools
Organization Type: School or School Systems
Organization Location: Decatur, IN
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Marquette University
Organization Type: Academic Institution
Organization Location: Milwaukee, WI
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Maryville College
Organization Type: Academic Institution
Organization Location: Maryville, TN
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Mathematical Association of America

Organization Type: Other Nonprofits
Organization Location: Washington, DC
Partner's Contribution to the Project:
Facilities
Collaborative Research
More Detail on Partner and Contribution: MAA distributed GFO at summer 2019 events.

Mattawan Consolidated Schools
Organization Type: School or School Systems
Organization Location: Mattawan, MI
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Mercy College
Organization Type: Academic Institution
Organization Location: Dobbs Ferry, NY
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Meredith College
Organization Type: Academic Institution
Organization Location: Raleigh, NC
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Metropolitan State University of Denver
Organization Type: Academic Institution
Organization Location: Denver, CO
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Miami University of Ohio
Organization Type: Academic Institution
Organization Location: Oxford, OH
Partner's Contribution to the Project:
Collaborative Research
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Middle Tennessee State University
Organization Type: Academic Institution
Organization Location: Murfreesboro, TN
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics, math and chemistry faculty and students each year.

Mineral County School District
Organization Type: School or School Systems
Organization Location: Hawthorne, NV
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Mississippi State University
Organization Type: Academic Institution
Organization Location: Starkville, MS
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Missouri University of Science and Technology
Organization Type: Academic Institution
Organization Location: Rolla, MO

Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Monroe County Community School Corporation
Organization Type: School or School Systems
Organization Location: Bloomington, IN
Partner's Contribution to the Project:
Other: Staff from this school system are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Monroe County Local Early Intervention Coordinating Council
Organization Type: Other Nonprofits
Organization Location: Rochester , NY
Partner's Contribution to the Project:
Other: Staff from this corporation are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Montclair State University
Organization Type: Academic Institution
Organization Location: Montclair, NJ
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Morehead State University
Organization Type: Academic Institution
Organization Location: Morehead, KY
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics and math faculty and students each year.

Morgan State University
Organization Type: Academic Institution
Organization Location: Baltimore, Maryland
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution:

New Castle Area School District
Organization Type: School or School Systems
Organization Location: Lawrence County, PA
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

New Jersey Center for Teaching and Learning
Organization Type: Other Nonprofits
Organization Location: Mahwah, NJ
Partner's Contribution to the Project:
Other: Staff from this organization are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Nicholls State University
Organization Type: Academic Institution
Organization Location: Thibodaux, LA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

North Carolina A&T State University
Organization Type: Academic Institution
Organization Location: Greensboro, NC
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

North Central College

Organization Type: Academic Institution
Organization Location: Naperville, IL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Northern Arizona University
Organization Type: Academic Institution
Organization Location: Flagstaff, AZ
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Northern Kentucky University
Organization Type: Academic Institution
Organization Location: Highland Heights, KY
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Northmont City School District
Organization Type: School or School Systems
Organization Location: Englewood, OH
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Northwest Missouri State University
Organization Type: Academic Institution
Organization Location: Maryville, MO
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Northwestern Oklahoma State University
Organization Type: Academic Institution
Organization Location: Alva, OK
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Northwestern State University
Organization Type: Academic Institution
Organization Location: Natchitoches, LA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the math faculty and students each year.

Oral Roberts University
Organization Type: Academic Institution
Organization Location: Tulsa, OK
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Oregon State University
Organization Type: Academic Institution
Organization Location: Corvallis, OR
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Pacific Lutheran University
Organization Type: Academic Institution
Organization Location: Parkland, WA

Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Pacific University
Organization Type: Academic Institution
Organization Location: Forest Grove, OR
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Penn State Behrend
Organization Type: Academic Institution
Organization Location: Erie, PA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Penn State University
Organization Type: Academic Institution
Organization Location: State College, PA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Pennsylvania Western University
Organization Type: Academic Institution
Organization Location: Pennsylvania
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Prairie View A&M University
Organization Type: Academic Institution
Organization Location: Prairie View, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Prince George's Community College
Organization Type: Academic Institution
Organization Location: Largo, MD
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the chemistry faculty and students each year.

Riverside City College
Organization Type: Academic Institution
Organization Location: Riverside, CA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Roanoke City Public Schools
Organization Type: School or School Systems
Organization Location: Roanoke, VA
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Rockdale County Public Schools
Organization Type: School or School Systems
Organization Location: Conyers, GA
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Roosevelt University

Organization Type: Academic Institution
Organization Location: Chicago, IL
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the math faculty and students each year.

Rowan University
Organization Type: Academic Institution
Organization Location: Glassboro, NJ
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics, math and chemistry faculty and students each year.

STEMteachersNYC
Organization Type: Other Nonprofits
Organization Location: New York, NY
Partner's Contribution to the Project:
Other: Staff from this organization are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

SUNY Buffalo State College
Organization Type: Academic Institution
Organization Location: Buffalo, NY
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

SUNY Geneseo
Organization Type: Academic Institution
Organization Location: Geneseo, NY
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Sacred Heart University
Organization Type: Academic Institution
Organization Location: Fairfield, CT
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Saint Leo University
Organization Type: Academic Institution
Organization Location: St. Leo, FL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Santa Margarita Catholic High School
Organization Type: School or School Systems
Organization Location: Rancho Santa Margarita, CA
Partner's Contribution to the Project:
Other: Staff from this school are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Seattle University
Organization Type: Academic Institution
Organization Location: Seattle, WA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Shepherd University
Organization Type: Academic Institution
Organization Location: Sheperdstown, WV
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences

More Detail on Partner and Contribution:

Slippery Rock University
Organization Type: Academic Institution
Organization Location: Slippery Rock, PA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

South Dakota State University
Organization Type: Academic Institution
Organization Location: Brookings, SD
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Southern Connecticut State University
Organization Type: Academic Institution
Organization Location: New Haven, CT
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Southern University and A&M College
Organization Type: Academic Institution
Organization Location: Baton Rouge, LA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Southern University, LA
Organization Type: Academic Institution
Organization Location: Baton Rouge, LA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Spelman College
Organization Type: Academic Institution
Organization Location: Atlanta, GA
Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Springdale Public Schools
Organization Type: School or School Systems
Organization Location: Springdale, AR
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

St. John's School
Organization Type: School or School Systems
Organization Location: Houston, TX
Partner's Contribution to the Project:
Other: Staff from this school are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

St. Mary's College of Maryland
Organization Type: Academic Institution
Organization Location: St. Mary's City, MD
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

St. Vrain School District
Organization Type: School or School Systems
Organization Location: Longmont, CO

Partner's Contribution to the Project:
Other: Staff from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Taylor University
Organization Type: Academic Institution
Organization Location: Upland, IN
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Texas A&M University - Commerce
Organization Type: Academic Institution
Organization Location: Commerce, TX
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Texas Christian University
Organization Type: Academic Institution
Organization Location: Fort Worth, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Texas Lutheran University
Organization Type: Academic Institution
Organization Location: Seguin, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

The Citadel
Organization Type: Academic Institution
Organization Location: Charleston, SC
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

The College of New Jersey
Organization Type: Academic Institution
Organization Location: Ewing Township
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

The Ohio State University
Organization Type: Academic Institution
Organization Location: Columbus, OH
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

The University of Alabama
Organization Type: Academic Institution
Organization Location: Tuscaloosa, AL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

The University of Alabama in Huntsville
Organization Type: Academic Institution
Organization Location: Huntsville, AL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

The University of Mississippi
Organization Type: Academic Institution

Organization Location: Oxford, MS
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

The University of Texas at Arlington
Organization Type: Academic Institution
Organization Location: Arlington, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

The University of Texas at El Paso
Organization Type: Academic Institution
Organization Location: El Paso, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Tooele County School District
Organization Type: School or School Systems
Organization Location: Tooele, TX
Partner's Contribution to the Project:
Other: Staff from this district are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Tougaloo University
Organization Type: Academic Institution
Organization Location: Tougaloo, MS
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics, math and chemistry faculty and students each year.

Towson University
Organization Type: Academic Institution
Organization Location: Towson, MD
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Tyler Jr. College
Organization Type: Academic Institution
Organization Location: Tyler, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

UMass Boston
Organization Type: Academic Institution
Organization Location: Boston, MA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Akron
Organization Type: Academic Institution
Organization Location: Akron, OH
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Arizona
Organization Type: Academic Institution
Organization Location: Tuscon, AZ
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Arkansas

Organization Type: Academic Institution
Organization Location: Fayetteville, AR
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of California - Berkeley
Organization Type: Academic Institution
Organization Location: Berkeley, CA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of California - Irvine
Organization Type: Academic Institution
Organization Location: Irvine, CA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the faculty and students each year.

University of California - Merced
Organization Type: Academic Institution
Organization Location: Merced, CA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of California - Santa Cruz
Organization Type: Academic Institution
Organization Location: Santa Cruz, CA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Central Florida
Organization Type: Academic Institution
Organization Location: Orlando, Florida
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

University of Cincinnati
Organization Type: Academic Institution
Organization Location: Cincinnati, OH
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Colorado - Boulder
Organization Type: Academic Institution
Organization Location: Boulder, CO
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

University of Colorado - Colorado Springs
Organization Type: Academic Institution
Organization Location: Colorado Springs, CO
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Connecticut
Organization Type: Academic Institution
Organization Location: Mansfield, CT

Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Delaware
Organization Type: Academic Institution
Organization Location: Newark, DE
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Detroit Mercy
Organization Type: Academic Institution
Organization Location: Detroit, MI
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Florida
Organization Type: Academic Institution
Organization Location: Gainesville, FL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Hartford
Organization Type: Academic Institution
Organization Location: West Hartford, CT
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Hawai'i at Mānoa
Organization Type: Academic Institution
Organization Location: Honolulu, HI
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Hawaii at Hilo
Organization Type: Academic Institution
Organization Location: Hilo, HI
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Houston
Organization Type: Academic Institution
Organization Location: Houston, TX
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics and math faculty and students each year.

University of Houston - Clear Lake
Organization Type: Academic Institution
Organization Location: Clear Lake, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Illinois at Urbana-Champaign
Organization Type: Academic Institution
Organization Location: Champaign, IL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Indianapolis
Organization Type: Academic Institution

Organization Location: Indianapolis, IN
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Kansas
Organization Type: Academic Institution
Organization Location: Lawrence, KS
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

University of Kentucky
Organization Type: Academic Institution
Organization Location: Lexington, KY
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Maryland
Organization Type: Academic Institution
Organization Location: College Park, MD
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Massachusetts
Organization Type: Academic Institution
Organization Location: Amherst, Massachusetts
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Massachusetts Lowell
Organization Type: Academic Institution
Organization Location: Lowell, Massachusetts
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Mississippi
Organization Type: Academic Institution
Organization Location: Oxford, MS
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics and chemistry faculty and students each year.

University of Nevada
Organization Type: Academic Institution
Organization Location: Reno, NV
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of North Carolina - Chapel Hill
Organization Type: Academic Institution
Organization Location: Chapel Hill, North Carolina
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of North Georgia
Organization Type: Academic Institution
Organization Location: Dahlonega, GA
Partner's Contribution to the Project:
Collaborative Research

More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

University of North Texas
Organization Type: Academic Institution
Organization Location: Denton, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Oregon
Organization Type: Academic Institution
Organization Location: Eugene, OR
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Saint Joseph
Organization Type: Academic Institution
Organization Location: Hartford, Connecticut
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Tennessee - Martin
Organization Type: Academic Institution
Organization Location: Martin, TN
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the math faculty and students each year.

University of Texas - Austin
Organization Type: Academic Institution
Organization Location: Austin, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Texas - El Paso
Organization Type: Academic Institution
Organization Location: El Paso, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Texas - Rio Grande Valley
Organization Type: Academic Institution
Organization Location: Edinburg, TX
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

University of Texas Permian Basin
Organization Type: Academic Institution
Organization Location: Odessa, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Texas at Austin
Organization Type: Academic Institution
Organization Location: Austin, TX
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

University of Texas at Tyler

Organization Type: Academic Institution
Organization Location: Tyler, TX
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Texas-Rio Grande Valley
Organization Type: Academic Institution
Organization Location: Edinburg, Texas
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Washington Bothell
Organization Type: Academic Institution
Organization Location: Bothell, WA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

University of West Florida
Organization Type: Academic Institution
Organization Location: Pensacola, FL
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of West Georgia
Organization Type: Academic Institution
Organization Location: Carrollton, Georgia
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Western Florida
Organization Type: Academic Institution
Organization Location: Pensacola, Florida
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Wisconsin - La Crosse
Organization Type: Academic Institution
Organization Location: La Crosse, WI
Partner's Contribution to the Project:
Facilities
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Qualitative Site. Researchers visit this IHE once per year during the grant period to conduct focus groups and give a workshop on the GFO resources. Additionally, once per year the GFO Research Team collects perceptions survey data from faculty and students in physics, chemistry, and math.

University of Wisconsin - River Falls
Organization Type: Academic Institution
Organization Location: River Falls, Wisconsin
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of Wisconsin-Platteville
Organization Type: Academic Institution
Organization Location: Platteville, WI
Partner's Contribution to the Project:
Other: Western Colorado University
More Detail on Partner and Contribution:

University of Wyoming
Organization Type: Academic Institution
Organization Location: Laramie, WY

Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of the District of Columbia
Organization Type: Academic Institution
Organization Location: Washington, D.C.
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

University of the Pacific
Organization Type: Academic Institution
Organization Location: Stockton, CA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Utah State University
Organization Type: Academic Institution
Organization Location: Logan, Utah
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Vassar College
Organization Type: Academic Institution
Organization Location: Poughkeepsie, NY
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Wartburg College
Organization Type: Academic Institution
Organization Location: Denver, CO
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the math and chemistry faculty and students each year.

Waynesburg University
Organization Type: Academic Institution
Organization Location: Waynesburg, PA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the chemistry faculty and students each year.

Wellesley College
Organization Type: Academic Institution
Organization Location: Wellesley, MA
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

West Chester University
Organization Type: Academic Institution
Organization Location: Chester County, Pennsylvania
Partners Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

West Virginia University
Organization Type: Academic Institution
Organization Location: Morgantown, WV
Partner's Contribution to the Project:
Facilities
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Qualitative Site. Researchers visit this IHE once per year during the

grant period to conduct focus groups and give a workshop on the GFO resources. Additionally, once per year the GFO Research Team collects perceptions survey data from faculty and students in physics, chemistry, and math.

Western Colorado University
Organization Type: Academic Institution
Organization Location: Gunnison, Colorado
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Western Kentucky University
Organization Type: Academic Institution
Organization Location: Bowling Green, Kentucky
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Western Washington University
Organization Type: Academic Institution
Organization Location: Bellingham, Washington
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Westmont College
Organization Type: Academic Institution
Organization Location: Santa Barbara, CA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the chemistry faculty and students each year.

Winthrop University
Organization Type: Academic Institution
Organization Location: Rock Hill, SC
Partner's Contribution to the Project:
Other: Departments from this institution are using GFO resources and providing feedback on their experiences
More Detail on Partner and Contribution:

Worcester Polytechnic Institute
Organization Type: Academic Institution
Organization Location: Worcester, MA
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Wright State University
Organization Type: Academic Institution
Organization Location: Dayton, OH
Partner's Contribution to the Project:
Collaborative Research
More Detail on Partner and Contribution: This institution is a GFO Quantitative Site. The Research Team collects perceptions survey data from the physics faculty and students each year.

Were other collaborators or contacts involved? If so, please provide details.
Nothing to report

Impacts

What is the impact on the development of the principal discipline(s) of the project?

This project is supporting chemistry, physics, and mathematics local faculty champions throughout the United States in providing equivalent and fair information about teaching as a profession compared to other STEM careers by providing high- quality, accurate, and effective recruitment resources.

Longer term, this project will recruit more highly qualified undergraduates into STEM teaching fields which will help improve workforce training and an educated citizenry. Research shows that students coming into college classes will be better prepared for their college STEM courses if they had well prepared STEM teachers.

The project also produces primary research on STEM student's and faculty's perceptions of grade 7-12 teaching. Much is first of its kind. This work can be used to guide new research in this needed field of study. Key research outcomes to date include:

- Detailed understanding of student perceptions of grade 7-12 math and science teaching including an instrument that can measure these and measure student interest in the career.
- An understanding of why students who are interested choose to pursue other careers. These reasons often center around salary, retirement, and day-to-day satisfaction.
- GFO's student presentation is effective at significantly improving perceptions of the profession. No differences in these perceptions and interests were found by gender or STEM discipline.
- Clear and large differences were found when analyzing student interest in and perceptions of grade 7-12 math and science teaching by race/ethnicity, including:
    - A smaller fraction of STEM majors who identify as white are interested in the career or are pursuing certification compared to students who identify in one of the underrepresented groups including: Black or African American, Hispanic or Latino, and Asian or Asian American.
    - Students who identify as Black or African American and students who identify as Hispanic or Latino have more positive perceptions of the profession.
    - Students who identify as Black or African American and students who identify as Hispanic or Latino are underrepresented in STEM degrees earned compared to all college degrees.
- The first research-based, user-tested teacher recruitment materials Presentations for Faculty - Teaching the Best Kept Secret!
- Presentations for Students - Busting Myths about the Teaching Profession
- Poster series and Brochure series
- Tested messaging about the profession that improves both student and faculty views of the profession Videos about the profession that share facts and provide a glimpse of teaching as a career
- Data handouts that include data to support the key facts about the profession that have been shown to impact student's career choices.
- Detailed understanding of faculty perceptions of grade 7-12 math and science teaching as a profession including an instrument that can measure them. In particular:
    - STEM faculty tend to think that (a) students aren't interested in teaching and (b) their colleagues do not value teaching careers for their students, neither of which are generally true. Consequently, many do not talk about teaching careers to students.
    - Also, we have learned that faculty in general are supportive of a teaching career for their students but are very naïve about the career itself. They often hold these inconsistent views at the same time. If these faculty do mention teaching, students are likely to sense the negative views and are often dissuaded from the career, because faculty are important influences in their lives at the time that they are making a career choice.
- STEM Faculty perceptions and knowledge of the career are not different by discipline, gender, or faculty position type
- There are unique challenges related to teacher recruitment facing each STEM discipline requiring a customized strategic approach for each.
- Basic miscommunication between faculty, students, and fellow faculty.
    - Over 60% of STEM majors are interested in grade 7-12 teaching
    - Students indicate that they often do not mention this to faculty for fear that they will be looked down upon
    - Faculty believe ~5% are interested and indicate that they do not bring it up because their students are not interested.
    - Over 40% of students surveyed indicate that they have never heard even one faculty member mention teaching as a career option.
    - Faculty also indicate that they perceive their colleagues are not supportive of the career

- 88% of faculty (n=2200) agree/strongly agree with the statement, "I would be comfortable with my strongest student becoming a grade 7-12 teacher"

Added for 2023

- The only known central location with every approved teacher certification program in the nation.
- NEW: 109 (247 total) A Teacher's Life by the Numbers Infographics for different counties around the U.S.
- NEW: Retirement data, loan forgiveness, scholarship data by state

What is the impact on other disciplines?

The GFO resources have been and will continue to be developed and tested with subjects from a range of STEM disciplines. These materials are ready for adoption by other societies or faculty in other STEM disciplines interested in recruiting teachers. Additionally, 75 (about 25%) of our C/champions are not specifically Physics, Chemistry, or Math educators. Those include other sciences, Noyce PIs, STEM/UTeach programs (directors, instructors, outreach, etc), Science Education, Education/Teacher prep, K12 human resources, university administrators, and K12 teachers.

In Yr 5 the use of GFO by Talent Acquisition Specialists at school districts has grown tremendously. Districts are seeing these resources as effective tools for recruitment of all teachers, not just STEM. Some are also working to use GFO for retention purposes.

In Colorado the State Department of Education Recruitment and Retention team has shared GFO with all the States Principals and Superintendents. They are also weaving the resources into their current Retention series to help teachers tell their story. This work is focused on both teacher retention and an effort to get teachers to begin planting the seed about teaching as a profession with their secondary students.

Finally, research shows that mathematics preparation is the primary barrier to participation in STEM disciplines in college, particularly for underserved students. Increasing the pipeline of highly qualified high school mathematics teachers should have a significant impact on numbers of students successfully pursuing majors and careers in all STEM disciplines.

What is the impact on the development of human resources?

Faculty

- More accurate and complete knowledge of the STEM teaching profession
- More positive opinion of the STEM teaching profession.
    - NEW: Greater understanding of student interest in and faculty appreciation of teaching careers.

Postdocs

- Active contributing members of the DBER community who are qualified to secure a DBER faculty position.
- Stronger project management and research presentation and writing skills.

STEM Teachers

- Increased number of grades 7-12 math, chemistry, and physics teachers.
- Incoming college first-year students who are better prepared for introductory STEM courses
- Increased knowledge of the profession and increased well-being hopefully equaling higher retention

What was the impact on teaching and educational experiences?

Nothing to report.

What is the impact on physical resources that form infrastructure?

Nothing to report.

What is the impact on institutional resources that form infrastructure?

Nothing to report.

What is the impact on information resources that form infrastructure?

GettheFactsOut.org

The GFO website hosts a wealth of information and resources related to STEM teaching professions, some of which is related to K-12 teaching generally. The site includes information for prospective teachers including facts about the profession; the only central location for all authorized teacher certification programs in the nation; resources for loan forgiveness and scholarships for STEM teachers. GFO resources for faculty use include: local teacher salary data; information on retirement plans by state as well as education on defined-benefit vs. defined-contribution; presentations for faculty and students; ready- to-print posters/brochures/flyers; facts and data; research-based messaging; motivation and avenues for engagement; research instruments for measuring perceptions; reports on GFO research at 50+ institutions.

Get the Facts Out YouTube Channel

The Get the Facts Out YouTube Channel contains professional videos designed to be used as recruitment and informational resources about the teaching profession. The channel also contains recorded research presentations about the project and sample Get the Facts Out

webinars. This year, we expanded this repository to contain other GFO-related videos produced by GFO champions or their institutional or professional-society colleagues.

What is the impact on technology transfer?

Nothing to report.

What is the impact on society beyond science and technology?

There is a growing body of research that provides evidence that increasing the number and diversity of qualified STEM teachers could open more doors for socioeconomically disadvantaged students and students from underrepresented groups, whether they ultimately pursue STEM careers or not (many employers recognize the value of the thinking skills learned by students of STEM). Additionally, increasing the number of qualified STEM teachers will improve public knowledge and attitudes about STEM fields.

In addition, it has become clear that faculty from colleges of education as well as school district recruitment specialists find the GFO resources to be effective recruitment and retention resources for teachers in all fields, not just science and mathematics. In particular, the resources are very appropriate for recruiting special education teachers, another very high need teaching area.

State Departments of Education (Colorado, Georgia, and Alabama) are beginning to reach out and integrate GFO resources into both their recruitment and retention work.

What percentage of the award's budget was spent in a foreign country?

Nothing to report.

Changes/Problems

Changes in approach and reason for change

There have been so many as we have learned what Champions need and what different types of Champions exist.

- It's critical to supply Champions with Local data, they don't have time or the experience to find it themselves.
- Community is important and a large body of the Champions want it.
- This work benefits all STEM. As the work becomes more centralized (ie GFO Central), it has become easier to serve all of STEM and beyond with school districts and State Departments of Education.
- Early on we learned that GFO Central has to organize and plan nearly all of the workshops and outreach activities.
- GFO Central supports the Champions rather than splintering this support out to a range of busy faculty identified as Change Agents.
- Because of the different types of Champions – it's important to have different strands of work.
    - For those who have been teachers or who have teachers in the family, GFO uptake is nearly immediate.
    - For those who work as teacher educators and have some but limited experience with teachers, more PD is necessary but reasonable.
    - For those who have no direct experience with the profession outside of having gone to school or having children in school, uptake is much slower. There is much less trust in the data as well as less interest in recruitment.
- Research is being redirected towards sites who are active with GFO. We have adequate data from sites who do not use GFO to provide a reliable understanding of the landscape and which variables affect it. Now we still have much to learn about Champion efforts and different types of campaigns.
- Resource development is and will always be ongoing. We had originally envisioned developing a suite of tools and then simply working to disseminate and diffuse. However, it's clear that the issues the public is currently faced with related to the teaching profession are a rapidly moving target. Teaching is a favorite topic of the media therefor the focus will shift every 6 months to a year to keep the headlines fresh. We are faced with the burden of addressing each of these headlines by searching for current evidence of the actual impact of these issues and then create effective messaging and resources that can education students and faculty about the current realities of the profession.
- We have hired a part-time Communications and Marketing Specialist, Misiewicz, who was a 1st grade teacher before earning her MA in Marketing. She has 12 years of Marketing experience and was ready to get out of corporate America back to something that makes a difference. Having an expert in this field has made us many times more efficient in our development of resources, social media presence, development of videos, and even production of our newsletter.

Actual or Anticipated problems or delays and actions or plans to resolve them
nothing to report

Changes that have a significant impact on expenditures
Our expenditures are consistent with the changes described in the Year 4 report

Significant changes in use or care of human subjects
The Colorado School of Mines IRB-review exemption was updated to add new investigators and the T@M Noyce Scholarship and Stipend Program.

Significant changes in use or care of vertebrate animals
Nothing to report

Significant changes in use or care of biohazards
Nothing to report

Change in primary performance site location
Nothing to report

Special Requirements

Responses to any special reporting requirements specified in the award terms and conditions, as well as any award specific reporting requirements.
Nothing to report