

**G**OODMAN RESEARCH GROUP, INC.  
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*Albert Einstein*  
*Distinguished Educator*  
*Fellowship Program*  
**Final Report on**  
**Comprehensive and**  
**2009–2010 Cohort**  
**Evaluations**

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## EXECUTIVE SUMMARY

The Albert Einstein Distinguished Educator Fellowship Program offers an opportunity for outstanding K–12 science, technology, engineering, and mathematics (STEM) teachers to serve in the public policy arena for a year. Einstein Fellows bring their expertise, practical insights, and real-world experience as classroom teachers to Congress and appropriate federal agencies; in return, they gain knowledge, resources, and broader perspectives on national educational issues to carry into their subsequent professional activities.

Goodman Research Group, Inc. (GRG) conducted a comprehensive retrospective evaluation and a more detailed examination of the 2009–2010 cohort of Einstein Fellows to assess the benefits and challenges of the program for Fellows, sponsoring agencies, and post-Fellowship professional settings.

## METHODS

GRG’s research design for the 2009–2010 Fellows included baseline, year-end, and follow-up surveys. GRG researchers also conducted a site visit to NSF Fellows, focus groups with all Fellows, and phone interviews with agency sponsors and Fellows. A comparison group of 2009–2010 finalists, who were in the top 10% of applicants but did not receive Fellowship placements, took baseline and follow-up surveys. For the comprehensive evaluation, the design included retrospective surveys of alumni Fellows back to the first year (1990–1991) of the program and of past finalists for the four years prior to the 2009–2010 finalist cohort. GRG also conducted focus groups and site visits with select alumni Fellows and surveyed post-Fellowship supervisors and principals.

Response rates for evaluation activities involving 2009–2010 Fellows were excellent, ranging from 92–100% (except for focus groups, which are always a logistical challenge). Response rates for activities involving alumni Fellows and 2009–2010 finalists ranged from 51–73%, rates which are quite good considering alumni may be many years post Fellowship, and post-Fellowship supervisors and past finalists have no lasting connection to the Einstein program.

## KEY FINDINGS

- Overall, the Einstein Fellowship Program is rated highly by all stakeholders. For Fellows, the program is a transformative professional development experience during which they gain useful knowledge and skills and grow as leaders. For agency sponsors, Fellows provide a useful K–12 perspective on STEM education, and they assist with tasks that might not otherwise be accomplished. Post-Fellowship supervisors and principals value the knowledge, skills, resources, and networks alumni Fellows bring with them.
- Fellows gain dramatically in their knowledge of the roles of various federal agencies in STEM education, policy, and

legislation and of the funding, curricular, and other resources available to STEM educators. Fellows are significantly more knowledgeable about most agencies than are finalists.

- Fellows show great gains in STEM education competencies and skills, especially the ability to understand and keep up with STEM education issues, policy, and legislation at the national and international levels. Again, Fellow abilities are significantly higher than are finalists' in most of these areas.
- Fellows make modest but significant gains in comfort with various STEM teaching practices. There are no significant differences between Fellows and finalists, but Fellows make significant gains over time, whereas finalists do not.
- Einstein Fellows report being significantly better equipped as leaders after their Fellowship year; finalists show no gains over this time period. After the Fellowship, Fellows move into national leader roles and regional, state, and national STEM curriculum development roles; finalists do not.
- The Einstein Fellowship profoundly alters the career pathways of some Fellows. There is tension between the intent of the enabling legislation that Einstein Fellows return to teaching and the reality that substantial numbers do not, partly because the Fellowship is transformative and partly because some participants apply at a career transition point.
- Just under a third of 2009–2010 Fellows are teaching at follow-up, but 60 percent expect to teach in the future; this compares to 71 percent of finalists who expect to teach. Fellows who leave the classroom believe they can have a greater impact on STEM education in other ways.
- The Triangle Coalition does an excellent job of supporting Fellows during application and selection and of providing orientation. They also do well in providing logistical and administrative support, particularly to NSF Fellows, and professional development opportunities. Fellows would like to see improvements to the Einstein Fellowship website.
- Most Fellows are very satisfied with their day-to-day supervisors in their agency placements, reporting that they value Fellow contributions and are flexible in allowing for professional development. The majority provide direction when needed. NSF Fellows rate their day-to-day supervisors higher and Hill Fellows rate their day-to-day supervisors lower than do other Fellows. Only half of Fellows say their offices were well prepared to work with them, and Hill Fellows rate their offices as significantly less prepared.
- Transitions from classroom teaching to the Einstein Fellowship and from the Fellowship to subsequent settings can be difficult, whether Fellows return to teaching or take other educational positions. Some participants simply miss

the Fellowship, but others feel school and district colleagues and administrators are dismissive of the contributions they can make as Einstein alumni.

- Both Fellows and sponsors mention the challenge of maintaining an appropriate balance between the Fellows' service to the agency and the Fellow's own professional development in terms of the tasks the Fellow is assigned and the amount of time the Fellow spends in and out of the office.
- Agency sponsors are very appreciative of the Einstein Fellows and the K–12 perspective they bring and the office tasks they accomplish. Challenges include issues such as space and the time to prepare and guide Fellows, their steep learning curve, and the challenge of balancing their office responsibilities and their professional development.
- In recent years, more Fellows extend their Fellowships beyond the first year, which has benefits for those Fellows, their offices, and first-year Fellows. However, allowing extensions reduces the number of spots for new Fellows.
- Post-Fellowship supervisors and principals appreciate that alumni Fellows bring information, contacts, and resources to share with their colleagues, students, and institutions, including tangible benefits like grants. Post-Fellowship supervisors report few challenges other than the possibility that former Fellows might intimidate colleagues.

## KEY RECOMMENDATIONS

- Other agencies should institute a formal sponsor handbook and Fellow orientation, as have been adopted at NSF, to explicitly convey expectations to agency sponsors, day-to-day supervisors, and Einstein Fellows. NSF and other agencies should clarify the proper balance between Fellows' service to the office and their professional development activities.
- GRG suggests instituting more formal training for sponsors about how best to plan for hosting an Einstein Fellow and what types of tasks and projects are most suitable. This would give new sponsors a better idea of what they are getting into, the Fellow's task portfolio would strike a better balance between the office's operational needs and the Fellow's professional development, and Triangle could spend less time troubleshooting around this issue.
- GRG recommends that the Triangle Coalition and the Department of Energy consider instituting a high-quality, professional public relations campaign to raise the national profile of the Einstein Fellowship program. This would

further raise the quality of the applicant pool and attract a more diverse group of applicants, including members of groups historically underrepresented in STEM. Further, by better conveying the prestige of the Fellowship and the potential post-Fellowship contributions of participants, schools and districts might be more supportive of Fellows at every stage of the process, from application to return.

- A regular and formal process of communication should be supported between Fellows and their home schools and districts during their Fellowship year, with an emphasis on Fellows sharing useful knowledge via trips or via personalized electronic newsletters or blogs. The monthly newsletter that Triangle already sends could enhance its focus on what Fellows can bring back to schools and districts as a result of the Fellowship; the newsletter could supplement the more individualized communication between Fellows and their schools and districts.
- GRG suggests providing more explicit support and guidance to outgoing Fellows in planning for their post-Fellowship experience to alert them to the challenges they may face and to offer successful strategies for sharing the ideas and excitement Fellows bring to their post-Fellowship professional activities. Given that many outgoing Fellows move on to higher-level educational leadership positions, it is also worth considering providing more explicit leadership training.