

RESESS Progress Report December 2006

This is a progress report, based on interviews from one summer's participants (2006, the second year of the RESESS program). The purpose of this report is to inform RESESS administrators and staff of participants' feedback in order to facilitate potential mid-stream adjustments in the ongoing program.

Thirteen minimally-structured, in-depth interviews were conducted with the following participants: all three protégés, and ten mentors (three of the four research mentors, all three writing and communication mentors, both community mentors and both peer mentors.) We were unsuccessful in reaching one of the research mentors for an interview, but will continue attempts to include this mentor in the ongoing evaluation.

Protégés' Feedback

Protégés were specifically asked about, but reported no, problems feeling included with SOARS protégés. At the same time, they had a sense of belonging to the RESESS group, as such. The RESESS group appears sufficiently small (with three protégés) at the present to prohibit a dynamic of an "out group" between the SOARS and RESESS protégés. In addition, the RESESS protégés reported belonging to small, especially close friendship groups with SOARS protégés. This natural formation of cliques, as noted in the SOARS evaluation (2005), was not seen as problematic by the RESESS protégés, and their identities as RESESS students were further normalized by the acceptance of the two groups of protégés.

There was some degree of culture shock, especially for one of the protégés. However, this could be seen as a "growing pain," one that this protégé would gladly assume again. This is not unlike the culture shock described by SOARS protégés. A couple of the protégés said that they would have liked to know ahead of time more about expectations of protégés, i.e. writing and presentations.

Protégés' suggestion: One RESESS protégé suggested, and the other two agreed, that they would appreciate more focus on the earth sciences, in parallel to that of the SOARS program. There were two ways in which this was visualized: SOARS has speakers and related special events for their protégés that relate specifically to atmospheric science. The RESESS protégés would like to have scientists specializing in earth sciences serve as speakers. Similarly, the RESESS protégés expressed anticipation of having more RESESS protégés in the future with which to discuss earth sciences and their particular summer projects. They did not have a sense of currently benefiting as much as the SOARS protégés from peer discussions of their summer projects, as there are only three RESESS protégés, and differences between the groups' work made it difficult for students in one group to fully appreciate the science employed by the other group. While the SOARS protégés do benefit from discussing their projects with one another, it is possible that the RESESS protégés over-rated the extent to which SOARS protégés understand one another's projects.

Surprise: RESESS protégés expressed no resistance toward the writing program. This is a surprise because the SOARS protégés expressed dislike of the writing seminars in a prior evaluation. However, a norm of resistance to the writing workshops had developed among the SOARS protégés, that was addressed following the 2005 SOARS evaluation. It is possible that this issue has been adequately addressed since the time of the SOARS evaluation.

Mentors' Feedback

Some of the mentors expressed concerns about one of the protégés in particular. This protégé appeared to them to be especially timid and, as one pointed out, academically unprepared for the level of work required. The other mentors expressed concern about this protégé's self-reliance, especially in terms of the practical, day-to-day living, that is expected of protégés. As time elapsed and the interviews continued, the self-reliance concerns appeared to be largely resolved. However, one mentor's questions about this protégé's academic readiness for RESESS work persisted.

The mentoring experience was seen as rewarding to nearly all of the mentors. One unexpected benefit cited by some of them was increased involvement with colleagues who also volunteered as mentors. They were also surprised, and pleased, to receive recognition from RESESS for their contributions as mentors.

The mentors had less of a sense of affiliation with SOARS than did the protégés, but had positive feedback about the interactions they did have with SOARS staff and administrators. At the same time, they also had little sense of affiliation with UNAVCO, which raised some questions about the role of UNAVCO in RESESS. For example, one mentor suggested that UNAVCO should play a more visible role, particularly in recruiting mentors from within. The visibility of support from top UCAR administrators for the SOARS program was in contrast to the invisibility of higher level support from UNAVCO administrators. It was suggested that RESESS, particularly as a new program, would benefit from more visible promotion from UNAVCO executives.

Mentors who participated in training that SOARS provided for first-time mentors said that they found value in these sessions. Of particular note, mentors provided positive feedback about weekly emails sent from SOARS staff in which expectations for each week were spelled out. At the same time, mentors described difficulty absorbing the large amount of information SOARS sent to them (some of which was not read because of time constraints) and attending mentor trainings, even though these were seen as of potential value.

The amount of time needed for mentoring turned out to be more than some mentors expected, but not too much, at least not too much for the occasional involvement. These mentors said that they can not make the time commitment every year, but nearly all expressed an interest in doing it again. In general, mentors liked the fact that they were personally asked to be mentors and most, if not all, hoped to be invited to be mentors again. Several also expressed an interest in getting feedback from their respective protégés about how they performed as mentors.

Research mentors

As mentioned above, there was some concern about the level of academic preparation of protégés. At the same time, mentors supported the RESESS goal of providing protégés who had few or no previous opportunities to gain specific skills. This feedback is not different than SOARS research mentors' concerns, but merit attention here, as they highlight the value of informing and reminding mentors of the RESESS program's goals in this regard. Both SOARS and RESESS administrators have discussed with the evaluator their intentions of providing meaningful opportunities for promising students who would not otherwise have these benefits. In choosing students for these programs, a judgment must be made about which applicants would benefit most from these opportunities, considering that some applicants would either succeed in their science careers without it or fail in spite of it. Difficult selection decisions are informed by this, as well as other, criteria. Close communication between research mentors at the conclusion of the summer projects and RESESS personnel who make selections among protégé applicants will promote a common understanding, and help to meet program goals.

There were challenges related to constructing and then tailoring research projects, that are not unlike those described by SOARS research mentors. There are inherent difficulties involved with knowing where to establish the level of challenge for protégés, and then monitoring success/struggle of the protégés. We pursued an idea with RESESS mentors, that originally came up in interviews with SOARS research mentors, about lessons learned by more experienced research mentors about how to design projects that could be easily modified over the course of the summer, given the individual protégé's abilities. We found that RESESS and SOARS research mentors alike have expressed interest in exchanging ideas about project planning with each other and, in particular, learning from more experienced research mentors. A panel discussion featuring experienced research mentors prior to the summer session would be helpful.

One of the protégé's projects involved coordination with an off-site mentor, followed by field work late in the program calendar. While the particular challenges this posed appear to have been met, they did cause a notable level of stress and challenge among the mentors involved. In cases such as this one, that entail greater than the usual level of challenges, particular attention to coordination among the group is especially important. For instance, the ambiguity of "pre-writing" expectations inherent in all of the protégés projects are enhanced in such cases, and are thus more stressful.

Writing and communication mentors

As with the SOARS mentor teams, there is an ongoing need for communication between writing and research mentors. In particular, there is a certain level of role overlap between writing and research mentors that merits attention. Questions naturally arise about when and how much the research mentors should give feedback on the writing and when the writing mentors should take the lead in providing this direction. Meetings of the mentors early in the project to clarify how particular teams prefer to work this out would minimize this stress for mentors and protégés alike.

There was some variation in closeness of collaboration between writing mentors and their protégés. Some of this was influenced by the ease of relationship between particular people, and some by the level of involvement in the writing that was assumed by the research mentors. As with research teams generally, it is natural that certain individuals find they have particularly compatible working styles and tend to collaborate more than others. It is a strength of the program that these relationships are permitted to evolve without undue rigidity in role expectations. At the same time, when a natural partnership develops between the protégé and either the research mentor or the writing mentor, and those pairs collaborate more on the writing, it is helpful that the benefits of this partnering be communicated to the team as a strength and not reflect on any other team members as deficient in some way. These natural collaborations need to be normalized so that others do not feel they contribute, or are otherwise consulted, too little.

Materials provided through the protégés' writing seminar were seen as useful to the writing mentors, but did not lend themselves directly to working sessions with protégés. It was helpful to make the materials available the writing mentors.

Community mentors

The community mentors, as did the other mentors, indicated they enjoyed their involvement in RESESS. Their feedback was positive overall, with only a couple of concerns, addressed below.

As with the SOARS program, questions arose among RESESS community mentors about the expectations involved with their role. The SOARS staff concluded that benefits of role flexibility outweighed discomforts of role ambiguity for community mentors. However, it is helpful to regularly revisit the question, as it does pose some difficulty for community mentors. The emergent issue this summer was uncertainty about how much money community members "ought" to spend on entertaining their protégés. Noticeable differences in amounts that the community mentors (including SOARS and RESESS mentors) were able to spend raised the question among those with more modest means.

In one case the duties of being a mentor was of some concern to the mentor's supervisor. There was concern expressed about potential time demands that could interfere with the mentor's work. While no specific problems arose, the issue was, in itself, of some concern to the mentor.

Overview

Feedback from all interviewees was generally positive. The RESESS program was seen as an important endeavor and off to a very promising start. All three of the protégés expressed interest in and the intent to apply again for next year's program.

Suggestions made included ideas about how much to grow and issues of continuing the alliance with SOARS. In general, the protégés and mentors, alike, favored keeping RESESS small enough to maintain its affiliation with SOARS. Some expressed surprise that RESESS would consider growing beyond their partnership with SOARS. The

protégés expressed more enthusiasm than did the mentors about increasing the number of RESESS protégés, and hence the size of the program. As addressed above, the protégés liked the idea of having a group of their own, focused on earth sciences. In this and other ways they would like to increase their “RESESS identity.” At the same time, they valued and wished to retain their affiliation and identity with the SOARS protégés. On occasion, there was an element of wistful thinking expressed in the interviews about having the same type and level of attention to earth science as there currently is at SOARS for atmospheric science. Still, they appreciate the relatedness of earth science to atmospheric science and SOARS overall. They did not want to branch out, independently of SOARS, too early.

Other Observations

Affiliations that mentors have with colleagues and other groups, including those on the University of Colorado campus, proved helpful to them as mentors, as well as to their protégés. For instance, mentors made introductions between protégés and their colleagues, and exposed the protégés to programs of interest.

Most commonly, interviewees believed that RESESS should remain affiliated with SOARS—no real benefit seen in a separate program. In fact, RESESS was seen as all the stronger for its alignment with SOARS. The only point at which a separate program was seen as best was if RESESS grew to have “enough” protégés to warrant a separate program. How many constitute “enough” was difficult to establish with interviewees, but several interviewees indicated that when RESESS has 15 protégés, it would be sufficiently large to be independent. They also assumed that the time it would take to grow this much would also allow for the development of UNAVCO support staff. Splitting too soon was not recommended, as there are many benefits to protégés (and to mentors, it would seem) to maintaining the relationship with SOARS. These include: the community of protégés, the protégés’ culture, the living arrangements in which the protégés have a good-sized group of peers as neighbors, the experienced SOARS staff who have learned to anticipate protégés’ needs, and the level of organization in general (seminars, trainings, tightly scheduled rhythm of an intense program in a brief ten weeks).

The protégés, in particular, were aware of the challenges of anonymity in the evaluation, and this may have contributed to lack of criticism of the program.