Considerations for the CADRE Advisory Discussion

Targeted Studies: Teacher and Student Compendia Discussion

- Improvements to the current compendia:
  - Are there other patterns that you notice within (each compendium) and across (both together) this collection of instruments that would be useful to highlight?
  - Are there other "resources" that should be added?
  - Thoughts on other dissemination? (CADRE, MSPnet, NARST paper are all underway or have happened.) *NOTE: There will likely be another revision after we code the Cohort 6 studies to incorporate what we have found being used there.*

- Developing a publishable article to support the dissemination of these two compendia:
  - What are the "big picture" ideas that you would use to structure a paper encompassing either or both compendia?
  - How should we frame this so that others care since it was constrained to the DR K-12 proposal reviews?
  - Are there areas of research that would be useful to address in a literature review for the NARST paper?

- Next steps as a line of inquiry:
  - Is there additional work that could be done to build on the compendia that would be useful for the STEM community beyond the DR K-12 community? If so, what might that be and how would we pursue support?
  - Utility in expanding the database to include non-DR K-12 identified instruments?

Building Capacity

- PI Meetings: Evaluation indicates increasingly successful meeting in terms of meeting goals of collaboration, networking, and knowledge sharing. There is at NSF some tide against supporting large-scale meetings. There are two views:
  - PI meetings anchor the other CADRE activities for awardees, and appear particularly useful for a significant number of PIs, and should be continued.
  - PI meetings, no matter how successful, require significant resources and are not completely essential to enhancing awardee project goals. They do meet particular needs; are there alternative venues for meeting these needs?

- Thematic Meetings: The Formative Assessment Group is exploring the interest in and purposes for a thematic meeting on formative assessment for 12-20 grantees in late spring or early summer 2013. An existing work group would be involved in designing and providing content for the meeting, which would produce a product. The question is: What *formative assessment* issues and research should the DR K-12 community prioritize, in general and in a thematic meeting? Another upcoming meeting is for STEM Smart and the topic is *career and college readiness*. We are also seeking advisor recommendations about PIs and projects with research-vetted work in this area.

- Use of Virtual Environments: Our plan is to make greater use of webinars. What are advisors' experiences with virtual options? Are there recommendations?

- Early Career Efforts: The Fellowship program appears to be effective, and is beginning the 2012-13 year.
  - Without a PI meeting, there is not a natural way for Fellows to interact with current PIs. What other options might we consider?

- There has been solid interest in the Fellowship program. Should we consider a thematic meeting or early career researchers including those who were not accepted, or those who presently work on DR K-12 project teams?

- Work groups/Special Interest Groups as Technical Support: This is a continuing conversation from every other advisory meeting. Groups have had different models, different outcomes, different durations, etc. We would like to discuss groups on micro and macro-level:
  - Science Curriculum Group: The topic of the group is very broad and over the years, the group has tackled specific concerns, primarily related to digital curriculum. There is an interest in continuing because the issues faced by developers are currently "too big" to tackle one-by-one. For the same reasons, it is challenging to narrow the concerns to a few on which the group can focus, feel productive, and have some impact on the field. Are there suggestions for how we might proceed?
  - Across groups, how do we measure if these groups provide added value to the work of awardees? If we continue these groups, what ways should we improve our processes to have more impact?

  To address the latter question, we would like to discuss a study of the theory and practice of technical support through working groups. We propose the collection of research and professional wisdom relevant to the use of working groups as a vehicle for technical assistance to experienced professionals. Since the 1990's there have been studies that can form a basis for understanding how we might build capacity through temporary systems that convene individuals engaged in similar or related work.

  Planned activities include: 1) Review research as well as empirical studies of technical assistance and of networks for learning, and perhaps other related theoretical or empirical work; and 2) Interview those who have engaged professionals in temporary systems with the purpose of capacity building and knowledge production, including leaders of other resource networks (e.g., the Center for Advancement of Informal Science Education, which had inquiry groups), the former ED-funded Content Center on Innovation and Improvement, the former Pew Forum on standards-based education reform, and the Carnegie Foundation.

  We would like to consider the following questions:
  - Can you point us to relevant bodies of research? Have you seen or heard about experiences with learning in groups of experts that we should know about and study?
  - What's the best audience for the findings of this inquiry? And, with the audience in mind, what should this little project produce? A CADRE white paper? A journal article? A testable design for future technical support?

Communication and Dissemination
- Who are the stakeholder groups we wish to reach?
- What are the purposes and related strategies which are most appropriate for each of those groups?
- How can we repurpose resources we have already developed?
- What is a good balance among various approaches (e.g., social media, email, meetings)?

Thinking about Impact and Sustainability
- What knowledge have we gained leading CADRE that others could use to support similar types of resource networks?
- How could similar resources be ideally leveraged in the future?
- Are there components of CADRE that should persist whether or not the formal network remains? How should we prepare, if at all, for those components to persist?
- How can we begin to prepare for a no-cost extension year?