Training Recommendations

- Managing Sequence of Trainings: Although both the Digital Scholar course and the Atlanta Convening had good participation, the original intent had been to have the Launch Pilots participate in both of them. We learned that the Launch Pilots had too many options and they were not sure how to manage all the opportunities. We recommend that NSF work to ensure that the training and technical opportunities that are offered in the future are organized better and spaced out more. Otherwise there will be lower participation in the individual trainings and the participants will not know how to best utilize them.

- Develop Cohorts for Learning Communities: The Trellis platform is a great step in the right direction to create learning communities. Our Launch Pilot participants were seeking such a resource to help them with their training and TA needs.

- Lack of Course Completion Does Not Mean Lack of Learning: Because our participants had so many learning opportunities, they were not always able to complete each training they participated in. For example, many of the Digital Scholar course participants were not able to complete their projects they continued to login to the platform and continued to learn from their exchange with other participants. Some participants in the Atlanta Convening only attended one of the two days but because we had shared a detailed agenda ahead of time they were able to select the components that they felt would be most beneficial for them. Tracking benefits from training and TA should go beyond just the completion of an overall training. It might be more effective to examine how each participant in the INCLUDES Design and Development Launch Pilots cohort is setting their own learning goals and then getting the help they need to identify the most relevant training and TA opportunities. They could then track their own progress (whether they complete a training or not) and NSF INCLUDES could evaluate the benefit of the training and TA they are providing.

- Cannot Train on Backbone Functions without Learning about Collective Impact First: Even though NSF would like projects to focus on the concept of 'Backbone Functions/Organization' as the main take away for application from the Collective Impact model, trainings should not teach about backbone functions in isolation from the Collective Impact model. Both concepts have to be taught together for the backbone functions to make sense to the Launch Pilot grantees. In addition, the training and TA providers should help the grantees learn how to adapt the backbone function component to their collective impact like approach. For example, if a project chooses to utilize a Networked Communities approach then the training and TA provider should help that project determine how best to utilize backbone functions in their context.

- Digital Platform Requires Institutional Marketing Support: To fully take advantage of any online course, institutions such as the NSF should assist in the marketing of such courses. These courses have the ability to create capacity for a large number of participants to benefit from a training. However, without strong promotion of such trainings from the leading institutions supporting it we will not

be able to maximize the reach of marketing efforts. However, the participants that did find our Digital Scholar course were self-motivated and very hungry for knowledge. They were also a very collaborative group who would be eager to continue their online collective impact/backbone learning community if it was available. NSF may want to consider engaging the Digital Scholar team to see how they could compliment the Trellis platform. The Georgia DOE has had requests for the Digital Scholar course to be repeated so we are exploring how to provide the training again.

- o Utilize CS/STEM Ed 'Celebrity': Partnering with a well-known and respected CS/STEM education expert might help in engaging more individuals in the field to sign up for CS/STEM broadening participation for online trainings or activities.

- Digital Platform has Value for Money: Conducting an in depth course clearly has much better value for the funding provided and it can reach a much wider audience. It would benefit the NSF to explore innovative digital learning/training platforms for specific training and broadening participation strategies.

- Divide by Audience Type/Need: Clearly, participants were at varying levels of training need and availability so it would be helpful to design training opportunities into varying types of needs of Launch Pilot stakeholders. Simplifying the topics to focus on specific components would be helpful to go beyond the basic training needs. Assess participants to determine how to manage the number of topics and the depth of each to present.

- o MOOC vs Interactive Training: For the Digital Scholar in particular, we learned that we need to put an extra emphasis in the marketing if a course requires a higher degree of interaction and production of work. Despite having provided some information on such expectations in our marketing information, many of the Digital Scholar course participants were surprised that they were expected to actually participate in learning activities and could not just sit back and listen to a MOOC like lecture.

- Feedback Loops Increase Engagement: Giving participants opportunities to provide feedback on their training experience, particularly for digital courses, increases the engagement and retention of participants. It is important to share the feedback data with the participants and how/why the feedback is or not going to be implemented in the course.