

Learning from the Field
Preparing STEM Faculty to Work with K-12 Teachers
Discussion Questions

1. Create a shared vision of effective teaching and learning.

How confident are you that all of the people you plan to involve in providing professional development to your target audience have a shared vision of effective teaching and learning?

If you consider this an area of need, how will you go about making sure the entire project team, including STEM faculty, has a shared vision of effective teaching and learning in mathematics/science?

2. Create a shared “theory of action” for the work.

Can you make a convincing case for the PD you are designing, explaining in detail how the professional development activities you are planning will lead to improved teaching and learning?

How will you go about making sure that the entire project team, including STEM faculty, has a shared vision of the way the planned activities will be implemented in order to improve teaching and learning as intended?

3. Ground STEM faculty in the world of K-12 education.

How confident are you that the STEM faculty members you plan to involve in providing professional development understand the realities of K-12 education and the content-related needs of the teachers in the subject/grade range you are targeting?

If you consider this an area of need, how will you go about making sure that STEM faculty develop a good understanding of those realities?

4. Design professional development for STEM faculty based both on where you are heading and on where you are starting.

What roles do you anticipate STEM faculty members playing in the PD you are designing?

How will you determine how well prepared STEM faculty are to carry out each of those roles?

What kinds of professional development will you provide to STEM faculty prior to their initial involvement with teachers in your target audience?

5. It helps to involve people from different backgrounds in “real work” where collaboration is essential.

How might you involve STEM faculty and others with complementary knowledge and skills in designing PD that will have the dual benefit of getting the work done and helping to build a collaborative culture?