

# Team-Based Inquiry

## Question Phase

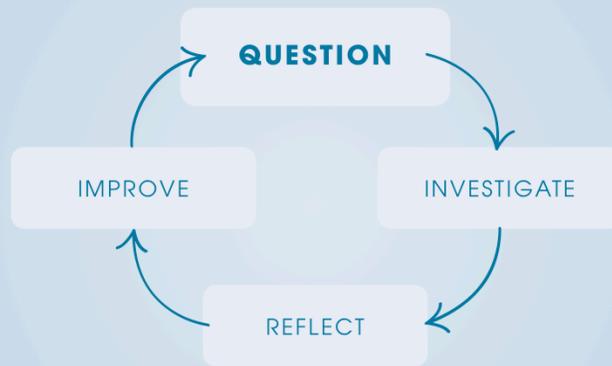


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Thanks for joining us in the process of learning about the Team-Based Inquiry process and its cycle of Question, Investigate, Reflect, and Improve. In this presentation, we will be talking about the first step in the TBI process, developing TBI questions.

This presentation will provide the basics of developing TBI-appropriate questions as well as reminding us about how to craft project goals and objectives.

## Question Phase



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## Identifying Questions



During the development process, or after fully developing a new educational activity, you may start asking yourself questions as soon as you take it out onto the museum floor. Important inquiry questions arise all the time in our daily work. The questions that matter to you and are essential for helping you move your work forward are the foundation of any team-based inquiry study.

## Make sure your team understands the project



### **Clarify**

- Project goals
- Information needs
- Project priorities



To develop and identify the best TBI studies for your project, you need to start with making sure your team is in agreement and has a shared understanding about your project's educational goals, information needs, and project priorities. When you are in agreement about what your expectations are for the project, write them down and openly share them to make sure you stay on track.

## TBI Questions

TBI questions are not survey or interview questions.  
Instead, they focus your data collection efforts!

TBI questions help you...

- Move forward with your work
- Focus your work
- Clarify your project's gaps/  
potential



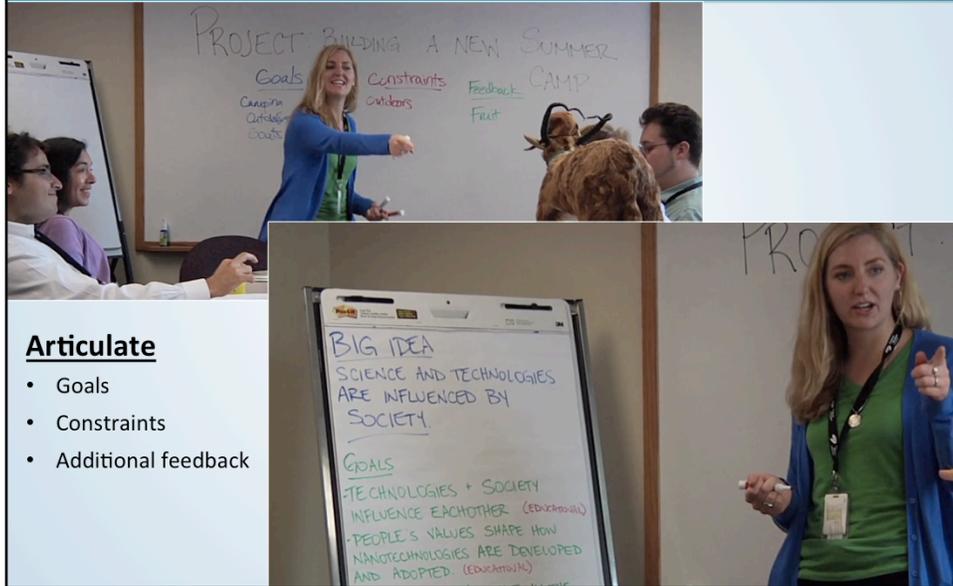
Your TBI questions are the broader questions that you need answered in order to move forward with your work. They focus your work, direct your efforts in data collection and analysis, and help you and your team clarify exactly what it is you are grappling with. These questions are inherently too big to directly ask someone but they help you think about the possible questions and types of data you might want to collect.

## A good TBI question is...

- One you don't know the answer to
- Focuses on useful and actionable information
- Can be realistically investigated given your resource and time constraints

You may have A LOT of questions about your project, which is great! You can really only tackle 1, 2, or 3 questions at a time, so figuring out which ones are the best and most helpful for you and your team is important.

## Prioritize your TBI questions



**Articulate**

- Goals
- Constraints
- Additional feedback

**BIG IDEA**  
SCIENCE AND TECHNOLOGIES ARE INFLUENCED BY SOCIETY.

**GOALS**  
- TECHNOLOGIES + SOCIETY INFLUENCE EACH OTHER (EDUCATIONAL)  
- PEOPLE'S VALUES SHAPE HOW NANOTECHNOLOGIES ARE DEVELOPED AND ADOPTED (EDUCATIONAL)

It is critical to prioritize your TBI questions and understand your limitations and recognize what you already know.

Make sure to articulate your goals, identify your constraints, and collect as much additional feedback before trying to identify your top TBI questions. When you have that, then you are ready to craft possible questions.

# Prioritize your TBI questions



### Question Worksheet

**Project Title:**  
Educational Grants)  
List the goals of your educational experience.

**Prioritizing Inquiry Questions**  
Fill in the table below for each of the broad inquiry questions that you and your team have brainstormed. Based on how useful, actionable, and feasible each question is, determine whether it is a high, medium, or low priority for your team-based inquiry study.

Inquiry question	Why is this question important to your team?	What types of information would you need to answer this question? (e.g., what resources, programs, observations?)	What resources would you need to answer this question? (e.g., staff, time, expertise, data collection forms?)	What changes might you be able to make if you answered this question?	Based on all of this, how high of a priority is this question? (High, Medium, Low)
					H M L
					H M L
					H M L
					H M L

Adapted from [Saxena et al., 2013](#). © 2013. Used permissively for non-commercial purposes. Retrieved from [http://dx.doi.org/10.1002/9781118130000.ch10](#)

On a piece of paper, have your team write out all of the questions you have about your project. Clump together those that are similar and redraft a new question that covers all of them. Those questions then get written onto the Questions worksheet.

## TBI questions to consider

- Participant characteristics (e.g., interest, knowledge)
- Short-term participant outcomes that indicate whether or not you are achieving your goals
- Challenges with the current version of the educational experience that could be addressed
- Current successes and strengths to build on

Especially in the context of developing or improving an educational experience, TBI questions often focus on:  
participant characteristics (e.g., interest or prior knowledge),  
short-term participant outcomes that indicate whether or not you are achieving your goals,  
challenges with the current version of the educational experience that could be addressed, or  
current successes and strengths to build on.

# Try the Question Worksheet



## Question Worksheet

**Project Title:**  
**Educational Goal(s)**  
*List the goals of your educational experience.*

**Prioritizing Inquiry Questions**  
*Fill in the table below for each of the broad inquiry questions that you and your team have brainstormed. Based on how useful, actionable, and feasible each question is, determine whether it is a high, medium, or low priority for your team-based inquiry study.*

Inquiry question	Why is this question important to your team?	What types of information would you need to answer this question (e.g., visitor comments, program observations)?	What resources would you need to answer this question (e.g., staff, time, expertise, data collection forms)?	What changes might you be able to make if you answered this question?	Based on all of this, how high of a priority is this question? H=High, M=Medium, L=Low
					H M L
					H M L
					H M L
					H M L

Adapted from [Erickson, J., & Shari, L. \(Eds.\), \(1997\). User-friendly handbook for mixed method evaluations. Retrieved from http://www.nf.gov/au/2002/02/21/13/13.htm](http://www.nf.gov/au/2002/02/21/13/13.htm)

NISE Network TBI Guide Question worksheet

Is your team ready to draft your TBI questions? Give it a try with the TBI Guide’s Questions Worksheet!

This tool is to help you and your team identify and prioritize your TBI questions.

Write down each of the major question categories in the left-most column. Answer each column’s question for each big question, either individually or as a group. Discuss everyone’s answers and thoughts about each question before prioritizing them. If you have more than one as a High Priority, decide if you are able to tackle them given your constraints.



This presentation is based on work supported by the National Science Foundation under Grant No. 0940143. Any opinions, findings, and conclusions or recommendations expressed in this presentation are those of the authors and do not necessarily reflect the views of the Foundation.

