Demystifying Assessment & Evaluation

Presented by UA STEM Learning Center

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# INTRODUCTIONS

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<th>Name</th>
<th>State</th>
<th>Experience:</th>
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WORKSHOP OVERVIEW

Part I: What is Assessment & Evaluation?
Part II: Let’s Talk Information & Data
Part III: Tool for Creating an Assessment & Evaluation Plan
PART I: WHAT IS ASSESSMENT & EVALUATION?
I HAVE NO IDEA WHAT I'M DOING

BUT I KNOW I'M DOING IT REALLY REALLY WELL
PART I: ASSESSMENT IS…

An ongoing process of collecting and reviewing information for the purpose of improvement.
PART I: ASSESSMENT IS…

- Implement program
- Collect information
- Review information
- Make improvements

Ongoing process
Diagnostic
Provides feedback
Formative
PART I: BENEFITS OF ASSESSMENT

- Progress to goal
- Connection to community
- Outcomes

- Practices
- Documentation
- Stories
- Emerging trends
PART I: EVALUATION IS …

The act of making a judgement about values, numbers, or performance of something or someone.
PART I: EVALUATION IS...

Assess → Assess → Assess → Evaluate

Judgement
End of process
Uses feedback
Summative
PART I: EVALUATION IS USED FOR...

- Report to funders
- Sharing with collaborators
- Engaging broader communities
- Sustaining program
- Designing new program
- Allocating resources
PART I: COMPONENTS OF ASSESSMENT & EVALUATION

1. Project goals – 2-4 SMART goals
2. Activities – 1-2 activities associated with each goal
3. Outcomes associated with each activity
4. Assessment tools – Collect information about your activities related to your outcomes

- Multiple choice survey
- Sign-in sheets
- Pre-Post test
- Focus groups
- Focus groups
PART II: LET'S TALK INFORMATION & DATA
PART II: LET’S TALK DATA

- Data is the information you collect
- Useful data must relate to the goals of your project
THE GAME WHERE EVERYTHING IS MADE UP
AND THE POINTS DON'T MATTER
PART II: TYPES OF DATA

- Quantitative Data
- Qualitative Data
PART II: QUANTITATIVE DATA

• Things you can measure. Examples:
  • Attendance
  • # of trees planted
  • Levels of participation (Level 1 = attending, Level 2 = asking questions, Level 3 = volunteering)
PART II: QUALITATIVE DATA

• Things you cannot or do not want to assign a number to.

• Stories
• Explaining how much you think you belong

• Experiences you want to document
• Attitudes
PART II: COLLECTING QUALITATIVE DATA

• Examples:
  • Open-ended questions
  • Focus groups
  • Journal prompts
  • Interviews
  • Observations
PART II: QUALITATIVE VS. QUANTITATIVE

• It depends on your:
  • Activities
  • Outcomes
  • Goals
  • Stories
PART II: QUALITATIVE VS. QUANTITATIVE – EXAMPLE 1

Goal: Increase # women in computer science jobs

Activity: Invite CS women to visit HS math classes and talk about career paths

Outcomes: Girls register for HS CS classes

What data do you collect and how will you collect it?
PART II: QUALITATIVE VS. QUANTITATIVE – EXAMPLE 2

Goal: Increase # women in computer science jobs

Activity: Invite CS women to visit HS math classes and talk about career paths

Outcomes: Girls feel they are smart enough to take HS CS classes

What data do you collect and how will you collect it?
PART III: TOOLS FOR CREATING AN ASSESSMENT & EVALUATION PLAN
PART III: CREATING AN ASSESSMENT & EVALUATION PLAN

10 Questions for Assessment & Evaluation

Project Roadmap
PART III: CREATING AN ASSESSMENT & EVALUATION PLAN

Scan the 10 Questions

With a partner, discuss:

• One question you think is critical
• One question that’s surprising to you
PART III: 10 QUESTIONS FOR EVALUATION

1. **Goals:** What expertise and experiences do my team and our organizations bring to the program?

   Purpose: Helps define potential goals and outcomes
PART III: 10 QUESTIONS FOR EVALUATION

2. Activities: What type of partnership activities will help us reach our goals?

Purpose: Consider audience, expanding existing programs, and new programs.
3. (SMART) Outcomes: What will success of each activity look like?

Purpose: Consider if the activity will produce an outcome tied to the goal(s)
PART III: 10 QUESTIONS FOR EVALUATION

4. Data: What data will we collect? Qualitative, quantitative, or both?

Purpose: Helps define the story we want to tell
PART III: 10 QUESTIONS FOR EVALUATION

5. Data: Can we get the data from the planned activities?

Purpose: Are the activities designed appropriately for the data we want to collect?
PART III: 10 QUESTIONS FOR EVALUATION

6. Data: What quantitative and qualitative data will we collect?

Purpose: How do we want to tell the story about the outcomes of our program?
7. Data: How will we collect our data? Who will collect it?

Purpose: Determine the tools and collection process
PART III: 10 QUESTIONS FOR EVALUATION

8. Timeline: When will we collect our data?

Purpose: Build time into your program for data collection.
PART III: 10 QUESTIONS FOR EVALUATION

9. Purpose: What will we use this information for?

Purpose:
Assessment – making our program better
Evaluation – determining if our program was successful
PART III: 10 QUESTIONS FOR EVALUATION

10. Impacts: What larger issue is our program addressing? What is the needle we are trying to move?

Purpose: Helps keep my eye on the larger picture
PART III: CREATING AN ASSESSMENT & EVALUATION PLAN

Scan the Roadmap
Walkthrough Roadmap
## PROJECT ROADMAP

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<tr>
<th>Goals</th>
<th>Activities</th>
<th>Outcome(s)</th>
<th>Data to be collected, Assessment Tool; Administered by</th>
<th>Timeline</th>
<th>Purpose of Assessment</th>
<th>Impacts</th>
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<tr>
<td>Enhance communication skills of scientists</td>
<td>Hold training workshop</td>
<td>10 scientists acquire improved communication skills.</td>
<td>Core competencies through pre- and post-surveys for scientists; administered by Program Coordinator</td>
<td>1 week before training and last 30 minutes of workshop</td>
<td>Identify potential revisions for following year</td>
<td>Better communication about science leads to greater public understanding of physical world.</td>
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<td>Video practice sessions</td>
<td>Scientists use “inviting” gestures</td>
<td>Trainers use scoring sheets to tally inviting gestures</td>
<td>1 day after video session</td>
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**Impacts:**
Better communication about science leads to greater public understanding of the physical world.
PART III: CONNECTING ASSESSMENT TO YOUR ROADMAP

• After each assessment:
  • Document decisions about and revisions to your project
  • Back up decisions with information you collected
CONNECT WITH US...

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