



# *Demystifying Assessment & Evaluation*

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Presented by UA STEM Learning Center

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# INTRODUCTIONS

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Name

State

Experience:   

# WORKSHOP OVERVIEW

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Part I: What is Assessment & Evaluation?

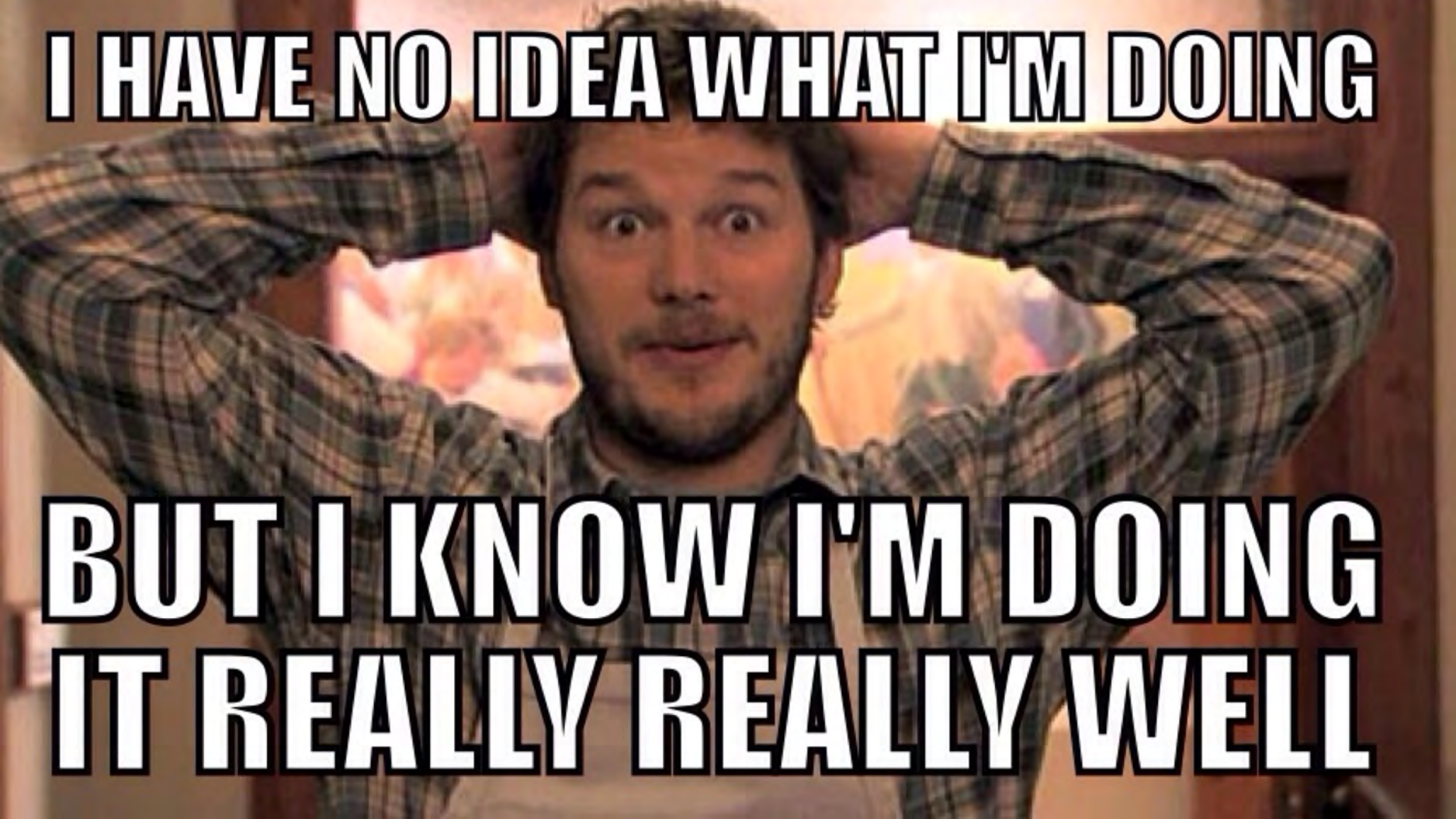
Part II: Let's Talk Information & Data

Part III: Tool for Creating an Assessment & Evaluation  
Plan

# PART I: WHAT IS ASSESSMENT & EVALUATION?

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A meme featuring actor Chris Pratt. He is shown from the chest up, wearing a plaid shirt, with his hands behind his head. He has a wide-eyed, slightly open-mouthed expression of confusion or surprise. The background is a blurred indoor setting with warm lighting.

**I HAVE NO IDEA WHAT I'M DOING**

**BUT I KNOW I'M DOING  
IT REALLY REALLY WELL**

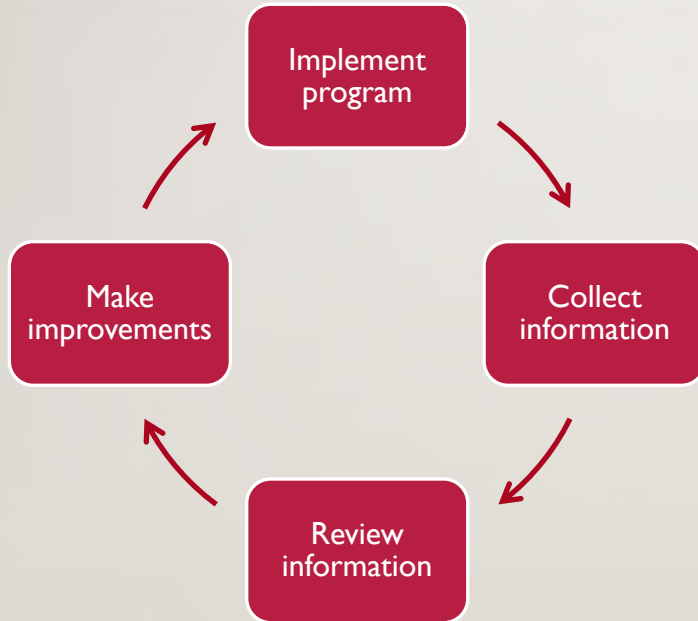
## PART I: ASSESSMENT IS...

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An ongoing process of collecting and reviewing information for the purpose of improvement.

# PART I: ASSESSMENT IS...

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Ongoing process  
Diagnostic  
Provides feedback  
Formative

# PART I: BENEFITS OF ASSESSMENT

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- Progress to goal
- Connection to community
- Outcomes
- Practices
- Documentation
- Stories
- Emerging trends



## PART I: EVALUATION IS ...

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The act of making a judgement about values, numbers, or performance of something or someone.

# PART I: EVALUATION IS...

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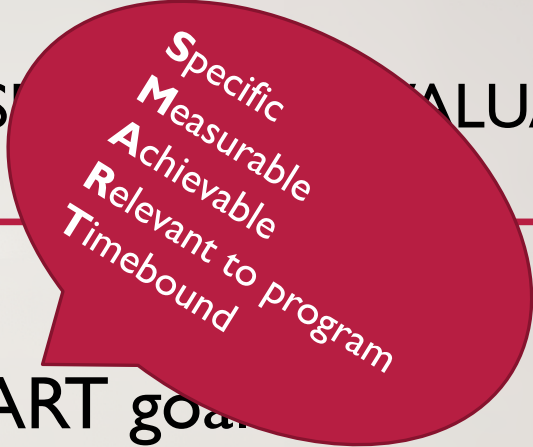
## PART I: EVALUATION IS USED FOR...

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- Report to funders
- Sharing with collaborators
- Engaging broader communities
- Sustaining program
- Designing new program
- Allocating resources

# PART I: COMPONENTS OF ASSISTANCE EVALUATION

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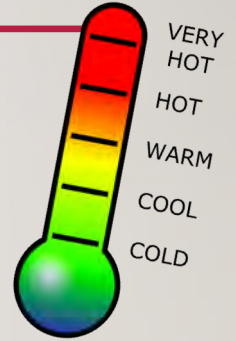
1. Project goals – 2-4 SMART goals
2. Activities – 1-2 activities associated with each goal
3. Outcomes associated with each activity



# PART I: COMPONENTS OF ASSESSMENT & EVALUATION

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## 4. Assessment tools – Collect information about your activities related to your outcomes



- Multiple choice survey
- Sign-in sheets
- Pre-Post test
- Focus groups

## PART II: LETS' TALK INFORMATION & DATA

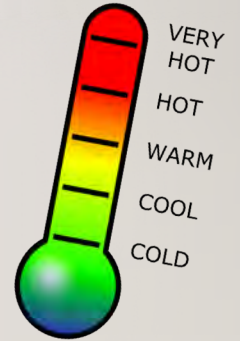
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## PART II: LET'S TALK DATA

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- 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**

abc family

DIYLOL.COM



## PART II: TYPES OF DATA

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- Quantitative Data
- Qualitative Data

## PART II: QUANTITATIVE DATA

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- 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

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- Things you cannot or do not want to assign a number to.
  - Stories
  - Experiences you want to document
  - Attitudes
  - Explaining how much you think you belong

## PART II: COLLECTING QUALITATIVE DATA

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- Examples:

- Open-ended questions
- Focus groups
- Journal prompts
- Interviews
- Observations

## PART II: QUALITATIVE VS. QUANTITATIVE

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- It depends on your:
  - Activities
  - Outcomes
  - Goals
  - Stories

## PART II: QUALITATIVE VS. QUANTITATIVE – EXAMPLE I

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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


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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

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# PART III: CREATING AN ASSESSMENT & EVALUATION PLAN

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## 10 Questions for Assessment & Evaluation Project Roadmap



# PART III: CREATING AN ASSESSMENT & EVALUATION PLAN

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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

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- I. 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

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

Purpose: Consider audience, expanding existing programs, and new programs

## PART III: 10 QUESTIONS FOR EVALUATION

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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

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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

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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

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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?



## PART III: 10 QUESTIONS FOR EVALUATION

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**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

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### 8. Timeline: When will we collect our data?

Purpose: Build time into your program for data collection.

## PART III: 10 QUESTIONS FOR EVALUATION

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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

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**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

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Scan the Roadmap

Walkthrough Roadmap



# PROJECT ROADMAP

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

## PART III: CONNECTING ASSESSMENT TO YOUR ROADMAP

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- 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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