# Conquering Your Data Challenges Training of Trainers

AMERICAN INSTITUTES FOR RESEARCH ARLINGTON, VIRGINIA | JUNE 26-28, 2019 ST. LOUIS, MISSOURI | JULY 9-11, 2019 SAN FRANCISCO, CALIFORNIA | JULY 23-25, 2019

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# Welcome, Introductions and Training Overview



#### Training Objectives

Drawing from information and data from your state, state teams will:

- Identify significant challenges local programs face that affect performance and data collection
- Use data to understand the challenges
- Identify strategies to address the challenges
- Review how workshop activities may be implemented with local programs
- Develop a draft action plan to replicate training to local programs



#### Agenda



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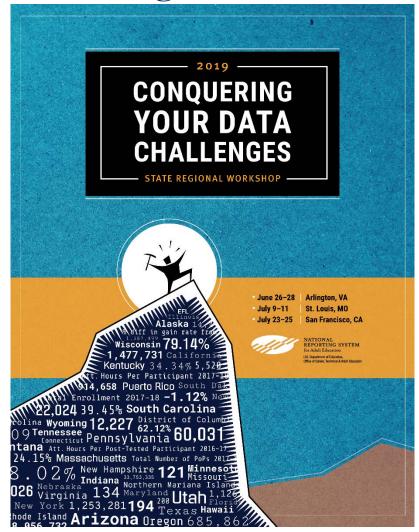


## Training Workbook



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#### Training Workbook



Workbook Icon



Link:

https://courses.nrsweb.org/mod/resource/view.php?id=1585



## Opening Activity



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#### Icebreaker

#### Find at least two people you don't know and share:

- Your name, program, and role.
- One thing that inspires you about your work.
- If data could tell one inspiring story about adult education in your state or adult education programs within your state, what would it be?

# Refresher: Why Data Matters and How We Use It



#### Data, Data Everywhere

Data-driven world

"Four out of five dentists..."

Focus on publicly funded services

Stronger focus on education

- WIOA, state laws
- National and state performance targets
- Test scores and performance



#### Brainstorm: Data, Data Everywhere

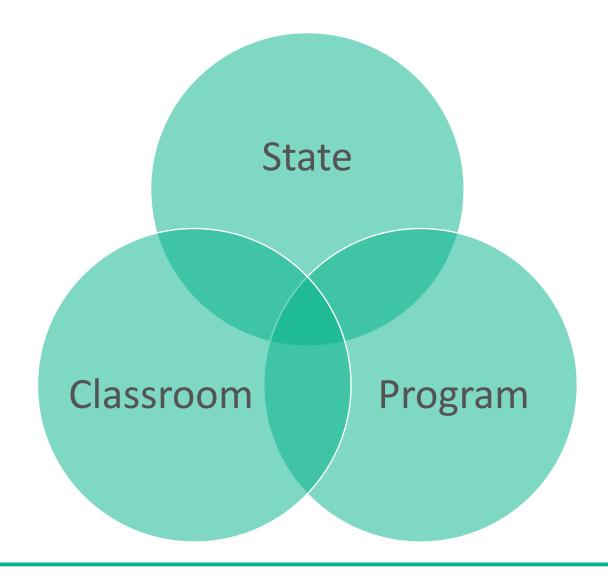
At your table brainstorm the following:

- In 5 minutes, list various ways or settings data are used or impacts our lives (non-adult education focused)
- For each item listed discuss:
  - What impact does this data have how is it used?
  - Do you trust the source of information or calculation of data?





#### How Do We Use Data?



#### State Uses of Data

Suggest needs for improvement in instruction

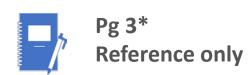
Measure program success and effectiveness

Identify what is making a difference

Identify which programs are getting the results you want—and which are not

Help identify root problems





## State of Arcadia and National Measurable Skill Gains (MSG) 2015–16 to 2017–18\*

Area and Service Program	Program Year 2015–16 (EFL Gain)	Program Year 2016–17	Program Year 2017–18	Percent Change, 2015– 2017
Arcadia State EFL/MSG	26%	34%	40%	+14%
EFL/MSG—ABE	30%	40%	46%	+16%
EFL/MSG—ESL	18%	21%	22%	+4%
National MSG/EFL	43%	44%	46%	+3%
EFL/MSG—ABE	41%	44%	46%	+5%
EFL/MSG—ESL	46%	44%	46%	0%

#### Local Program Uses of Data

Identify enrollment: trends and types of students

Track student progress—test scores and MSG

Identify which classes and teachers are effective

Examine attendance by student and class types

Help identify classes and students needing assistance





#### Classroom Uses of Data

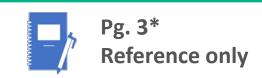
Track student progress—testing, test scores, and MSG

Determine if your instruction is effective

Examine attendance by student

Help identify students needing assistance





#### Additional Stakeholders and the Use of Data

- Professional Developers
- Human Resource
- Parents
- Students
- Partners
  - CBO
  - Employers
  - Others?
- Funders



#### Break—Please Return in 15 Minutes



#### Overview of Data Challenge Activities

#### **Pre-session work**

- ✓ Identify and craft three challenge statements
- ✓ Capture at least 2-3 guiding questions that help focus on the who, what and why of the challenge
- ✓ Identify 2-3 data sources to validate or assist in analyzing your challenge

#### Day 1:

- Future forecast
- \_\_ Select a challenge to address
- Provide additional guiding questions
- \_\_ Develop a list of data focused questions

#### **Day 2:**

- \_\_ Develop responses to guiding and data focused questions
- \_\_ Use responses and peer feedback to develop strategies to address the challenge
- \_\_ Group presentations
- \_\_ Day 3:
- \_\_\_ Replication with your local programs

#### Future Forecast



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#### Future Forecast Activity

- It's 2029
- You're receiving top honors from the National Center for Best Practices Across All Sectors
  - State Adult Education
  - Success in addressing challenges
- There is an award ceremony
- You must present a brief verbal or visual acceptance presentation

Work in your state teams and use the Future Forecast worksheet to guide you in the development of your acceptance presentation



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#### Share Out



### Lunch



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## Thought Partnering Around Data Challenges

Part 1: State Teams





# Data Challenge Example: Understanding the Second Quarter Employment Indicator

N PoPs	Exited PoPs	N Employed in 2nd Q	2nd Q Employment Percent
117,137	105,650	21,870	20.7%

# SECOND Q EMPLOYMENT RATE AND PERCENT EMPLOYED AT ENTRY 32.2 2ND Q EMPLOYMENT EMPLOYED AT ENTRY

# Data Challenge Example: Guiding Questions for Second Quarter Employment

Challenge: Second quarter employment of exited participants is lower than expected and we want to improve it.

#### **Guiding Questions:**

- 1. What might be the data and programmatic reasons the rate is too low?
- 2. What data and procedures go into calculating the rate?
- 3. What data would you need to understand this challenge?
- 4. What sources of data would you consult?
- 5. What employment rate do we expect?
- 6. What other information would you need, and where would you get it?

Use these questions to develop data-focused questions.





# Data Challenge Example: Second Quarter Employment: Data-Focused Questions

- 1. Are the data that make up the indicator accurate (i.e., number of exited period of participation (PoPs), number obtained employment)?
- 2. How many Social Security number(SSNs) are missing? Does this differ by participant or provider?
- 3. Is the employment rate low every where or limited to some programs and levels?
- 4. Is data from matching agencies complete or inaccurate?
- 5. How accurate and complete are data from supplementary sources (e.g., surveys)?





#### Developing Guiding Questions

**Guiding questions** suggest ways to understand the challenge and what to do next. They focus on the "who/ what/whys". For example:

Why is [the challenge] happening?

Is it widespread or limited to some programs or participants?

Why is the [data point] so [low/high]?

What performance indicators are most affected?

What data collection procedures go into these indicators?

Who are the participants affected by or causing the challenge?

What data sources or other information do we need to review to understand the challenge?





#### Developing Data-Focused Questions

**Data-focused questions** identify what you need to review and how you will use data to help analyze the challenge. **Data-focused questions** identify the data sources and analysis needed to address the guiding questions. It is a review, disaggregation and analysis of data to help understand the challenge.

State what you need to review and how you will use data to help analyze the challenge further.

- Review and disaggregate the data
  - Is [X] lower or higher for groups of participants or programs? And why?
  - What data sources and analyses will you consult?
- Examine program and data collection procedures
  - What are programs doing that affects the data and challenge?
  - What data will we examine to understand procedures?





#### Potential Data Sources

- Adult Education State and Program Data
  - State data system, NRS and state tables
  - Participant surveys
- Partner databases
  - Workforce agency, employment databases, supplemental wage and employment records
  - Community college databases:- local and state, National Student Clearinghouse
  - Referring agency databases

- State and program-developed data collection instruments
  - Surveys, observation, focus groups, document review guides
- Extant databases
  - US Census and American Community
     Survey
  - Labor market data
  - Adult education research and surveys





#### Break—Please Return in 15 Minutes



#### Overview of Data Challenge Activities

#### **Presession work**

- ✓ Identify and craft three challenges
- ✓ Capture at least 2-3 guiding questions that help focus on the who, what and why of the challenge
- ✓ Identify 2-3 data sources to validate or assist in analyzing your challenge

#### **Day 1:**

- \_\_ Select a challenge to address
- Provide additional guiding questions
- \_\_ Develop a list of data focused questions

#### **Day 2:**

- \_\_ Develop responses to guiding and data focused questions
- \_\_ Use responses and peer feedback to develop strategies to address the challenge
- \_\_ Group presentations

\_\_ Day 3:

\_\_ Replication with your local programs

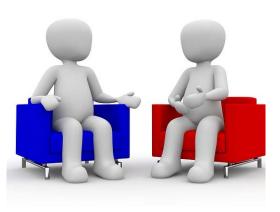


#### Sample Challenge Statements

- Our rate (44%) of participants for data matching causes less accurate post-exit indicator results. We need to increase it to reflect our actual performance.
- Students do not provide their social security number and we cannot data match. We need to improve our SSN collection to be a significant number of students so we can data match.
- To date this year, only 66.5% of the participants go on to active enrollments in programs which is an 8.5% decline from the past two fiscal years.

#### State Team Thought Partners Activity

- Select one of your 3 challenges to work on-you will use this throughout the rest of the training
- Review the worksheet.
  - Develop at least 4-5 guiding questions for your challenge
  - Develop at least 3-5 data focused questions for your challenge
  - What data and data sources would you use to answer the section?
  - Chart your responses.
- Assign reporter(s).







# Thought Partnering Around Data Challenges

Part 2: State to State



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#### State to State Thought Partner Activity

Visit Another Team (State)

The "Presenting Team" shares their:

- Challenge
- Guided and data focused questions
- The "Listening Team":
  - Provides feedback and develops or adds at least 2 questions for each area (guided and data focused)
  - Provides additional thoughts on data that could be used
- The Presenting Team then adds additional responses to their charts.
- Switch and repeat the above process.





#### Share Out



# Day 1 Wrap-Up and Overview of Day 2



#### NRS Training Evaluation

- Please complete your evaluation for today
- We use this information to inform our trainings and future resources and supports we provide to states



# Welcome Back and Review Day 1 and Agenda for Day 2



#### Overview of Data Challenge Activities

#### **Pre-session work**

- ✓ Identify and craft three challenges
- ✓ Capture at least 2-3 guiding questions that help focus on the who, what and why of the challenge
- ✓ Identify 2-3 data sources to validate or assist in analyzing your challenge

#### **Day 1:**

- ✓ Future forecast
- ✓ Select a challenge to address
- ✓ Provide additional guiding questions
- ✓ Develop a list of data focused questions

#### **Day 2:**

- \_\_ Develop responses to guiding and data focused questions
- \_\_ Use responses and peer feedback to develop strategies to address the challenge
- \_\_ Group presentations

#### **Day 3:**

\_\_\_ Replication with your local programs

## Using Data: State Successes



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#### Using Data: State Successes

- Several states have adopted strategies for using data to:
  - Improve data quality
  - Improve performance
  - Create professional development activities
  - Build a local and state data use culture to understand students and their successes
- And all of the above!



## State Presentation



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# Data Versus Data: Leveraging Data to Address the Challenge

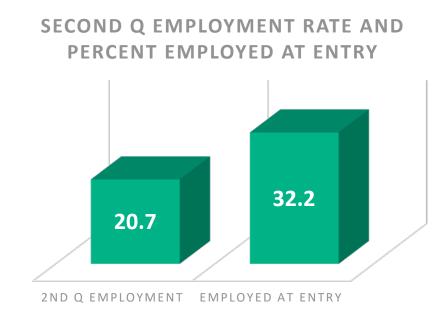


# Accept the challenges so you can feel the exhilaration of victory.

- George S. Patton

# Data Challenge Example: Understanding the Second Quarter Employment Indicator

N PoPs	Exited PoPs	N Employed in 2nd Q	2nd Q Employment Percent
117,137	105,650	21,870	20.7%



# **Challenge:** Second quarter employment of exited participants is lower than expected: Guiding Questions and Sample Answers

Guiding Questions	Sample Answers
1. What might be the data and programmatic reasons the rate is too low?	
2. What data and procedures go into calculating the rate?	
3. What data would you need to understand this challenge?	
4. What employment rate do we expect?	
5. What sources of data would you consult?	

## **Challenge:** Second quarter employment of exited participants is lower than expected: Guiding Questions and Sample Answers

<b>Guiding Questions</b>	Sample Answers
1. What might be the data and programmatic reasons the	Data matching not complete, no supplemental data
rate is too low?	collection, missing SSNs
	Participant characteristics
	External factors (unemployment rate in state)
2. What data and procedures go into calculating the rate?	Collecting SSNs, data matching, tracking student
3. What data would you need to understand this challenge?	Data matching records, percent SSNs received, survey response rates, instructional approaches
4. What employment rate do we expect?	Look at past performance. Employment of entering students, area employment data
5. What sources of data would you consult?	State record system, partner data, staff interviews, classroom data





#### Challenge: Second quarter employment of exited participants is lower than expected: Data-Focused Questions and Sample Answers

Data Focused Questions	Sample Answers
1. Are the data that make up the indicator accurate (i.e., number of exited PoPs, number obtained employment)?	
2. How many Social Security number (SSNs) are missing? Does this differ by participant or provider?	
3. Is the employment rate low everywhere or limited to some programs and levels?	
4. Is data from matching agencies complete or inaccurate?	
5. How accurate and complete are data from supplementary sources (e.g., surveys)?	

## **Challenge:** Second quarter employment of exited participants is lower than expected: Data-Focused Questions and Sample Answers

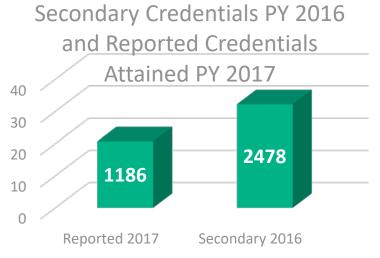
Data Focused Questions	Sample Answers
1. Are the data that make up the indicator accurate (i.e., number of exited PoPs, number obtained employment)?	<ul> <li>Check of state NRS data base to review accuracy and all participants are correctly exited;</li> <li>Time periods for collection are accurate</li> </ul>
2. How many Social Security number(SSNs) are missing? Does this differ by participant or provider?	Only have 45% of SSNs; missing rate high for low level ESL and some providers
3. Is the employment rate low everywhere or limited to some programs and levels?	High level ABE students have higher employment. Rural providers have lower employment rate.
4. Is data from matching agencies complete or inaccurate?	Matching rate is high
5. How accurate and complete are data from supplementary sources (e.g., surveys)?	<ul> <li>Many providers are not doing surveys or other methods, response rate is 20% for those that do survey.</li> </ul>





# Data Challenge Example: Understanding the Credential Indicator

Total N PoPs	Total Exited PoPs	N PoPs in Credential Cohort	N Attained Credential	Attained Credential Percent
21,572	17,939	3,638	1186	32.6%



# **Challenge:** Credential indicator rate and cohort of exited participants is lower than expected: Guiding Questions and Sample Answers

Guiding Questions	Sample Answers
1. What might be the reasons the cohort number is too low?	<ul> <li>Programs not identifying participants in cohort accurately</li> <li>Co-enrolled participants are not being counted</li> </ul>
2. What data and procedures go into calculating the credential rate?	Data matched from secondary and postsecondary databases for credential attainment, credential employment and postsecondary entry needs tracking up to one year after exit.
3. What data would you need to understand this challenge?	Data matching records, percent in secondary instruction and co-enrolled with partners, response rates, postsecondary exit rates
4. What credential rate do we expect?	Look at past performance, number of credentials attained in prior years. Adjust for time period covered by indicator.
5. What sources of data would you consult?	State record system, partner data (number co-enrolled), staff interviews, classroom data





# **Challenge:** Credential indicator rate and cohort of exited participants is lower than expected: Data-Focused Questions and Sample Answers

Data Focused Questions	Sample Answers
1. Are the data that make up the indicator accurate (i.e., number of exited PoPs, number exited in cohort)?	<ul> <li>Check of state NRS data base to review accuracy indicates participants are not correctly identified in the cohort</li> <li>No indication of exited for co-enrolled participants</li> </ul>
2. How much data are missing? Does this differ by participant or provider or type of credential?	<ul> <li>Much missing datamost providers are not identifying participants who should be in cohort. Co-enrolled participants are not identified or indicated as exiting postsecondary training. There is little data matching.</li> <li>Participant postsecondary credential achievement is not reported.</li> </ul>
3. Are the cohort and credential rates low in all programs? Are any programs collecting secondary and postsecondary credentials anywhere?	Rate of cohort identification is low in all programs. There appears to be a problem in the state data system that does not permit proper cohort identification.
4. Is data from matching agencies complete or inaccurate?	State and programs are not matching with postsecondary data bases—data not available.
5. What amount of data come from supplementary sources (e.g., surveys)?	Providers are not doing surveys or other methods.





## Break



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#### Activity: And the Answer Is...

In your state teams, continue the data analysis of your selected challenge by providing data sourced and data based responses to your guiding and data focused questions:

- Choose at least three of your guiding questions to answer
  - Use at least 2 sources of data to support your responses
  - Write your responses on a flip chart
- Choose at least three of your data focused questions to answer
  - What will be your process for getting to this answer? Outline on flip chart
  - Use at least 2 sources of data
  - Write your responses on a flip chart

If you complete this for your initial challenge, then select one of your other challenges previously identified from your Pre-session work.





#### Activity: State to State

Pair up with your assigned state teams:

- Share your responses on your:
  - Guiding questions
  - Data focused questions to answer

As a full group discuss the following:

- Do these analyses help you understand the issue?
- What other answers or issues do you see or might be suggested as a result of the responses?





## Lunch



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## Planning to Conquer



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# Planning to Conquer: Identifying Strategies to Address the Challenge

#### Reflect on:

- Responses to guiding questions, data focused questions, peer to peer feedback
- Your goals for where you want to be regarding the challenge (your future forecast)
- Who is impacted by the challenge itself and by addressing the challenge
- Whether changes in instruction, services or data procedures are needed, or some combination of these are needed to address the challenge
- Identify current and needed resources and assets to assist in addressing the challenge
- Consider if the solution/strategy will potentially prevent this from occurring in the future or is it a "band-aid"?





### Identifying Strategies to Address the Challenge: Staff Needed (cont.)

- Who needs to be involved to make the changes happen?
  - State leadership
  - Program staff
  - Local and state data staff
  - Teachers
  - Partner agency staff



#### Activity: Identifying Strategies to Address the Challenge

Each state will now work with a partner state to identify strategies to address their selected challenge. Use the following questions as a guide:

- What do you want to see happen?
- What are potential strategies and activities to get you there based on what you now know?
  - Who's needs to be involved and how?
  - What resources and support would be needed?
- What are potential barriers to implementing your strategies and how might they be addressed?
- What data will you use to determine if your strategies have been successful?





#### Volunteer Share Out



## Break



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## Planning to Conquer: Developing and Sharing Your Data Game Plan (AKA NRS Data Shark Tank)

Using the PPT presentation template presented, develop a presentation that is **under 3 minutes** 

Slide 1: The challenge and 2 of your guiding questions

Slide 2: At least 3 of your data focused questions

Highlight 1 of these data focused questions and your response in your presentation

Slide 3: Your approach to answering and the data sources used

Slide 4: Highlight at least 2 potential strategies and/or activities to address the challenge; **present on 1 of these strategies** 



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### Whole Group Share Out







## Wrap Up, Day 2



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#### NRS Training Evaluation

- Please complete your evaluation for today
- We use this information to inform our trainings and future resources and supports we provide to states



# Welcome Back, Review Day 2 and Agenda Day 3



#### Overview of the Day

- Preparing Locals to Conquer Their Data Challenges
  - Trainer's lens vs the administrator lens
  - Considerations for replication
  - Identifying needed and leveraging existing resources
  - Identifying potential barriers and assets that may impact replication



#### Overview of Data Challenge Activities

#### **Pre-session work**

- ✓ Identify and craft three challenges
- ✓ Capture at least 2-3 guiding questions that help focus on the who, what and why of the challenge
- ✓ Identify 2-3 data sources to validate or assist in analyzing your challenge

#### Day 1:

- ✓ Future forecast
- ✓ Select a challenge to address
- ✓ Provide additional guiding questions
- ✓ Develop a list of data focused questions

#### **Day 2:**

- Develop responses to guiding and data focused questions
- ✓ Use responses and peer feedback to develop strategies to address the challenge
- ✓ Group presentations

#### **Day 3:**

\_\_ Replication with your local programs



# The Trainer's Lens



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# Considerations for Replication with Local Programs

- Clarity on training objective and desired outcomes
- Identify what needs to happen before training
- Recognize there are different training styles and approaches to facilitation; consider what will resonate with your participants.
  - Opportunity for individual reflection
  - Opportunity for small and large group interaction
- Access to data

- Create a positive atmosphere
- Build from or acknowledge existing knowledge and work
- Remain mindful of the local perspective (value, return on investment)
- Determine when to observe, when to provide feedback, and when to overtly intervene
- Be aware of diversity across programs and participants
- Be aware of power dynamics among participants





### Activity - Preparing Your Locals to Conquer Their Data Challenges

Using the worksheet provided, review each component of the training and reflect on the following:

- What did and didn't resonate with your team? Why/why not?
- What do you think will resonate with your local programs? Why?
- How might you adapt this for your locals?

Capture responses to the following on flipchart and select a reporter to share out:

What, if any, existing or upcoming professional development opportunities could this training be connected with?

What supports or resources would be needed to successfully replicate this training?

What barriers do you anticipate in delivering this training to local programs?





# Break



## Share Out



### Got Solution?

Still in need of solutions for a barrier? Consider the following:

- Is the barrier in your control?
- 15% solution
- "Bottom up" solution

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Other?



# NRS Training Evaluation

- Please complete your evaluation for today
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### Lunch—Please Return in 1 Hour



## Activity - Round Robin Barriers/Solutions to Replication

Working in breakout groups of state teams, discuss the barriers you anticipate in delivering this training to local programs (*captured from the previous activity*).

- What are some strategies or actions that could address or solve this barrier?
- Select at least 2 different reporters from your group to share out.

#### **Round Robin!**

- In 1 minute or less share 1 barrier and 1 or more strategies or actions to address the barriers
- Pass the microphone to the next team
- Repeat





# Activity – Your Turn!

Select 1 section of the training (except Future Forecasting) as if you were designing and delivering it for your local programs:

- Write at least 2 objectives for this section
- What teaching style(s) and/or facilitation approach would you incorporate for this section?
- What might be the local perspectives and diversity across local programs you need to consider for this section?
  - Provide at least 2 examples of how you might reflect this in your training?
- What resources, activities or templates would you use/create?
- Who would/could deliver the training?





# Key Takeaways Regarding Data

Write on two separate sticky notes:

- A key takeaway or positive reflection on using data to address state or program challenges.
- An action step you'll take around data use to address your challenge

Place it on the wall.

Walk around and review the gallery of sticky notes.



# Day 3 Wrap-Up



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# Evaluation Learning Community 2019

**Evaluation Basics for Adult Education Administrators** 

Learn how to conduct research & evaluation using your state's NRS data

# Online and in Washington, D.C. November 2019

State teams will develop and implement an evaluation plan by participating in an online course, face-to-face workshop and ongoing coaching throughout 2020



A project-based training produced by the National Reporting System Support Project

# LARRY CONDELLI GEMAR NELOMS DELPHINIA BROWN

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#### THANK YOU



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### Planning to Conquer: Developing and Sharing Your Data Game Plan

Using the PPT presentation template presented, develop a presentation that is **under 3 minutes** 

Slide 1: The challenge and 2 of your guiding questions

Slide 2: At least 3 of your data focused questions

Highlight 1 of these data focused questions and your response in your presentation

Slide 3: Your approach to answering and the data sources used

Slide 4: Highlight at least 2 potential strategies and/or activities to address the challenge; **present on 1 of these strategies** 



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# <<State's>> Data Game Plan

LIST STATE TEAM MEMBERS

NRS Regional Training 2019



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# Data Challenge

Insert your challenge statement here

# Guiding Question

Insert one guiding question here

## Data-Focused Question

Insert one data-focused question here



### Approach to Answering Data Question

 Include a few bullet points to describe your approach to answering your data-focused question.

### Data Sources

- Source 1
- Source 2
- Source 3
- Source 4



# Strategies to Address the Challenge

- Strategy 1
- Strategy 2