

2019

CONQUERING YOUR DATA CHALLENGES

STATE REGIONAL WORKSHOP

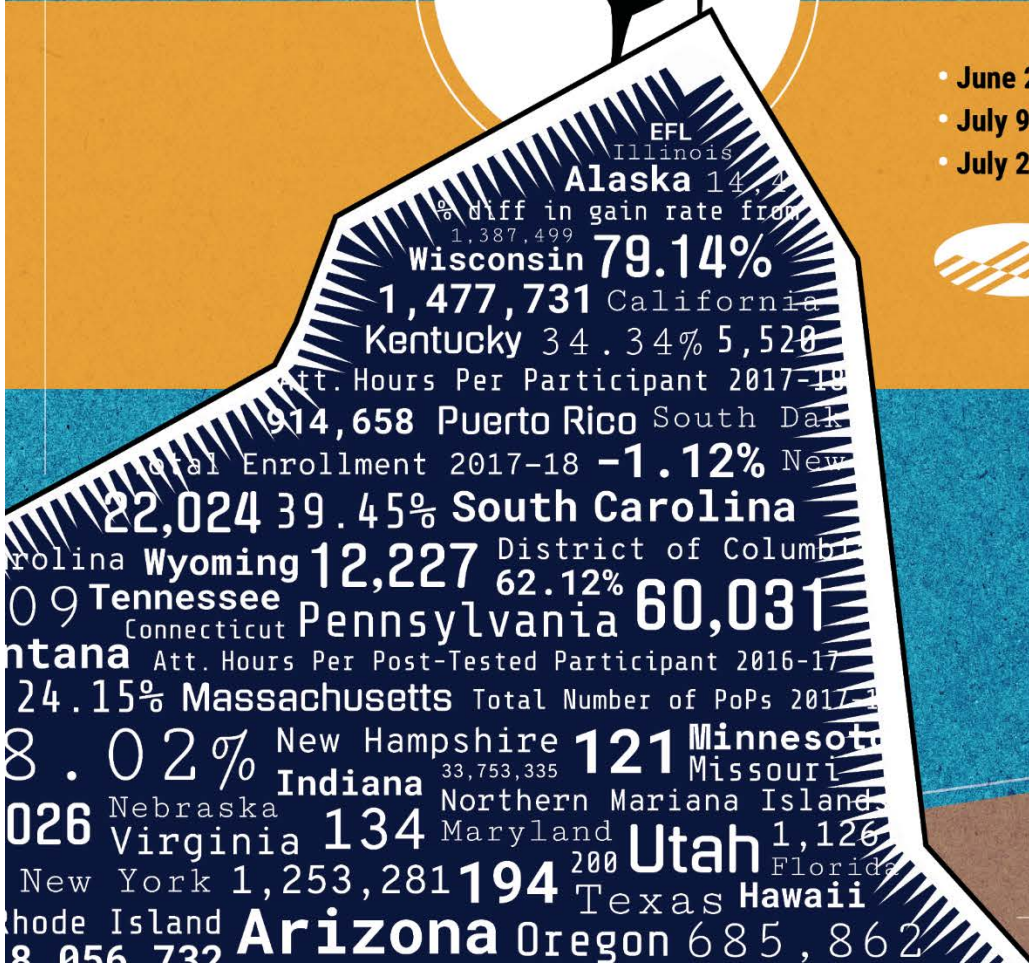


- June 26-28 | Arlington, VA
- July 9-11 | St. Louis, MO
- July 23-25 | San Francisco, CA



NATIONAL
REPORTING SYSTEM
for Adult Education

U.S. Department of Education,
Office of Career, Technical & Adult Education



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Introduction

Conquering Your Data Challenges Workbook Description

This workbook, *Conquering Your Data Challenges: Training Workbook*, is a resource designed to help state agencies and local adult education providers identify and address challenges at the state, local, and classroom levels through the use of data. Although it has been developed for use in conjunction with the *Conquering Your Data Challenges* regional training, it is designed to support replication of activities for use with and by state teams and local providers. This workbook provides examples and space for state or local teams to identify data challenges and to develop strategies for addressing those challenges. Completing the activities in this workbook will lead to action steps that can be replicated with state and local programs. First, state teams will receive a refresher on why data matters and how to use the data. This will be followed by engaging in a vision of possible future success. State teams will then walk through solutions around data challenges together. Afterward, state teams will identify strategies to address those challenges. Finally, state teams will review how these workshop activities can be implemented with local programs and will develop a draft of their action plan.

Examining and reflecting on your state and local data using the guidance and activities in this workbook will help you do the following:

- Identify significant challenges local programs face that affect performance and data collection.
- Understand the reasons for the challenges using data.
- Identify strategies to address the challenges.
- Develop action steps to be implemented with local programs.
- Develop an action plan to replicate training to local programs.

As states and local providers constantly strive for positive results for adult education participants, taking time to reflect on data and its challenges can help create and inform these results. In doing so, the action steps you develop will be better tailored to address the data challenges specific to your state and local programs.



Workbook Sections

Why Data Matter and How We Use Data

Data have a variety of uses and can be found almost anywhere. Data are used for advertising, for health instruments from blood pressure cuffs to heart monitors, and for calculating wind speeds to help delayed flights make up for lost time. Data can be used for many products and as a source or function, such as an exercise monitor, restaurant review platforms, and travel websites. With so many different sources and types of data, it is important to ask whether the data are trustworthy.

Questions to Consider

- What is the source and validity of the data?
- What is the quality and integrity of the data?

Data, Data Everywhere

Brainstorm and list the different ways data appear and are used on a day-to-day basis. For each item, discuss the impact the data have and whether you trust the source of information.

Source of Data	Impact or Use	Do you trust the source? Yes or No (Include why)
1.		
2.		
3.		
4.		
5.		

Question to Consider

- How do we use data on a state, classroom, and local program levels?

Example Uses of Data

The following examples reflect some of the ways states, classrooms, and local programs can effectively use data.

States

- Suggest needs for improvement in instruction.
- Measure program success and effectiveness.

Local programs

- Identify enrollment: trends and types of students.
- Track student progress: test scores and Measurable Skills Gain (MSG).

Classrooms

- Track student progress: testing, test scores, and MSG.
- Determine whether your instruction is effective.

Exercise: Other Uses of Data

Brainstorm and list other uses of data for states, classrooms, and local programs.

States

-
-

Local programs

-
-

Classrooms

-
-

Future Forecast

Data can be used to meet the challenges of both current and future students. However, for that to happen, data will need to be utilized in a way that highlights what those challenges are and how they can be overcome.

Future Forecast Activity

It is 2029 and the newly formed National Center for Best Practices Across All Sectors has awarded your state's adult education department its highest honors. The honor stems in part from how your state successfully addressed one of the three challenges you identified in the pre-session. To prepare for the award ceremony, you will need to provide a visual or a verbal presentation that highlights the following:

- A single statement that reflects your former challenge as a success
- The data sources and information you used to identify the original challenge
- The data sources and information you used to address the original challenge and continue to review to validate your success
- Who across the state and various programs was involved in making the success happen
- Bonus: What role, if any did the National Reporting System (NRS) and the Office of Career, Technical and Adult Education (OCTAE) play in supporting your success?

Part I: Individual Brainstorming

As an individual, take 10 minutes to think about your approach and start drafting your presentation. Remember to touch on each of the points above. Outline your ideas and thoughts in the boxes below.

1. Statement reflecting your success in addressing the challenge

2. Data sources used for identification of challenge

3. Data sources used for validating success

4. Partners in success

5. Bonus: Role NRS and OCTAE played in your success

Part 2: Group Presentation and Share Out

Capture key highlights and things that resonated with you.

Questions to Consider

- What themes did you hear across the group conversation?
- After hearing others' thoughts, how achievable is your future forecast?
- What elements of your future forecast do you believe can be worked toward now?

Challenge Statements and Data Sources

Prior to the training, you were asked to identify three challenge statements reflecting data challenges in your state and for your local providers. You were also asked to identify two or three data sources to enhance your understanding and analysis of the challenge. Please enter this information below for easy reference throughout the training.

Challenge statements

1.

2.

3.

Data sources

1.

2.

3.

Thought Partnering Around Data Challenges—Part 1: State Teams

A core part of this training is to help state teams determine what their data challenges are and how to address those challenges. However, state teams will first need to know what kinds of questions to ask in order to analyze their data. To do this, state teams will need a set of guiding questions, a set of data-focused questions, and an understanding of potential data sources.



Data Challenge Examples



Guiding Questions for Second-Quarter Employment

One of the team facilitators should capture the responses provided in the large group for the data challenge questions below. For questions 3 and 4, consider what other organizations or partners could provide data.

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?

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 numbers (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. Are the 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. These questions focus on the who, what, and why.

Examples

- 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. Review, disaggregate, and analyze the data to help understand the challenge.

State the information 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? 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



State Team Activity

Select **one** of your three challenges to work on. You will use this throughout the rest of the training.

Challenge:

Review the worksheet and then proceed with the following activities.

Develop four or five guiding questions for your challenge.

- 1.
- 2.
- 3.
- 4.
- 5.

Develop three to five data-focused questions for your challenge.

- 1.
- 2.
- 3.
- 4.
- 5.

What data and data sources could you use to answer your questions?

Thought Partnering Around Data Challenges—Part 2: State-to-State (Team-to-Team) Sharing

Now you will have the opportunity to walk through and thought partner on solutions around your chosen challenge. States (or teams) will work with another state (or team). Each state will present their responses to their new partner, and the new partner will add any thoughts to the responses of the former group on an adjacent flip chart.



Activity: Visit Another State (Team)

- Present and share your challenge and guided and data-focused questions (avoid sharing any potential responses just yet! That comes later.)
 - Instructions for the listening team: Provide feedback and add at least two questions for each area (guided and data focused).
 - Provide additional thoughts on data that could be used.
- The presenting team adds the additional responses to your charts.
- Switch and repeat the above process.

Share-out

Capture key highlights and things that resonated.

Data Versus Data: Leveraging Data to Address the Challenge

The next step is to delve into the challenges so that you can feel the exhilaration of victory and get closer to your future forecast.



Data Challenge Example 1: Guiding Questions and Answers

Challenge: Second-quarter employment of exited participants is lower than expected.

Guiding Questions	Sample Answers
1. What might be the data and programmatic reasons the rate is too low?	<ul style="list-style-type: none">• Data matching not complete, no supplemental data collection, missing SSNs• Participant characteristics• External factors (unemployment rate in state)
2. What data and procedures go into calculating the rate?	<ul style="list-style-type: none">• Collecting SSNs, data matching, tracking student
3. What data would you need to understand this challenge?	<ul style="list-style-type: none">• Data matching records, percent SSNs received, survey response rates, instructional approaches
4. What employment rate do we expect?	<ul style="list-style-type: none">• Look at past performance. Employment of entering students, area employment data
5. What sources of data would you consult?	<ul style="list-style-type: none">• State record system, partner data, staff interviews, classroom data



Data Challenge Example 1: Data-Focused Questions and Answers

Challenge: Second-quarter employment of exited participants is lower than expected.

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 style="list-style-type: none">• Check of state NRS data base to review accuracy and all participants are correctly exited• Time periods for collection are accurate.
2. How many SSNs are missing? Does this differ by participant or provider?	<ul style="list-style-type: none">• Only have 45% of SSNs; missing rate high for low-level English as a second language (ESL) and some providers
3. Is the employment rate low everywhere or limited to some programs and levels?	<ul style="list-style-type: none">• High-level adult basic education (ABE) students have higher employment. Rural providers have a lower employment rate.

Data-Focused Questions	Sample Answers
4. Are data from matching agencies complete or inaccurate?	<ul style="list-style-type: none"> Matching rate is high.
5. How accurate and complete are data from supplementary sources (e.g., surveys)?	<ul style="list-style-type: none"> Many providers are not doing surveys or other methods. The response rate is 20% for those that do survey.



Data Challenge Example 2: Guiding Questions and Answers

Challenge: Credential indicator rate and cohort of exited participants is lower than expected.

Guiding Questions	Sample Answers
1. What might be the reasons the cohort number is too low?	<ul style="list-style-type: none"> Programs not identifying participants in cohort accurately Co-enrolled participants are not being counted
2. What data and procedures go into calculating the credential rate?	<ul style="list-style-type: none"> 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?	<ul style="list-style-type: none"> Data matching records, percentage in secondary instruction and co-enrolled with partners, response rates, postsecondary exit rates
4. What credential rate do we expect?	<ul style="list-style-type: none"> Look at past performance and number of credentials attained in prior years. Adjust for time period covered by indicator.
5. What sources of data would you consult?	<ul style="list-style-type: none"> State record system, partner data (number co-enrolled), staff interviews, classroom data



Data Challenge Example 2: Data-Focused Questions and Answers

Challenge: Credential indicator rate and cohort of exited participants is lower than expected.

Data Questions	Sample Answers
1. Are the data that make up the indicator accurate (i.e., number of exited PoPs, number exited in cohort)?	<ul style="list-style-type: none">• Check of state NRS data base to review accuracy indicates participants are not correctly identified in the cohort• No indication of exited for co-enrolled participants
2. How much data are missing? Does this differ by participant or provider or type of credential?	<ul style="list-style-type: none">• Much missing data--most 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• Participant postsecondary credential achievement is not reported
3. Are the cohort and credential rates low in all programs? Are any programs collecting secondary and postsecondary credentials anywhere?	<ul style="list-style-type: none">• 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. Are data from matching agencies complete or inaccurate?	<ul style="list-style-type: none">• 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)?	<ul style="list-style-type: none">• Providers are not doing surveys or other methods.



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 the following prompts.
 - Use two or three 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 the following questions.
 - What will be your process for getting to this answer? Outline your process on a flip chart.
 - Use at least two sources of data.
 - Write your responses on a flip chart.



Activity: State to State

Pair up with your assigned state teams. Write down and share responses for both your guiding questions and data-focused questions.

Responses for guiding questions

- 1.
- 2.
- 3.
- 4.
- 5.

Responses for data-focused questions

- 1.
- 2.
- 3.
- 4.
- 5.

What data and data sources would you use to answer your questions?

Questions to Consider

- Do your responses enhance your understanding or analyses of the issue?
- What other answers or issues might be suggested as a result of the above responses?

Planning to Conquer

To conquer data challenges, state teams will need to identify effective strategies. In this section, state teams will reflect on their guiding questions, data-focused questions, and challenges. State teams will then think through the staff needed to effect change, work with a partner state to identify the challenge, and develop a 5-minute presentation highlighting potential strategies.

Reflection

Prompts	Reflections
Reflections or highlights on the responses to guiding questions, data-focused questions, and 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.	
What types of changes or actions are needed to address the challenge (i.e., instruction, services, revised data procedures and/or a combination)?	
Identify current and needed resources and assets to assist in addressing the challenge.	
Consider whether the solution or strategy will potentially prevent this from occurring in the future or is it a short-term fix?	

Staff Who Can Make Change Happen

The left-hand column provides examples of just a few of the staff members needed to address challenges and effect change. In the right-hand column, brainstorm and list other staff members who are needed to effect change.

Needed Staff Members	Other Needed Staff Members
<ul style="list-style-type: none">• State leadership• Program staff• Local and state data staff• Teachers• Partner agency staff	<ul style="list-style-type: none">•••••

Identify Strategies to Address the Challenge

Each state will 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 potential strategies and activities can get you there based on what you now know?

Who needs to be involved and how?

What resources and support are needed?

What are the potential barriers to implementing your strategies and how might they be addressed?

What data will you use to determine whether your strategies have been successful?

Share-out (voluntary)

Write down and share one strategy, who would be involved in implementing that strategy, and the resources needed.

Developing and Sharing Your Data Game Plan

Use the provided slide presentation template to develop a presentation that is shorter than 5 minutes. Each state will use either a single reporter or multiple members of the team and will present the following:

- Slide 1: The challenge and your guiding questions
- Slide 2: Data-focused questions
 - Highlight your responses to one or two of the data-focused questions.
- Slide 3: Your approach to answering the data-focused question highlighted in slide 2 and the data sources used
- Slide 4: Highlight at least three potential strategies and/or activities to address the challenge
- Slide 5 (if time permits): Create a slide of your own choosing

Whole-group share-out

Each group will deliver their presentation to the full group of state teams.

Question to Consider

- What key next steps can you take to address your data challenge?

The Trainer's Lens: Part 1

State teams will now revisit the training in sections to identify what and how they may replicate sections of or the entire training with their local programs or larger state teams.

Considerations for Replication With Local Programs

- Ask for 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
- Obtain 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.

Additional Considerations

Brainstorm and list other considerations you may have for replication with local programs.

The Trainer's Lens: Part 2

Preparing Your Local Providers to Conquer Their Data Challenges

Review each component of the training and reflect on the following questions.

What did and did not resonate with your team? Why or why not?

What do you think will resonate with your local programs? Why?

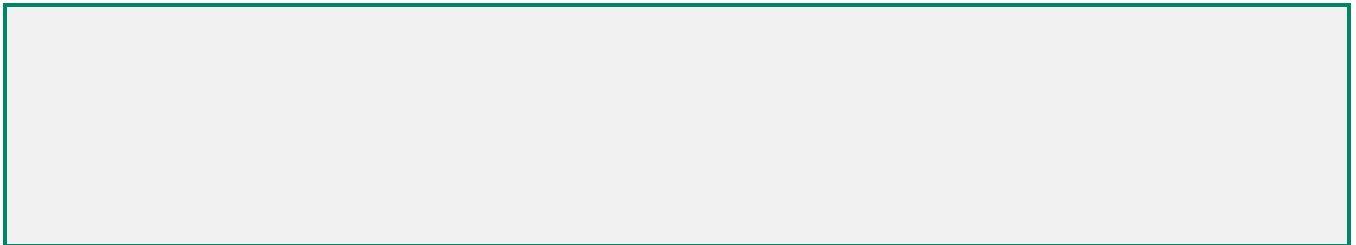
How might you adapt this for your local programs?

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

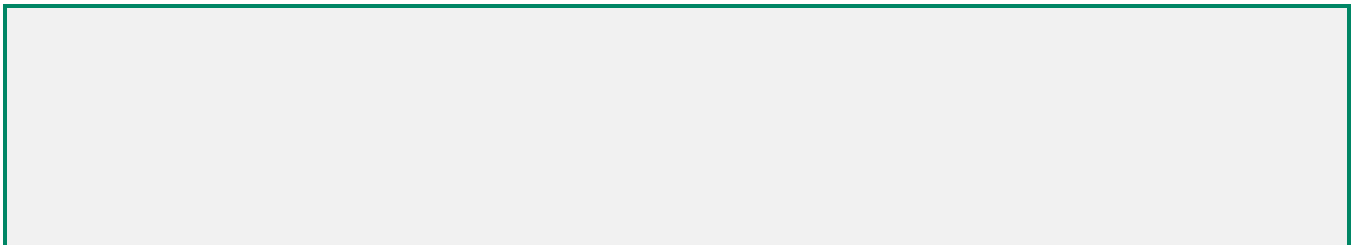
What supports or resources would be needed?

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

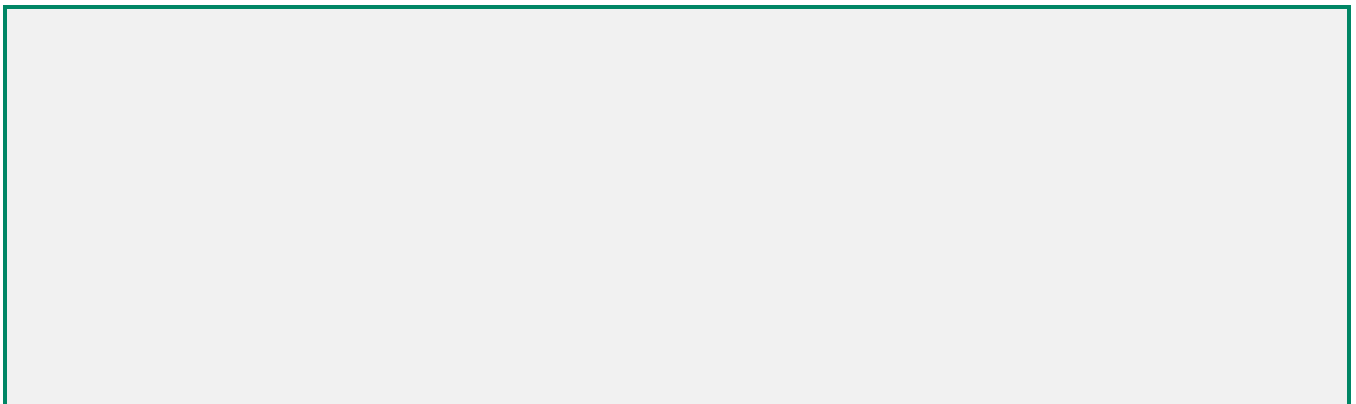
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What are the potential solutions to address these barriers?

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Share-out

Capture key highlights and things that resonated.

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Got Solutions?

There may not be an immediate or exact solution or strategy for the barriers mentioned. Several approaches can be taken to help develop solutions.

- Is the problem in your control?
- Use a 15% solution: What can be done to make some progress toward addressing the barrier, even if it is only 15% toward a full solution?
- Use a “bottom up” solution: Put yourself in the local provider position (or for local providers in the classroom position). What might they propose as a solution or strategy for the barriers and why?

Your Turn!

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

Write at least two objectives you would have for this training with local providers.

1.

2.

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 two examples of how you might reflect this in your training.

1.

2.

What resources, activities, or templates would you use or create?

Who would or could deliver the training?

Share-out

Capture key highlights and things that resonated.

Key Takeaways Regarding Data

Please respond to the following prompts.

A key takeaway or positive reflection on using data to address state or program challenges.

An action step you will take around data use to address your challenge.

Place your sticky notes on the wall and review the gallery of sticky notes.

Share-out

Write and share anything that stood out in the gallery. What common themes did you notice?

1

[illegible]



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EFL
Illinois
Alaska 14,4
% diff in gain rate from
1,387,499
Wisconsin 79.14%
1,477,731 California
Kentucky 34.34% 5,528
Att. Hours Per Participant 2017-18
914,658 Puerto Rico South Dak
Total Enrollment 2017-18 -1.12% New
22,024 39.45% South Carolina
Carolina Wyoming 12,227 District of Columbi
09 Tennessee 62.12%
Connecticut Pennsylvania 60,031
ntana Att. Hours Per Post-Tested Participant 2016-17
24.15% Massachusetts Total Number of PoPs 2017-1
8.02% New Hampshire 121 Minnesota
026 Nebraska Indiana 33,753,335 Missouri
Virginia 134 Northern Mariana Island
Maryland Utah 1,126
New York 1,253,281 194 Florida
Rhode Island Texas Hawaii
8,056 732 Arizona Oregon 685,862



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