9-27-2018

ECDataWorks Data Story Activity Guide

Kate Grannemann
Ruth Lett
Philip M. Sirinides
University of Pennsylvania

Follow this and additional works at: https://repository.upenn.edu/cpre_conferences

Part of the Early Childhood Education Commons

https://repository.upenn.edu/cpre_conferences/8

This paper is posted at ScholarlyCommons. https://repository.upenn.edu/cpre_conferences/8
For more information, please contact repository@pobox.upenn.edu.
ECDataWorks Data Story Activity Guide

Abstract
Learning from data is not easy. Developing data stories can support data use among stakeholders at the state and local levels. This resource is intended to support stakeholders working in small groups to develop data stories requiring integrated early childhood data, but can support planning for the use of other types of data as well. The goal of this activity is to engage stakeholders and build a shared understanding of data needs and uses through facilitated conversations.

Keywords
Early Childhood Integrated Data Systems

Disciplines
Early Childhood Education

This other is available at ScholarlyCommons: https://repository.upenn.edu/cpre_conferences/8
9-27-2018

ECDataWorks Data Story Activity Guide

ECDataWorks Project CPRE
University of Pennsylvania

Philip M. Sirinides
University of Pennsylvania

Follow this and additional works at: https://repository.upenn.edu/cpre_conferences
Part of the Early Childhood Education Commons

https://repository.upenn.edu/cpre_conferences/8

This paper is posted at ScholarlyCommons. https://repository.upenn.edu/cpre_conferences/8
For more information, please contact repository@pobox.upenn.edu.
ECDataWorks Data Story Activity Guide

Abstract
Learning from data is not easy. Developing data stories can support data use among stakeholders at the state and local levels. This resource is intended to support stakeholders working in small groups to develop data stories requiring integrated early childhood data, but can support planning for the use of other types of data as well. The goal of this activity is to engage stakeholders and build a shared understanding of data needs and uses through facilitated conversations.

Keywords
Early Childhood Integrated Data Systems

Disciplines
Early Childhood Education

This other is available at ScholarlyCommons: https://repository.upenn.edu/cpre_conferences/8
Introduction

Learning from data is not easy. Developing data stories can support data use among stakeholders at the state and local levels. This resource is intended to support stakeholders working in small groups to develop data stories requiring integrated early childhood data, but can support planning for the use of other types of data as well. The goal of this activity is to engage stakeholders and build a shared understanding of data needs and uses through facilitated conversations.

What is a Data Story?

A data story is a brief structured analysis that provides data visuals with insightful narrative in a sharable format. Successful data stories support timely decision-making by allowing the audience to quickly understand the insight the data offers and the message the creator is communicating. A data story is neither a lengthy report nor a short infographic.

Potential Purposes for Data Stories

- Demonstrate a Success
- Demonstrate a Program/Service Need
- Demonstrate an Information Need
- State a Goal/Priority
- Examine a Trend
- Measure Progress Toward a Performance Target

Potential Topic Areas of Focus

The development of data stories may be particularly useful to those working to use data from Early Childhood Integrated Data Systems (ECIDS). The following are examples of topics for which data stories may require integrated data.

- Early Childhood Program Quality
- Kindergarten Readiness
- Cultural and Linguistic Competency
- At Risk Populations
- Service Reach/Uptake
- Service Gaps
- Teacher Qualifications
**Examples**

The above report purposes and topic areas can serve as a starting place for generating ideas for data stories. Below are a few examples of how you could draw from these lists. The lists are not intended to be exhaustive; add ideas for any topics and purposes that are relevant to you!

<table>
<thead>
<tr>
<th>Example</th>
<th>Report Purpose</th>
<th>Topic Areas of Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate that areas with high poverty have the greatest access to high quality early childhood programs.</td>
<td>Demonstrate a Success</td>
<td>Early Childhood Program Quality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Service Reach/Uptake</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At Risk Populations</td>
</tr>
<tr>
<td>County X needs additional resources to support families with a home language other than English.</td>
<td>Demonstrate a Program/Service Need</td>
<td>Service Gaps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At Risk Populations</td>
</tr>
<tr>
<td></td>
<td>State a Goal/Priority</td>
<td></td>
</tr>
<tr>
<td>Our state agency does not have data on educational attainment levels for a high percentage of early childhood staff. This knowledge gap prohibits us from evaluation and improving teacher readiness for delivering high quality early childhood services.</td>
<td>Demonstrate an Information Need</td>
<td>Teacher Qualifications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Early Childhood Program Quality</td>
</tr>
</tbody>
</table>

**Considerations for Facilitation**

- This activity is designed to be completed in person with small, diverse groups of people.
- With larger groups, consider breaking out into smaller groups either to cover more topics or address more data story ideas on one topic. Have the groups provide feedback to each other on their resulting stories.
- If possible, assign a facilitator who is familiar with the activity to each group.
- For more focused discussions, the facilitator may find it helpful to develop materials on key topic areas describing relevant background information.
- Provide print-outs of the guiding questions to participants.
- Poster-sized versions of the data story template are a fun way to get participants more engaged by providing more space to explore ideas.
- If participants plan to use the results of this activity to create a data story, recommend “storyboarding” as a means of determining effective organization and recommend they conduct a peer-review to ensure that the data story is clear and the inferences drawn from the data are appropriate.

**Possible Next Steps**

Once you have completed this activity, consider using the ECDataWorks Data Story Builder App to develop visual and narrative content for your story in a shareable format.
Guiding Questions

This below guiding questions can inform the development of content for the data story template and ensure that the content is focused and intentional. Before filling in each section of the template, consider the questions below.

1. **Determine the Purpose**
   - Why is it important and useful to create a data story for this purpose?
   - What analysis questions do you need to answer to create an effective story for this purpose?
   - Are your analysis questions supported by data?
   - How might the answers to your questions lead to actionable results?

2. **Assess Required Data**
   - What relevant data are available and accessible to support the data story purpose?
   - For ECIDS data stories, is integration across data sources needed? If not, consider identifying a new purpose that leverages the integrated data.
   - What is the process for getting access to data? What is your agency’s approach to data governance for these data?
   - What issues do you anticipate with the quality and usefulness of the data and how will you mediate them?

3. **Identify Expected Results**
   - What support (tools, resources, etc.) would you need to analyze the data?
   - What would you expect the results of your analysis to reveal?
   - How might you visualize the results of your analysis to effectively communicate your findings?

4. **Develop Data Story**
   - Who is the audience of your data story?
   - How might you organize the data and analytics in your data story?
   - What narrative could you include to help the audience understand the key message/takeaway?
   - What additional context would be important for your audience?

5. **Share Your Message**
   - What opportunities do you have to share your message with the intended audience?
   - When would sharing your message be most useful to your audience?
   - What decisions could your audience make using the data story?
   - How will you know whether the purpose of the data story is accomplished?
Data Story Activity Guide

Determine Purpose

1

Assess Required Data

2

Identity Expected Results

3

Develop Data Story

4

Share Your Message

5

Data Story Template