Six Data Quality Issues That Could Undermine Your SSIP Work

June 21–23, 2022
Presenters

Nashville, TN - June 6–7, 2022
Tamara Nimkoff, IDEA Data Center
Jennifer Schaaf, IDEA Data Center

Virtual - June 21–23, 2022
Tamara Nimkoff, IDEA Data Center
Jennifer Schaaf, IDEA Data Center
Participant Outcomes

• Understand the principles of high-quality data
• Learn how to recognize data quality issues in SSIP work
• Gain potential solutions for addressing data quality issues in SSIP
Agenda

• Principles of high-quality data
• How the principles manifest in SSIP work
• Activities
  – Identify the principle
  – Identify consequences and propose a solution
Principles of High-Quality Data

- Timely
- Accurate
- Complete
- Secure
- Accessible
- Usable
Timeliness

Timely data are current per a specific period of time
Accuracy

Accurate data are consistent across time, methods, and locations (reliable) and represent what they intend to measure (valid).
Completeness

Complete data represent the expected population and subgroups
Secure data are collected and stored with due consideration to maintaining confidentiality and with electronic and physical protections consistent with the sensitivity of the data.
Accessible data are readily available in formats that are understandable, user friendly, and practical.
Usable data support decisionmaking for sound management, strong governance, and improvement of results for children and youth with disabilities and their families.
Let’s Practice!

Three short scenarios

• Identify the data quality principle involved
• Discuss potential consequences of the data quality issue
• Brainstorm potential solutions to address the issue
Data Quality Issue: Scenario 1

LEAs provide student demographic and outcome data for the evaluation to the state, but the data are in different formats (Excel, SPSS, Word tables) and the labeling in the data files is inconsistent.

What is the primary data quality principle involved?
Student demographic and outcome data arrive in different formats with inconsistent labelling.

Source: Third-party application (Mentimeter).
Student demographic and outcome data arrive in different formats with inconsistent labelling (cont.)

Source: Third-party application (Mentimeter).
Data Quality Issue: Scenario 2

Parents are asked to complete a survey, but few (average 11%) provide responses.

What is the primary data quality principle involved?
Only around 11% of parents complete a survey

Source: Third-party application (Mentimeter).
Only around 11% of parents complete a survey (cont.)

Source: Third-party application (Mentimeter).
SSIP evaluators conduct a baseline assessment of practitioner knowledge after the professional training program started.

*What is the primary data quality principle involved?*
The baseline assessment of practitioner knowledge is given after the professional development started.

Source: Third-party application (Mentimeter).
The baseline assessment of practitioner knowledge is given after the professional development started (cont.)

Source: Third-party application (Mentimeter).
Addressing Data Quality Issues: Scenario 1

How could we ensure data that come from the LEAs are accessible for the state’s evaluation?
How could we ensure that data coming from the LEAs are accessible for the state's evaluation?

<table>
<thead>
<tr>
<th>Provide template for data</th>
<th>Create standardized protocols.</th>
<th>List format for submission</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI data in the same format</td>
<td>Provide templates</td>
<td></td>
</tr>
<tr>
<td>Require a single format</td>
<td>Prescribe or recommend a standard format</td>
<td>Common forms or surveys</td>
</tr>
</tbody>
</table>

Source: Third-party application (Mentimeter).
How could we ensure that data coming from the LEAs are accessible for the state's evaluation? (cont.)

- Provide a template
- Do proactive webinars for LEAs.
- Suggest they are uploaded and housed in one place with templates
- Provide a uniform submission portal
- Standard format and naming conventions
- Provide guidelines on reporting formats, provide data system to use with standard outputs
- standard template
- Give them guidance doc or template
- There should be a data warehouse that can be easily accessible

Source: Third-party application (Mentimeter).
How could we ensure that data coming from the LEAs are accessible for the state's evaluation? (cont.)

<table>
<thead>
<tr>
<th>Provide common template for data set</th>
<th>Provide guidelines including templates to the LEAs</th>
<th>Templates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide a format that standardized the labels and format</td>
<td>Provide the districts with the usable data elements/ templates</td>
<td>Temple</td>
</tr>
<tr>
<td>Provide required format</td>
<td>Training for respondents about survey expectations</td>
<td></td>
</tr>
</tbody>
</table>

Source: Third-party application (Mentimeter).
How could we ensure that data coming from the LEAs are accessible for the state's evaluation? (cont.)

- Central repository
- Provide templates for data collection
- Give parents an incentive to respond
- Templates/intuitive excel sheets already set up, with certain cells (headers) locked
- Mapping

Source: Third-party application (Mentimeter).
Addressing Data Quality Issues: Scenario 2

What could we do to have more complete data from our parent survey?
What could we do to have more complete data from the parent survey?

- Interviews
- Conduct focus groups
- Incentivize responding, multiple survey attempts, alternate survey response methods
- Use multiple means of communication
- Ensure process is easy and accessible
- Work with parent stakeholder groups to help explain how the info is used and the value of it
- Interview
- Divulgation
- Engage with Parent TA Centers to assist

Source: Third-party application (Mentimeter).
What could we do to have more complete data from the parent survey? (cont.)

- Address language barriers (make survey available in multiple languages)
- Ensure multilingual, multilingual distribution of link
- Encourage LEAs to advertise survey on social media
- Survey prominently displayed on SEA and LEA websites/presentations
- Interviews
- Simplify the questionnaire
- Incentivize response
- Make sure survey tool has different language options
- Post focus groups; 2nd round for nonresponders

Source: Third-party application (Mentimeter).
What could we do to have more complete data from the parent survey? (cont.)

<table>
<thead>
<tr>
<th>Use several methods</th>
<th>Focus groups</th>
<th>Share back how past data was used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer time for surveys to be completed at different times when parents can receive support.</td>
<td>Set up survey stations at parent events.</td>
<td>Target all parents. Collaborate with your districts to heighten public awareness of the data collection process.</td>
</tr>
<tr>
<td>Incentivize</td>
<td>Provide multiple times, avenues, and modes of communication to inform of why the data is important</td>
<td>Make sure questions are readily accessible to parents</td>
</tr>
</tbody>
</table>

Source: Third-party application (Mentimeter).
What could we do to have more complete data from the parent survey? (cont.)

- Simplify the survey
- Use a representative sample instead of a census
- Incentives
- Translate survey for non Native English speakers

Source: Third-party application (Mentimeter).
Addressing Data Quality Issues: Scenario 3

How could we ensure more accurate assessment of practitioner knowledge?
How could we ensure more accurate assessment of practitioner knowledge?

- Pre and post surveys

Insert pre survey as part of registration.

Ensure PD providers are aware of timelines and expectations.

- Pre and post tests

Pre-survey

Progress monitoring to understand incremental improvement instead of simply pre/post

- Pre-post questions that are specific to the training

Pre and post survey

Do the pretest before PD starts next time

Source: Third-party application (Mentimeter).
How could we ensure more accurate assessment of practitioner knowledge? (cont.)

- Ask about what they’ve learned so far (i.e. what the previously didn’t know)
- Condition training commencement on the completion of baseline assessment
- Track change in knowledge from point of first assessment
- Self assessment of practice change using artifacts from teaching from before the PD
- Pretext as part of intro to training session
- Exclude the data that are inaccurate, or report those data with interpretive caution and full explanation
- retro-evaluation
- It’s will drive the composition of the professional development activities
- Give a unique code for review all people answers before the training

Source: Third-party application (Mentimeter).
How could we ensure more accurate assessment of practitioner knowledge? (cont.)

- Provide live and asynchronous training/information
- Make survey a retrospective pre/post type to establish knowledge gain
- Participant evaluate on scale of before and after
- Such as state exams??
- Questions/answers that can be used for comparative reliability
- Make sure to give the assessment before the next training

Source: Third-party application (Mentimeter).
Related Resource

New! Checklist for Identifying and Addressing SSIP Data Quality Issues
Contact Us

• Tamara Nimkoff, TamaraNimkoff@westat.com
• Jennifer Schaaf, JenniferSchaaf@westat.com
What actions will you take to commit to being a Data Quality Influencer?
For More Information

Visit the IDC website
http://ideadata.org/

Follow us on Twitter
https://twitter.com/ideadatacentre

Follow us on LinkedIn
http://www.linkedin.com/company/idea-data-center
The contents of this presentation were developed under a grant from the U.S. Department of Education, #H373Y190001. However, the contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the federal government.

Project Officers: Richelle Davis and Rebecca Smith