Data Use and Analysis
Community of Practice:
Getting Started on the Right Foot

March 31, 2015
Communities of Practice

Policy and Programs
Rashidah Lopez Morgan

Data Use and Analysis
Dr. Andy Baxter

Stakeholder Engagement
Dr. Ellen Sherratt

Rural Access Issues and Support
Dr. Rose Honey
Attendees will:

• Learn promising practices when starting an extensive data analysis effort with multiple stakeholders.

• Consider approaches to data analysis by examining a State team’s early equity work.

• Explore the data metrics tools available through the EASN and partners.
Agenda

• Getting the right people around the (data) table
• The Show-Me State shows us
• Tools only you would love
• Q&A
Facilitators and Presenters

- Andy Baxter, Southern Regional Education Board
- Jeff Sellers, AEM Corporation
- Tim Wittmann, Missouri Department of Elementary and Secondary Education
- Alex Berg-Jacobson, AIR—Center on Great Teachers and Leaders
Getting the Right People Around the (Data) Table
Jeff Sellers
Statewide Longitudinal Data Systems (SLDS) State Support Team
Q&A

Share Your Thoughts!

Please type your question for Jeff in the chat box.
The Show-Me State Shows Us
Tim Wittmann
Director of Educator Accountability
Missouri Department of Elementary and Secondary Education
The Journey (So Far)

1. Developed “data inventory”
2. Performed initial analysis: a “kitchen sink” approach
3. Refined analysis based on stakeholder feedback
4. Dug deeper to illuminate complex issues
Data Inventory

• Measures of inequitable access
  • Percentage of teachers who are not fully qualified
  • Percentage of teachers with fewer than three years experience

• Contextual and explanatory measures
  • Average teacher salaries
  • Discipline incidence rate
## Data for Possible Priority Metrics

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<th>District Name</th>
<th>Number of Schools</th>
<th>Enrollment K-12</th>
<th>Free and Reduced Lunch Percent</th>
<th>Pct Teachers Less than Fully Qualified</th>
<th>Pct Teachers with Three or Fewer Years Experience</th>
<th>Teacher Supply (Shortage Index)</th>
<th>Mean Math Student Growth NCE</th>
<th>Mean ELA Student Growth NCE</th>
<th>Percent of Teachers Rated &quot;Effective&quot; or &quot;Highly Effective&quot;</th>
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Stakeholder Feedback Loop

Analyze Data

Listen and Reflect → Review and Discuss

EASN.grads360.org
Stakeholder Engagement

• Met with leaders of urban and rural districts
  • Similar issues, different contexts
  • Led to inclusion of State’s most rural districts in future data analyses

• Met with interest groups
  • Given advice to make data more informative
  • Recruitment and retention issues identified by all stakeholders as contributing to inequities
## The Kitchen Sink: Take Two

<table>
<thead>
<tr>
<th>Measure</th>
<th>Highest 5% FRPL of schools (110 schools) Students eligible for Free and reduced lunch</th>
<th>Lowest 5% FRPL of schools (110 schools) Students eligible for Free and reduced lunch</th>
<th>Most Rural School Buildings (315 schools) NCES Urbanicity Classification <strong>“Rural: Remote”</strong></th>
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<td>FRPL rate</td>
<td>91.9%-100%</td>
<td>0%-16.4%</td>
<td>60.4% (average)</td>
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<tr>
<td>Avg. poverty rate of community</td>
<td>30.7%</td>
<td>7.1%</td>
<td>18.4%</td>
</tr>
<tr>
<td>% Minority (Students)</td>
<td>86.38%</td>
<td>16.62%</td>
<td>3.6%</td>
</tr>
<tr>
<td>% Minority (Teachers)</td>
<td>41.9%</td>
<td>4.5%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Discipline Incident Rate</td>
<td>2.2%</td>
<td>0.4%</td>
<td>0.6%</td>
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<tr>
<td>Avg. years of experience</td>
<td>9.97</td>
<td>13.72</td>
<td>12.1</td>
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<tr>
<td>Adjusted average salary</td>
<td>$49,733.95</td>
<td>$59,794.06</td>
<td>$48,219.20</td>
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<tr>
<td>1st yr teachers w/ Bacc</td>
<td>$38,868.87</td>
<td>$39,343.84</td>
<td>$38,488.02</td>
</tr>
<tr>
<td>1st yr teachers w/ Mast</td>
<td>$43,603.59</td>
<td>$44,498.51</td>
<td>$43,443.01</td>
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<tr>
<td>Teachers w/ 5 years experience or less</td>
<td>$42,138.66</td>
<td>$46,920.98</td>
<td>$42,343.00</td>
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<td>Teachers w/ 6-10 years experience</td>
<td>$48,804.28</td>
<td>$53,653.01</td>
<td>$47,072.14</td>
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<tr>
<td>Teachers w/ 11+ years experience</td>
<td>$60,512.59</td>
<td>$70,430.06</td>
<td>$53,667.07</td>
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<td>Retention Rate</td>
<td>77.8%</td>
<td>89.6%</td>
<td>84.3%</td>
</tr>
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<td>Absent 10 days or more</td>
<td>30.2%</td>
<td>31.5%</td>
<td>17.5%</td>
</tr>
<tr>
<td>First Year Teachers</td>
<td>15.4%</td>
<td>6.8%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Teachers with less than three years experience</td>
<td>26.9%</td>
<td>8.9%</td>
<td>15.0%</td>
</tr>
<tr>
<td>1st Yr Teachers assigned a mentor</td>
<td>78.6%</td>
<td>92.4%</td>
<td>97.5%</td>
</tr>
<tr>
<td>Avg overall preparation First Year teacher response 1-5 scale(%)</td>
<td>3.87 (90.1%)</td>
<td>4.45 (99.2%)</td>
<td>4.24 (97.8%)</td>
</tr>
<tr>
<td>Avg overall preparation Principal response 1-5 scale(%)</td>
<td>3.66 (87%)</td>
<td>4.30 (97.6%)</td>
<td>3.94 (93.4%)</td>
</tr>
<tr>
<td>% Less than fully Qualified</td>
<td>15.6%</td>
<td>5.3%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Effectiveness Index Overall teacher impact</td>
<td>78.8%</td>
<td>84.7%</td>
<td>81.2%</td>
</tr>
<tr>
<td>Student Performance: ELA Proficiency</td>
<td>24.2%</td>
<td>68.8%</td>
<td>54.1%</td>
</tr>
<tr>
<td>Student Performance: Math Proficiency</td>
<td>26.5%</td>
<td>66.0%</td>
<td>50.7%</td>
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</table>
Taking the Data on the Road

- Invited leaders of poorest and most rural schools to regional focus group meetings
- Met with 36 percent of the 425 schools in focus group
- Opportunity to better understand root causes, challenges, and strategies
- Reviewed “kitchen sink” at every meeting
Digging Deeper: Guiding Questions

• How do equity issues and contextual factors change over time?
• Are there ways to know how much impact different strategies may have?
Takeaways

• Use data to affirm stakeholder views
• Dig deeper than district or school averages
• Be willing to revisit and refine your data
• Visit with stakeholders for a more complete picture
• Present complex or abstract data cautiously
Share Your Thoughts!

Please type your question for Tim in the chat box.
Tools Only You Would Love
Alex Berg-Jacobson
Technical Assistance Associate
AIR
The Center on Great Teachers and Leaders’ Data Review Tool

• The GTL Center’s Data Review Tool and supporting resources are designed to be used by a small internal team of State education agency staff to:
  • Identify available and relevant equitable access metrics
  • Analyze the policy implications of those data
  • Present the findings to a variety of audiences effectively

• The Data Review Tool and the supporting resources can be found here: http://www.gtlcenter.org/learning-hub/equitable-access-toolkit/data-review-tool
Section 1: Considering the Metrics

- Identify Equitable Access Metrics
  - Consider the provided *example metrics*, and determine which will be most relevant to your State’s analysis, what data are required to create these metrics, and how these data can be collected.

- Analyze Data and Assess Quality
  - Use the *example data* and guiding questions to increase your team’s capacity for basic data analysis and interpretation.

- Create Equitable Access Metrics
  - Consider how best to construct the chosen metrics, including how to divide the data (for example, quartiles or deciles).
### Equitable Access: Example Metrics

**Instructions:** Consider the following metrics, which may be helpful as you analyze the equity gaps in your state, through three steps: (1) Take inventory of data you have and do not have, (2) assess whether these metrics are useful to drive decisions on equitable access to excellent educators for all students, and (3) determine what steps are needed to collect meaningful metrics that currently are unavailable.

**Note:** The level at which these metrics are available is intentionally left ambiguous. As you review this menu of metrics, consider at what level each of them would be available: district level, school level, classroom level, or even individual student level.

<table>
<thead>
<tr>
<th>Metrics</th>
<th>Considerations for Your State’s Metric Choice</th>
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<tr>
<td></td>
<td>(1) Does your state have these metrics? (YES/NO/UNKNOWN)</td>
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<tr>
<td>Recruitment</td>
<td></td>
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<tr>
<td># of applicants per teaching vacancy</td>
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<tr>
<td># of applicants per principal vacancy</td>
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<tr>
<td>% of teaching positions vacant on first day of school (or another specified date)</td>
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<tr>
<td># of recruiting dollars spent per teaching vacancy</td>
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</tbody>
</table>
Section 2: Interpreting the Data

• Examine Available Data
  • Analyze your prepared data and identify equity gaps and key findings.

• Connect Your Data to Practical Solutions
  • Consider if your analysis provides evidence of specific equitable access challenges, the extent and nature of these challenges, and the relevant policy implications.
Example Guiding Questions

- **Taking stock of your data**
  - Were your data collected at the district level? The student level? The classroom level?
  - How complete is your data set? Are there any missing values?

- **Consider quality and comprehensiveness**
  - What information do you have available that leads you to trust the accuracy of the data?
  - Do you have any reason for concerns about the accuracy of the data? Can something be done to improve the accuracy of the data for the future?

- **Analyze your data**
  - How do the most meaningful metrics that you identified compare across districts when broken down by poverty and minority status?
Section 3: Using your Data

• Review Methods for Displaying Data
  • Review the *sample data displays* and consider how to best present the results of your data analysis to a variety of stakeholders.

• Connect Key Findings to Root Cause Analysis
  • Finally, use your observed equity gaps and the key findings from your analysis as a starting point for your root cause analysis work.
Sample Data Displays

Figure 1. School Poverty Rate by New Teacher Population

Figure 3. Average Percentage of Teachers Rated Ineffective by Poverty Quartile

Note: Depending on the number of districts in your state, it may be useful to group districts into categories when using this data display.

AVERAGE % OF TEACHERS RATED INEFFECTIVE BY POVERTY QUARTILE

- 4th Quartile: 23.2% in District A, 0% in District B, 45% in District C
- 3rd Quartile: 10.7% in District A, 2.5% in District B, 48.4% in District C
- 2nd Quartile: 15.3% in District A, 7.0% in District B, 26.0% in District C
- 1st Quartile: 8.2% in District A, 6.0% in District B, 13.9% in District C
Contact Information

For more information about the data review tool please contact Alex Berg-Jacobson at aberg-jacobson@air.org
Share Your Thoughts!

Please type your question for Alex in the chat box.
Your Turn

Share Your Thoughts!

Please complete the poll in the bottom right corner of your screen.
Wrap Up
EASN Communities 360°

Equitable Access Support Network

Welcome to the Equitable Access Support Network website — your access point to useful tools and the latest news and products from EASN and its partners. Explore the resources and work with us to build a more equitable future for students across the country.

Log in to access more!

EASN News

- Technical Assistance Opportunity - Targeted Coaching Support: CEAs interested in accessing coaching support should review this overview and contact EASN by February 24th.
- Webinar: Understanding Your Educator Equity Plan: Watch the recording and find materials from this ED event (12/14).
- Webinar: Ensuring Equitable Access to Excellent Educators: Watch the recording and find materials from this ED event (11/17/14).
- FAQs: State Plans to Ensure Equitable Access to Excellent Educators: New document from ED.

Relevant Resources

- State Plan Readiness Tool
- Equitable Access Support Network
- Sample Educator Equity Plan Template

Communities
Equity Plan Help
Tools & Toolkits
Welcome to the Equitable Access Support Network website — your access point to useful tools and the latest news and products from EASN and its partners. Explore the resources and work with us to build a more equitable future for students across the country.

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Relevant Resources

- **State Plan Readiness Tool**
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- **Sample Educator Equity Plan Template**

Communities
Communities of practice (CoPs) will soon be live to share.

Equity Plan Help
Need help with your State’s Equity Plan? We can answer.

Tools & Toolkits
Find useful tools and toolkits to help your State plan for and
Use the EASN Readiness Tool as a guide to develop your plan

View upcoming EASN and partner events

Participate in log-in access only discussions with other States

Events Calendar

EASN Open Forum

The Open Forum provides a convenient way for States, the U.S. Department of Education, and EASN technical assistance providers to communicate and share information. This forum is also a way for grantees to easily connect with their peers on a variety of topic areas. See below for helpful tips on participating.
Click on the outer circle to go to a different page

Access tools and resources to support equity plan development

Click on a link to join EASN Communities of Practice

Learn about EASN

GET ASSISTANCE

Email EASN to request assistance

Communities of practice (CoPs) will allow states to share information and connect with experts and peers as they develop their Equity Plans. Current CoPs:

- Data Use & Analysis
- Stakeholder Engagement
- Policy & Programs
- Rural Access Issues & Support

Email EASN@easn.org with ideas for additional CoP topics.

Need help with your State’s Equity Plan? We can answer questions, provide targeted support, or help you find relevant resources.

Find useful tools and toolkits to help your State plan for and implement systemic changes to close the equity gap.

Currently, this page highlights tools developed by or in partnership with our partner organizations. Additional tools and toolkits from the EASN are currently in development, so be sure to check back soon.

In partnership with the Office of State Support (OSS) of the U.S. Department of Education, the Equitable Access Support Network (EASN) offers collective and individualized technical assistance (TA) and resources to all 50 States and their districts. The Network will assist in the development and implementation of statewide plans, which will be completed by each State and submitted to the U.S. Department of Education in June 2015, and will

https://easn.grads360.org
Next Steps

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Contact the EASN

Please visit the EASN website or email the EASN to join an EASN Community of Practice, find relevant resources, or request targeted support.

https://easn.grads360.org/

easn@aemcorp.com
Thank You!