Mapping Solutions: Strengthening and Diversifying the Educator Workforce

Lisa Lachlan-Haché, EdD | Jessica Giffin | Carolyn Haug, PhD

AUGUST 2021
Welcome!

As you enter, please say hi in the chat box:

- Let us know your name and organization.
- Share one or two data sources you use to understand your educator workforce.
Zoom Protocol

Mute your mic. This helps minimize audio feedback. Mute your audio by clicking on the microphone icon located in the lower left-hand corner of the menu bar.

Use chat. Connect with panelists via private chat. We will insert important links in the chat for you as well.

Live captioning. Turn on live captioning by clicking the “CC” button.

Ask questions. If you have a technical question, leave your message in Q&A pod.
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Meet the Presenters

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<table>
<thead>
<tr>
<th>Topic</th>
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<tr>
<td>Historical barriers to employment for teachers of color</td>
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<tr>
<td>Teacher diversity and student success</td>
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<tr>
<td>Policy approaches for attracting and retaining a diverse workforce</td>
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<td>Exposure to teachers of color</td>
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<td>Introduction of GTL Talent Development Data Tool 2.0</td>
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Revisiting Session II: Beyond Selection and Hiring: Tools and Experiences from the Field

The GTL Talent Development Data Tool 2.0

Improving teacher recruitment and retention in Lansing, Michigan

Diversifying the education profession in Reynoldsburg, Ohio
Using Geographic Information Systems to Address Educator Shortages and Diversity

Jessica Giffin
Teacher Shortages and Teacher Diversity

Teachers are the most important within-school factor driving student achievement.

Diverse teachers improve outcomes for all students, particularly students of color.

Addressing shortages AND diversity can ensure that all students, particularly students of color, have access to effective instruction.

Identifying Shortage and Diversity Gaps Within the Pipeline

Source: Center on Great Teachers and Leaders Talent Development Framework: Improving Access to Excellent Educators for All Students.
Shortage Is a School- and Subject-Level Problem

Broad analysis:
State X has one chemistry teacher for every 400 students

More accurate analysis:
One qualified chemistry teacher for every 2,000 students in high-need schools
One chemistry teacher for every 100 students in affluent schools
Quick Audience Chat

• Which type of communities in your state or district experience educator shortages and/or a lack of educator diversity (e.g., rural schools, low-performing schools)?

• Which subject areas in your state or district have the greatest educator shortages?
Why GIS? Place Matters

Sources: Dreier et al. (2014); Orfield (2011); Sampson (2012); Sharkey (2013).
Geographic Information System

GIS software uses maps as a container for multiple layers of data.
How It Works
How It Works
GIS Demonstration
Quick Audience Chat

Which type of data would be most interesting to you to layer on your educator workforce data and why?
A Data-Driven, Stakeholder-Engaged Approach

Step 1: Analyze disaggregated data

Step 2: Engage stakeholders

Step 3: Select actions and evidence-based strategies

Step 4: Monitoring and continuous improvement

Source: Center on Great Teachers and Leaders (2021).
Strengthening the Colorado Educator Workforce Pipeline

Carolyn Haug, PhD
Colorado Educator Workforce Diversity Context

2020-21 Colorado Teachers by Ethnicity/Race

- BIPOC: 13.4%
- White: 86.6%

2020-21 Colorado Teachers by Ethnicity/Race and Gender

- BIPOC Male: 3.4%
- BIPOC Female: 10.0%
- White Male: 20.6%
- White Female: 66.0%

BIPOC: Black, Indigenous and People of Color
### Colorado Educator Shortage Context

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<tbody>
<tr>
<td>Positions filled by shortage mechanism*</td>
<td>13%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Unfilled teaching positions</td>
<td>3.4%</td>
<td>2%</td>
<td>3.3%</td>
</tr>
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*Shortage mechanisms include hiring alternatively licensed candidates who are still in their preparation program, emergency licensees, long-term substitutes, and retired educators (per Colorado law).*
• A research question identifies the purpose of each of the seven tabs.
• For the first time, data from multiple sectors can be visualized together.
• Geographic regions can be analyzed compared with others.
• Regional strengths and needs can be analyzed.
• Teams of district staff and educator preparation program (EPP) staff collaboratively analyzing data and forming a community of practice
  – Facilitated data analysis sessions
  – Data findings and interpretations summarized by staff
  – Community of practice for further discussion of root causes and to develop action plan

• District human resources staff: In addition to the team-based analysis, reflecting on hiring needs compared with teacher production and local economic indicators

• Regional Boards of Cooperative Education Services, which also serve as alternative licensure agencies, are in unique positions as both producers of teachers, hiring managers, and district advisers.
### Factors: Equity

**Data Interpretation:** Learning and using culturally responsive teaching practices may be more demanding, requiring more effort from teachers.

- **Data Interpretation:** Teachers may not be adequately prepared to teach students of color.

- **Eight of 13 schools in the district that have 80% or more students of color have higher teacher mobility/attrition rates.**

- **Data Interpretation:** Increase in mobility/attrition in region and less enrollment in EPP. Few candidates to replace pool.

- **There is a difference in the number of schools with higher teacher mobility/attrition rates between the east and west sides of the district.**

### Findings

<table>
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<th>Findings</th>
<th>Data interpretations</th>
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<td>• Teacher mobility/attrition rates are higher in schools that serve more BIPOC students.</td>
<td>• Teachers may not be adequately prepared to teach BIPOC students (i.e., culturally responsive teaching practices).</td>
</tr>
<tr>
<td>• Charter schools in the district have higher teacher mobility/attrition rates.</td>
<td>• The charter school is viewed by teachers as an entry into the district.</td>
</tr>
<tr>
<td>• Teacher salaries are competitive with the median household incomes in the region.</td>
<td>• Teacher candidates may perceive they can earn more in nonteaching professions. Housing costs may be prohibitive.</td>
</tr>
</tbody>
</table>
• Developed a 50-state comparison of strategies and approaches to attract, prepare, and retain teachers. Published April 2021.

• Under development now: A “bright-spots” report based on interviews with school and district leaders in locations that beat the odds in terms of low teacher turnover in schools with high percentages of students who are at risk. To be published fall 2021.
Considerations and Lessons

• Communications plan: Do not overlook the importance of a communications plan. It is important.

• Collaboration across sectors to communicate, problem-solve, and coordinate efforts.
  – The GIS maps are tools.
  – Analysis is the first step in a larger process.
Mapping the Talent Development Data Tool 2.0

Jessica Giffin
The Talent Development Data Tool 2.0
Choosing Where to Focus Diversity Work

Which district should be the focus of our diversity efforts?

Option 1  Jefferson City has more students of color.

Map Example: Districts With the Most BIPOC Students

% BIPOC Students
- 0 - 20
- 21 - 40
- 41 - 60
- 61 - 94

Eri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS
Choosing Where to Focus Diversity Work

Which district should be the focus of our diversity efforts?

Option 1: Jefferson City has more students of color.

Option 2: Jefferson City has a larger gap between the percentage of students of color and the percentage of teachers of color.

Map Example: Gap of BIPOC Students and Teachers

% Difference BIPOC Teachers and BIPOC Students
- 0 - 10
- 11 - 30
- 31 - 45
- 46 - 70

Source: HERE, Garmin, FAO, NOAA, USGS, EPA, NPS
Choosing Where to Focus Diversity Work

Which district should be the focus of our diversity efforts?

Option 3
Adamstown has a larger ratio between BIPOC students and BIPOC teachers:
\[
\frac{\text{Number or rate of BIPOC students}}{\text{Number or rate of BIPOC teachers}}
\]

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Large ratio: unlikely to meet teachers who share race</th>
<th>Moderate ratio: somewhat likely to meet teachers who share race</th>
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</tr>
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<tbody>
<tr>
<td>Above 4</td>
<td>Large ratio: unlikely to meet teachers who share race</td>
<td>Moderate ratio: somewhat likely to meet teachers who share race</td>
<td>Small ratio: likely to meet teachers who share race</td>
</tr>
<tr>
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<td>Large ratio: unlikely to meet teachers who share race</td>
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Choosing Where to Focus Shortage/Diversity Work

Which district should be the focus of our diversity efforts?

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- Students in Adamstown are significantly less likely than students in Jefferson City to meet a teacher of color. In fact, students in Jefferson City will almost certainly meet one.
- BIPOC students in Adamstown may be more vulnerable and exposed to implicit bias and discrimination than BIPOC students in Jefferson City.

Source: Freeman & Steidl (2016).
Map Example: Ratio Between BIPOC Students and Teachers
Comparing Gap to Ratio

Gap of BIPOC Students to Teachers

Ratio Between BIPOC Students & Teachers
Benefits of Mapping Educator Workforce Pipeline

- Identify regional patterns with challenges and opportunities to address educator shortages and diversity.
- Can layer additional data to identify possible causes or challenges for the lack of diversity and shortages in the workforce.
- Identify potential resources and opportunities for collaboration.
- Foster convening the right people to take the right actions at the right place.
GTL Center Services

- Innovative and customized data tools
- Convene and engage diverse stakeholders
- Facilitate data analysis sessions
- Expertise in evidence-based strategies to strengthen and diversify the educator workforce
- Tools and processes to support equity-focused program implementation
- Action planning and progress monitoring for continuous improvement
We want to hear from you!

Would a conversation with GTL Center staff be helpful to you?

Would a collaborative on shortages and diversity be useful?

Help us help you! Complete our survey by using the link in the chat box.
Information Session

A GTL Center Cross-State Collaborative: Accelerating Data-Driven Policy and Practice to Address Educator Shortages

An Information Session with the GTL Center
References


