Beyond Significant Disproportionality: How Identifying the Differences in Graduation and Dropout Rates Can Lead to Better Transition Planning

Significant Disproportionality Summit
November 10, 2021

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Nancy Johnson, IDC
Agenda

• Welcome and introductions
• Make connections across graduation, dropout, and transition planning data
• Present sample data and analysis
• Discuss use of graduation and dropout data to inform transition planning
• To recognize the connections between graduation, dropout, and transition planning data
• To understand how “likelihood ratios” can measure and identify differences by subgroup in graduation and dropout data
• To identify success gaps in graduation and dropout data and apply strategies that address these gaps during transition planning
Connections Across Graduation, Dropout, and Transition Planning Data
Connections Across Graduation, Dropout, and Transition Planning Data

High-quality transition planning → Increased likelihood of graduation

High-quality transition planning → Decreased likelihood of dropout
Connections Across Graduation, Dropout, and Transition Planning Data (cont.)

• Examine likelihood of graduation and likelihood of dropout by subgroup
  – Race/ethnicity
  – Gender
  – English learner status

• Examine likelihood of graduation and likelihood of dropout by subgroup *as compared to all other students*
  – Are white students more likely to graduate than non-white students?
  – Are females more likely to graduate than males?
  – Are English learners more likely to dropout than non-English learners?
Connections Across Graduation, Dropout, and Transition Planning Data (cont.)

Differences in graduation between subgroups

Differences in dropout between subgroups

Transition Planning
Process for Connecting Graduation and Dropout Data to Transition Planning

*How do we connect graduation and dropout data back to transition planning?*

Establish an iterative process of data collection and program improvement

- **Measure** differences between subgroups
- **Identify** subgroups that need additional support
- **Use** measurable differences between subgroups to improve services and provide additional support
- **Create** systemic change that benefits future subgroups
Sample Data and Analysis
Methodology for Measuring and Identifying Subgroup Differences

1. Calculate risk ratios by subgroup for graduation and dropout
2. Reframe risk ratios into likelihood ratios. A likelihood ratio of 1.00 represents equal likelihood that a subgroup meets a criterion as compared to all other students
3. Investigate likelihood ratios significantly different than 1.00
Likelihood Ratio

Likelihood ratio (LR) = \frac{\text{likelihood of outcome for a subgroup}}{\text{likelihood of outcome for all other students}}

Example: What is the likelihood ratio of dropout for male students?

\[ LR = \frac{\text{likelihood of dropout for male students}}{\text{likelihood of dropout for all other students}} \]
## Sample Likelihood Ratios: Graduation by Subgroup

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>State A</th>
<th>State B</th>
<th>State C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic/Latino</td>
<td>0.94</td>
<td>1.04</td>
<td>1.40</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>0.93</td>
<td>1.02</td>
<td>1.33</td>
</tr>
<tr>
<td>Asian</td>
<td>1.10</td>
<td>1.16</td>
<td>0.80</td>
</tr>
<tr>
<td>Black or African American</td>
<td>0.89</td>
<td>0.89</td>
<td>0.65</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>1.01</td>
<td>--</td>
<td>2.00</td>
</tr>
<tr>
<td>White</td>
<td>1.09</td>
<td>1.07</td>
<td>1.48</td>
</tr>
<tr>
<td>Two or more races</td>
<td>1.05</td>
<td>0.96</td>
<td>1.14</td>
</tr>
<tr>
<td>Male</td>
<td>0.93</td>
<td>0.99</td>
<td>0.92</td>
</tr>
<tr>
<td>Female</td>
<td>1.08</td>
<td>1.01</td>
<td>1.08</td>
</tr>
<tr>
<td>English learner</td>
<td>0.97</td>
<td>1.09</td>
<td>1.25</td>
</tr>
<tr>
<td>Non-English learner</td>
<td>1.04</td>
<td>0.92</td>
<td>0.80</td>
</tr>
</tbody>
</table>
What did you learn about graduation by examining likelihood ratios by subgroup?

Mentimeter short answer
Mentimeter Results

What did you learn about graduation by examining likelihood ratios by subgroup?

- Very helpful way to examine this issue at a high level.
- Provides another way to look at the data.
- I think this could be something considered for the state level, but because of small cell and n-size would be difficult to apply at the LEA level.
- Yes, this was helpful. Need to find possible reasons why. Many factors involved.
- All the information is overwhelming if you don’t know all the variables. You need to know how to analyze the data.
- Subgroup data is very useful for examining grad rates, often look at grad rates at large scales and that does not always provide deep/robust picture.
- Potentially provides direction for further data analysis.
Mentimeter Results, continued

What did you learn about graduation by examining likelihood ratios by subgroup?

| Easier said than done, but very important to do | That you need to have more data to form a fuller picture | which groups are more or less likely to graduate |
| connections for using the data | Useful with context and reasonable N size | You can get an idea of which subgroups are doing well/not well as compared to others |
| You shouldn't have to make high stakes decisions based on the risk ratios alone. | Yes - it gives a brief look into issues. That guide a deeper look. | Needs a deeper dive behind the numbers depending upon subgroup sizes |
## Sample Likelihood Ratios: Dropout by Subgroup

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>State A</th>
<th>State B</th>
<th>State C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic/Latino</td>
<td>1.29</td>
<td>0.96</td>
<td>0.40</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>1.21</td>
<td>1.77</td>
<td>2.55</td>
</tr>
<tr>
<td>Asian</td>
<td>0.68</td>
<td>0.00</td>
<td>0.76</td>
</tr>
<tr>
<td>Black or African American</td>
<td>1.51</td>
<td>2.06</td>
<td>1.29</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>1.10</td>
<td>--</td>
<td>0.00</td>
</tr>
<tr>
<td>White</td>
<td>0.68</td>
<td>0.54</td>
<td>0.78</td>
</tr>
<tr>
<td>Two or more races</td>
<td>0.81</td>
<td>1.38</td>
<td>1.76</td>
</tr>
<tr>
<td>Male</td>
<td>1.33</td>
<td>1.33</td>
<td>1.42</td>
</tr>
<tr>
<td>Female</td>
<td>0.75</td>
<td>0.75</td>
<td>0.71</td>
</tr>
<tr>
<td>English Learner</td>
<td>1.15</td>
<td>0.76</td>
<td>0.20</td>
</tr>
<tr>
<td>Non-English Learner</td>
<td>0.87</td>
<td>1.31</td>
<td>4.89</td>
</tr>
</tbody>
</table>
What did you learn about dropouts by examining likelihood ratios by subgroup?

Mentimeter: Check if true. Check all that apply.

• There is more variability in dropout likelihood ratios than graduation likelihood ratios

• If the likelihood of dropout by subgroup is similar across states, there is no need for further investigation

• We don’t need to examine outlier data because likelihood ratios are a mathematical certainty

• Black or African American subgroups are always more likely to drop out than their peers
Mentimeter Results

What did you learn about dropouts by examining likelihood ratios by subgroup? Select all that apply:

- 76%: There is more variability in dropout likelihood ratios than graduation likelihood ratios.
- 15%: If the likelihood of dropout by subgroup is similar across states, there is no need for further investigation.
- 0%: We don’t need to examine outlier data because likelihood ratios are a mathematical certainty.
- 9%: Black or African American subgroups are always more likely to drop out than their peers.
Using Differences in Graduation and Dropout Data to Inform Transition Planning
What Do We Know About the Data Collected for Indicator 13. Secondary Transition?

- Data are from
  - State monitoring
  - State database

- Rate calculation
  - **Numerator** = # of youth with IEPs age 16 & above with an IEP that includes
    - Appropriate, measurable postsecondary goals
    - Transition services
    - Evidence that student was invited to the IEP Team meeting
    - Evidence, if appropriate, a representative of any participating agency
  - **Denominator** = # of youth with an IEP age 16 & above
  - **Rate** = Numerator/Denominator X 100

*Individualized education program (IEP)*
How does your state collect data for Indicator 13?

1) State monitoring
2) State database

What challenges does your state face when collecting Indicator 13 data?
Analyzing Data From a Different Perspective

- Consider disaggregating Indicator 13 data
  - Disability category
  - Gender
  - Race
  - English Learner/Non-English Learner
  - Non-compliant issues

- Look for
  - Trends
  - Themes
  - Differences

- How does this compare to your graduation and dropout likelihood data?

<table>
<thead>
<tr>
<th>Sample Likelihood Ratios: Dropout by Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>State A</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
</tbody>
</table>
Mentimeter: How likely is your state to disaggregate, analyze, and use Indicator 13 data differently?

- Likely
- Somewhat likely
- Unsure
- Somewhat unlikely
- Unlikely
Mentimeter Results

How likely is your state to disaggregate, analyze, and use Indicator 13 data differently?

- Likely: 3
- Somewhat likely: 10
- Unsure: 9
- Somewhat unlikely: 2
- Unlikely: 4
Strategies to Address Differences in Transition Planning

• Disaggregate/analyze data by subgroups to help identify which children are experiencing success gaps
• Hold state conferences with focused sessions on secondary transition
• Hold student focus groups
• Build and maintain websites with live-binders that provide targeted strategies and resources
• Provide pre-data collection technical assistance
• Conduct collaborative file reviews
• Partner with parent groups
What barriers/challenges do your districts face with effective transition planning?

What strategies does your state use to ensure effective transition planning for all students with IEPs?
# Mentimeter Results

**What barriers/challenges do your districts face with effective transition planning?**

<table>
<thead>
<tr>
<th>Funding</th>
<th>Lack of resources and job opportunities in the community</th>
<th>Appropriate transition goals on the IEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>training</td>
<td>capacity within LEAs - high staff turnover</td>
<td>community placement and alignment of iep</td>
</tr>
<tr>
<td>Rural areas not have resources/opportunities for students</td>
<td>Depth of understanding of those who are writing the plans</td>
<td>parent; funding; training; lack of support staff</td>
</tr>
</tbody>
</table>
Mentimeter Results, continued

What barriers/challenges do your districts face with effective transition planning?

- Lack of training on writing effective transition plans
- Types of protocol used for evaluation/Change in personnel/training
- Appropriate assessments for collection of student interests
- Consistency of meetings and goals
- Clarification/review of SEA handbook, resource documents.
## Mentimeter Results

What strategies does your state use to ensure effective transition planning for all students with IEPs?

<table>
<thead>
<tr>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal and targeted technical assistance</td>
</tr>
<tr>
<td>It’s part of our coordinated program review</td>
</tr>
<tr>
<td>secondary transition specialist across the state.</td>
</tr>
<tr>
<td>Stakeholders meeting</td>
</tr>
<tr>
<td>community of practice</td>
</tr>
<tr>
<td>Constant training for teachers</td>
</tr>
<tr>
<td>Alabama Rocks!</td>
</tr>
<tr>
<td>Random review of IEPs for compliance</td>
</tr>
<tr>
<td>Site visits; Rubrics; State-Wide Meetings;</td>
</tr>
<tr>
<td>cohort for LEAs with rotating site visits.</td>
</tr>
</tbody>
</table>
Final Thoughts
Wrap Up

Key takeaways

• Graduation, dropout, and transition data are sources of rich information

• We can identify differences by subgroup in graduation and dropout data using likelihood ratios

• Identified differences can inform our approach to transition planning, leading to improved student outcomes, increased graduation, and decreased dropout

What is a key takeaway most relevant to your state? (Enter in chat.)
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For More Information

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

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