Colorado Department of Education
Exceptional Student Services

Preliminary Data
for
Deaf and Hard of Hearing Students in
Colorado’s Public Schools

Inspiring Change
Part 1
February 12, 2013
December 1 Count

- Purpose

Geographic Locations

Areas with 1 to 10 DHH students
Areas with 11 to 20 DHH students
Areas with 21 to 30 DHH students
Areas with 31 to 40 DHH students
Areas with 41 to 50 DHH students
Areas with 51 to 60 DHH students

Areas with 61 to 70 DHH students
Areas with 71 to 80 DHH students
Areas with 81 to 90 DHH students
Areas with 91 to 100 DHH students
Areas with 100+ DHH students
1 – 10 DHH Students on IEPs
11 – 20 DHH Students on IEPs
21 – 30 DHH Students on IEPs
31 – 40 DHH Students on IEPs
41 – 50 DHH Students on IEPs
71 – 80 DHH Students on IEPs
More than 100 DHH Students on IEPs
Colorado Districts/BOCES reporting DHH students on IEPs
DHH Students reported on December 1st
The largest programs have a self-contained component

- Adams 12 Schools (Northglenn-Thornton)
- Aurora Public Schools
- Denver Public Schools
- Douglas County
- Jefferson County
- Colorado School for the Deaf and the Blind
Smaller DHH Programs

- Typically outside of the greater Denver area
- May have a self-contained component
- Typically practices inclusion into the general education classrooms with resource room or itinerant support
The Transitional Colorado Assessment Program (TCAP)

- Colorado’s standards-based assessment designed to provide a picture of student performance to schools, districts, educators, parents, and the community.
- The primary purpose of the assessment program is to determine the level at which Colorado students meet the Colorado Model Content Standards in the content areas assessed.
Reading, Writing, & Mathematics are assessed at grades 3-10
Science is assessed at grades 5, 8, & 10

According to state law, every Colorado student enrolled in a public school is required to take either the TCAP or CoAlt (alternate assessment) in the appropriate grade levels and content areas.

This preliminary data access discussed today pertains to reading scores only.
## Reading TCAP Scores

### Elementary School Level

<table>
<thead>
<tr>
<th></th>
<th>Un satisfactory</th>
<th>Partially Proficient</th>
<th>Proficient</th>
<th>Advanced</th>
<th>No Score</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>145</td>
<td>95</td>
<td>96</td>
<td>1</td>
<td>9</td>
<td>346</td>
</tr>
<tr>
<td>Middle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

28% of DHH elementary school students taking the reading portion of the TCAP are Proficient or Advanced
### Reading TCAP Scores
#### Middle School Level

<table>
<thead>
<tr>
<th></th>
<th>Unsatisfactory</th>
<th>Partially Proficient</th>
<th>Proficient</th>
<th>Advanced</th>
<th>No Score</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>145</td>
<td>95</td>
<td>96</td>
<td>1</td>
<td>9</td>
<td>346</td>
</tr>
<tr>
<td>Middle</td>
<td>124</td>
<td>82</td>
<td>84</td>
<td>5</td>
<td>4</td>
<td>299</td>
</tr>
<tr>
<td>High</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30% of DHH middle school students taking the reading portion of the 2012 TCAP are Proficient or Advanced
## Reading TCAP Scores
### High School Level

<table>
<thead>
<tr>
<th></th>
<th>Unsatisfactory</th>
<th>Partially Proficient</th>
<th>Proficient</th>
<th>Advanced</th>
<th>No Score</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>145</td>
<td>95</td>
<td>96</td>
<td>1</td>
<td>9</td>
<td>346</td>
</tr>
<tr>
<td>Middle</td>
<td>124</td>
<td>82</td>
<td>84</td>
<td>5</td>
<td>4</td>
<td>299</td>
</tr>
<tr>
<td>High</td>
<td>56</td>
<td>67</td>
<td>48</td>
<td>2</td>
<td>6</td>
<td>179</td>
</tr>
</tbody>
</table>

28% of DHH high school students taking the reading portion of the 2012 TCAP are Proficient or Advanced
# Total Number DHH Students Reading TCAP - 2012

<table>
<thead>
<tr>
<th></th>
<th>Unsatisfactory</th>
<th>Partially Proficient</th>
<th>Proficient</th>
<th>Advanced</th>
<th>No Score</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>145</td>
<td>95</td>
<td>96</td>
<td>1</td>
<td>8</td>
<td>345</td>
</tr>
<tr>
<td>Middle</td>
<td>124</td>
<td>82</td>
<td>84</td>
<td>5</td>
<td>3</td>
<td>298</td>
</tr>
<tr>
<td>High</td>
<td>56</td>
<td>67</td>
<td>48</td>
<td>2</td>
<td>5</td>
<td>178</td>
</tr>
<tr>
<td>Total</td>
<td>325</td>
<td>244</td>
<td>228</td>
<td>8</td>
<td>16</td>
<td>821</td>
</tr>
</tbody>
</table>

29% of the total of DHH students taking the reading portion of the 2012 TCAP are Proficient or Advanced.
### Total Number DHH Students by TCAP Content Areas - 2012

<table>
<thead>
<tr>
<th></th>
<th>Unsatisfactory</th>
<th>Partially Proficient</th>
<th>Proficient</th>
<th>Advanced</th>
<th>No Score</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>325</td>
<td>244</td>
<td>228</td>
<td>8</td>
<td>16</td>
<td>821</td>
</tr>
<tr>
<td>Writing</td>
<td>178</td>
<td>471</td>
<td>132</td>
<td>24</td>
<td>14</td>
<td>819</td>
</tr>
<tr>
<td>Mathematics</td>
<td>352</td>
<td>254</td>
<td>148</td>
<td>51</td>
<td>16</td>
<td>821</td>
</tr>
</tbody>
</table>

- **Reading**: 29% Proficient / Advanced
- **Writing**: 19% Proficient / Advanced
- **Mathematics**: 24% Proficient / Advanced
Colorado Alternate Assessment (CoAlt)

- The Colorado Alternate Assessments (CoAlt) is a standards-based assessment designed specifically for students with significant cognitive disabilities.
- The TCAP scores in previous slides DO NOT include CoAlt.
Do students improve as they move through the grades?

TCAP 2012: Students with Hearing Impairment

- No Score
- Advanced
- Proficient
- Partially Proficient
- Unsatisfactory

Elementary | Middle | High
Is there a catalyst for desirable performance on TCAP?

- Teacher : Student ratio in classes ?
- Student has one or more deaf parent and developed language through ASL at an early age ?
- % of time in self-contained class ?
- % of time included in general education content area ?
- Socioeconomic Status ?
- Teacher prep program of the Teacher of the Deaf ?
- Educational Interpreter’s score on the EIPA test ?
- Cochlear Implant and/or hearing aid use ?
- Staff worked with the CDE Mentor Program ?
- ASL vs. Oral vs. Combined methodology ?
- Degree of hearing loss ?
What HAS NOT worked to improve student performance?

- Large professional development trainings with no observable implementation in the classroom
- Full inclusion in general education with little regard for the individual student’s needs
- Lack of administrative knowledge of deafness to support and evaluate the Teacher of the Deaf and related support services
- Lack of parent involvement – most observable at the Middle and High School levels
- State laws supporting Highly Qualified teachers that often eliminate student access to the expertise of a trained teacher of the deaf
- Other possibilities........
What HAS worked to improve student performance?

- Early intervention services (birth to 3) through a program specifically dedicated to deaf and hard of hearing children and their families
- Changing instructional practices through staff exposure to a mentor who is skilled in deaf education
- Educational interpreters with dynamic backgrounds in content area and expertise in Cohesion and Discourse
- Exposure to rigorous academics (in a special education program or a general education classroom) at an appropriate level
- Parent involvement birth through graduation and beyond
- Exposure to deaf adult role models
- Consistent audiology supports and perspective
- Data-driven instruction based on individual student need
What data are still needed?

- All disaggregated DHH scores from CSAP and TCAP since inception to determine trends
- Comprehensive information regarding DHH students demonstrating Proficient or Advanced performance
  - Is there a pattern that can be identified within this group?
  - Can the pattern be replicated?
- Data regarding training background of teachers of the deaf
- Data regarding accurate reporting of interpreter qualifications
- Data regarding Deaf + ELL populations
- Data answering questions about “catalysts”
Ruth Mathers
Principal Consultant for Deaf Education
1560 Broadway Ste. 1175
Denver, Colorado 80204
303.866.6909