Pathways to College and Career for Students Who Are Deaf, Hard of Hearing, or Deaf Blind

March 17, 2021
Why SLEDS Data Matters

• Students who identify as Deaf, Deaf Blind, or Hard of Hearing (DHH) are considered a low incidence population as some districts have less than ten DHH students.
  • Due to confidentiality reasons, we cannot count students with such low incidence rates and, therefore, often do not know how these students are progressing.

• Using the SLEDS data, outcome trends and possible achievement gaps can be illuminated.
  • With this data, we can review the systems of support and resources, readjusting to support a different story in the future. The key is in the disaggregated data and the longevity of the data across many years.

• Minnesota is one of the few states that has provided data to the National Deaf Center, the leading research center in Deaf, Deaf Blind, or Hard of Hearing and Transition (age 14-21) systems in order to serve as a model for other states.
  • Evaluating our state data in relation to data provided by the National Deaf Center allows us to accurately assess our programming compared to other states' performances.
The data presented today come from the Minnesota Statewide Longitudinal Education Data System, more commonly known as SLEDS:

- The data presented includes K-12 students enrolled 2006-2019 with a primary disability code of deaf/hard of hearing, deaf and blind, or both at any point in grades K-12. We’ve also included comparison group data if available.

- Data Sources
  - K-12 and Adult Basic Education data come from the MN Department of Education.
  - Postsecondary enrollment and graduation data comes from the MN Office of Higher Education and the National Student Clearinghouse.
  - Employment data comes from the MN Department of Employment and Economic Development.

- The data are linked across state agencies at the individual level based on matching first name, last name, date of birth, MARSS number (K-12 to Higher ed.), and social security number (higher ed. to employment).
• There were 3271 students in the population.

• Students in the population identify as having a primary disability of deaf/hard of hearing, deaf and blind, or a combination of deaf/hard of hearing and deaf and blind.

• The population included students with an academic record in high school that ended between 2006 – 2019.

• Cohorts are based on the year the student started 9th grade.

Percentage of Students that Identify as Having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both by Cohort Group, 2006-2019

<table>
<thead>
<tr>
<th>Cohort Group</th>
<th>Deaf/Hard of Hearing</th>
<th>Deaf/Blind</th>
<th>Comb. DB/DHH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 (02-05)</td>
<td>95% 2%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Cohort 2 (06-09)</td>
<td>95% 2%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Cohort 3 (10-12)</td>
<td>96% 1%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Cohort 4 (13-15)</td>
<td>96% 1%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Cohort 5 (16-19)</td>
<td>96%</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Newer cohorts have a higher percentage of students of color and indigenous students.
Student Demographics – Identifying Gender

- 53% of the population among all cohort years identify as male.

<table>
<thead>
<tr>
<th>Cohort Group</th>
<th>Female (%)</th>
<th>Male (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 (02-05)</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Cohort 2 (06-09)</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Cohort 3 (10-12)</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Cohort 4 (13-15)</td>
<td>48%</td>
<td>52%</td>
</tr>
<tr>
<td>Cohort 5 (16-19)</td>
<td>46%</td>
<td>54%</td>
</tr>
</tbody>
</table>

*Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Student Demographics – Free/Reduced Price Meals

- Over 50% of the population among all cohort years are eligible for free or reduced-price meals (measured at any point in grades 9-12).

- The highest percentage of the population that were eligible for free or reduced-priced meals occurred in cohort 3 with 62%.

- MN Free or Reduced-Price Meal Eligibility (most recent year):
  - Annual Gross Income (Family of 5)
  - Free: $39,884
  - Reduced: $56,784

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Among all cohort groups, 69% (2260) students in the total population exited high school with a diploma.

Among all cohort groups, 14% students in the population exited high school without a diploma.

Note: Caution cohort 5 reflects data as of June 30th, 2019 and is subject to change.

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Percentage of Students in MN by High School Exit Status and Primary Disability, 2013 - 2015

- **Exit HS with Diploma**
  - MN - Deaf/Hard of Hearing: 84%
  - MN - Entire Population: 84%
  - MN - No reported Disability: 86%
  - MN - Speech/Language Impaired: 83%
  - MN - Physically Impaired: 54%
  - MN - Blind Visually Impaired: 78%
  - MN - Specific Learning Disabilities: 75%

- **Exit HS without a Diploma**
  - MN - Deaf/Hard of Hearing: 14%
  - MN - Entire Population: 16%
  - MN - No reported Disability: 14%
  - MN - Speech/Language Impaired: 16%
  - MN - Physically Impaired: 17%
  - MN - Blind Visually Impaired: 18%
  - MN - Specific Learning Disabilities: 24%

- **Status Unknown**
  - MN - Deaf/Hard of Hearing: 2%
  - MN - Entire Population: 1%
  - MN - No reported Disability: 1%
  - MN - Speech/Language Impaired: 1%
  - MN - Physically Impaired: 4%
  - MN - Blind Visually Impaired: 1%
  - MN - Specific Learning Disabilities: 1%
K-12 Outcomes - ACT Scores by Cohort

Average ACT Scores of Students in the Population* by Cohort Group, 2006-2019

<table>
<thead>
<tr>
<th>Cohort 2 (06-09)</th>
<th>Cohort 3 (10-12)</th>
<th>Cohort 4 (13-15)</th>
<th>Cohort 5 (16-19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. of ACT Composite Score</td>
<td>Avg. of Math Scale Score</td>
<td>Avg. of English Scale Score</td>
<td>Avg. of Reading Scale Score</td>
</tr>
<tr>
<td>20.1</td>
<td>19.2</td>
<td>18.8</td>
<td>18.4</td>
</tr>
<tr>
<td>20.2</td>
<td>19.6</td>
<td>19.2</td>
<td>18.6</td>
</tr>
<tr>
<td>16.9</td>
<td>17.0</td>
<td>16.9</td>
<td>18.4</td>
</tr>
<tr>
<td>20.4</td>
<td>19.8</td>
<td>19.3</td>
<td>18.8</td>
</tr>
<tr>
<td>20.7</td>
<td>19.8</td>
<td>19.4</td>
<td>18.8</td>
</tr>
</tbody>
</table>

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
K-12 Outcomes – ACT Scores by Primary Disability

Average ACT Scores of Students in MN by Primary Disability, 2013-2015

<table>
<thead>
<tr>
<th></th>
<th>Avg. of ACT Composite Score</th>
<th>Avg. of Math Scale Score</th>
<th>Avg. of English Scale Score</th>
<th>Avg. of Reading Scale Score</th>
<th>Avg. of Science Scale Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN - Deaf/Hard of Hearing</td>
<td>18.8</td>
<td>17.0</td>
<td>19.6</td>
<td>22.2</td>
<td>22.2</td>
</tr>
<tr>
<td>MN - Entire Population</td>
<td>19.2</td>
<td>20.5</td>
<td>20.1</td>
<td>21.0</td>
<td>21.6</td>
</tr>
<tr>
<td>MN - No reported Disability</td>
<td>21.7</td>
<td>21.8</td>
<td>22.1</td>
<td>22.2</td>
<td>22.2</td>
</tr>
<tr>
<td>MN - Speech/Language Impaired</td>
<td>20.1</td>
<td>19.9</td>
<td>18.9</td>
<td>19.8</td>
<td>19.5</td>
</tr>
<tr>
<td>MN - Physically Impaired</td>
<td>19.9</td>
<td>18.5</td>
<td>17.5</td>
<td>19.2</td>
<td>19.6</td>
</tr>
<tr>
<td>MN - Blind Visually Impaired</td>
<td>19.6</td>
<td>18.2</td>
<td>17.5</td>
<td>21.1</td>
<td>21.0</td>
</tr>
<tr>
<td>MN - Specific Learning Disabilities</td>
<td>15.3</td>
<td>16.2</td>
<td>13.0</td>
<td>16.1</td>
<td>15.3</td>
</tr>
</tbody>
</table>
8% (271) students in the total population participated in ABE classes and 1% (28) students in the population were GED completers.

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
• Of the GED Completers:
  • 71% were ABE participants.
  • 25% were ABE Participants and met their GED Goal.
  • 17% Reported as Dropped Out.

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
K-12 Outcomes – Accountability Tests

- 67% of students took the reading portion and 70% took the mathematics portion of the MCA:
  - 23% of students met or exceeded proficiency in Math.
  - 44% met or exceeded proficiency in Reading.
  - The highest proficiency for reading occurred in cohort 3 with 50%.
  - The highest proficiency for math occurred in cohort 5 with 29%.

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
27% of students in the population participated in a Rigorous Courses program (Concurrent Enrollment, PSEO, IB, AP).

- 14% were AP Participants.
- 8% were Concurrent Enrollment Participants
- 4% were PSEO Participants
- 1% were IB Participants

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both.
K-12 Outcomes – CTE Courses

- 53% participated (took a course) in Career and Technical Education (CTE).
- 31% of students were CTE concentrators (took 240 course hours within one career field).
- 23% of students completed their CTE courses.

Percentage of Students in the Population* that Participated in Career and Technical Education (CTE) Courses by Cohort Group, 2006-2019

- Cohort 1 (02-05): 56% CTE Basic Part., 49% CTE Basic Conc., 29% CTE Basic Completer
- Cohort 2 (06-09): 59% CTE Basic Part., 35% CTE Basic Conc., 27% CTE Basic Completer
- Cohort 3 (10-12): 53% CTE Basic Part., 29% CTE Basic Conc., 26% CTE Basic Completer
- Cohort 4 (13-15): 57% CTE Basic Part., 29% CTE Basic Conc., 25% CTE Basic Completer
- Cohort 5 (16-19): 41% CTE Basic Part., 15% CTE Basic Conc., 8% CTE Basic Completer

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both.
Postsecondary Outcomes - Enrollment

- Of the students in the population that graduated high school, 68% students enrolled at a post-secondary institution.

- 83% of students in the population enrolled in a post-secondary institution attended schools in Minnesota.

- 53% enrolled in the post secondary institution within one year of high school exit.

- 7% enrolled in the post secondary institution within two years of high school exit.

- 8% enrolled in the post secondary institution three or more years post high school exit.

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Postsecondary Outcomes – Enrollment by P. Disability

Percentage of HS Graduates in MN that Enrolled at a Post-Secondary Institution by Primary Disability and Cohort Group, 2010-2015

- MN - Deaf/Hard of Hearing: 65% (Cohort 3), 67% (Cohort 4)
- MN - Entire Population: 81% (Cohort 3), 77% (Cohort 4)
- MN - No reported Disability: 86% (Cohort 3), 81% (Cohort 4)
- MN - Speech/Language Impaired: 75% (Cohort 3), 72% (Cohort 4)
- MN - Physically Impaired: 58% (Cohort 3), 57% (Cohort 4)
- MN - Blind Visually Impaired: 57% (Cohort 3), 67% (Cohort 4)
- MN - Specific Learning Disabilities: 53% (Cohort 3), 47% (Cohort 4)
Of the students in the population that enrolled in a post-secondary institution and reported credit hours:

- 71% attended school full-time (12+ credits).
- 32% enrolled with 12 - 14 credits.
- 39% enrolled with 15+ credits.
- 28% attended school part-time.

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Among students in the population that enrolled in a postsecondary institution with a reported major, the programs of study with the highest enrollment were:

- Liberal Arts and Sciences, 28%
- Health Professions, 10%
- Business, Mgmt., Marketing, 9%
- Education, 6%
- Mechanic and Repair Tech., 5%

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Postsecondary Outcomes – Highest Credential Earned

- Of the students attending a post-secondary institution, 39% earned a postsecondary credential.
  - 10% earned a Certificate or Diploma
  - 11% earned an Associate Degree as their highest credential.
  - 17% earned a Bachelor’s Degree as their highest credential.
  - 1% earned an Advanced/Graduate Degree as their highest credential.

### Percentage of Students in the Population* Enrolled in a PS Institution by Highest Credential Earned and Cohort Group, 2006-2019

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Students attending a post-secondary institution, and earning a higher credential, took an average of 5 and a half years to complete their certification.

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
59% of students in the population worked while in high school.

- Of the employment records indicating hours worked, 86% of students worked on a part-time basis.

- Part-time status consists of less than 1820 hours worked per year.

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both.
Employment Outcomes – HS Work Tenure and Industry

• Of the students working part-time:
  • 21% = worked one quarter.
  • 18% = worked two quarters.
  • 20% = worked three quarters.
  • 40% = worked four quarters.

• The top three industries that students in the population worked in:
  • 27% Retail Trade
  • 26% Accommodations and Food Service
  • 10% Healthcare and Social Assistance

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Employment Outcomes – Post HS Employment Rate

<table>
<thead>
<tr>
<th>Cohort Group</th>
<th>Employed 1yr Post HS Exit</th>
<th>Employed 2yrs Post HS Exit</th>
<th>Employed 3yrs Post HS Exit</th>
<th>Employed 4yrs Post HS Exit</th>
<th>Employed 5yrs Post HS Exit</th>
<th>Employed 6yrs Post HS Exit</th>
<th>Employed 7yrs Post HS Exit</th>
<th>Employed 8yrs Post HS Exit</th>
<th>Employed 9yrs Post HS Exit</th>
<th>Employed 10yrs Post HS Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 (02-05)</td>
<td>66.9%</td>
<td>66.7%</td>
<td>65.1%</td>
<td>64.5%</td>
<td>62.5%</td>
<td>64.5%</td>
<td>62.9%</td>
<td>64.0%</td>
<td>61.5%</td>
<td>59.1%</td>
</tr>
<tr>
<td>Cohort 2 (06-09)</td>
<td>55.2%</td>
<td>59.2%</td>
<td>61.9%</td>
<td>61.4%</td>
<td>62.7%</td>
<td>60.1%</td>
<td>55.6%</td>
<td>42.6%</td>
<td>28.5%</td>
<td>Partial Data</td>
</tr>
<tr>
<td>Cohort 3 (10-12)</td>
<td>67.7%</td>
<td>66.8%</td>
<td>64.2%</td>
<td>56.5%</td>
<td>40.7%</td>
<td>18.5%</td>
<td>Partial Data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort 4 (13-15)</td>
<td>63.6%</td>
<td>39.0%</td>
<td>20.4%</td>
<td>Partial Data</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- Of the students in the population* working:
  - 49% were employed one year post high school exit.
  - 31% were employed 10 years post high school exit.

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
**Employment Outcomes – Post HS FT Employment**

<table>
<thead>
<tr>
<th>Cohort Group</th>
<th>Full-Time Yr. 1</th>
<th>Full-Time Yr. 2</th>
<th>Full-Time Yr. 3</th>
<th>Full-Time Yr. 4</th>
<th>Full-Time Yr. 5</th>
<th>Full-Time Yr. 6</th>
<th>Full-Time Yr. 7</th>
<th>Full-Time Yr. 8</th>
<th>Full-Time Yr. 9</th>
<th>Full-Time Yr. 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1 (02-05)</td>
<td>9.8%</td>
<td>13.1%</td>
<td>18.7%</td>
<td>23.1%</td>
<td>27.9%</td>
<td>28.7%</td>
<td>36.1%</td>
<td>44.3%</td>
<td>49.4%</td>
<td>51.1%</td>
</tr>
<tr>
<td>Cohort 2 (06-09)</td>
<td>5.4%</td>
<td>9.7%</td>
<td>16.5%</td>
<td>23.4%</td>
<td>30.2%</td>
<td>35.3%</td>
<td>43.8%</td>
<td>42.0%</td>
<td>44.1%</td>
<td>48.2% Partial Data</td>
</tr>
<tr>
<td>Cohort 3 (10-12)</td>
<td>6.7%</td>
<td>14.2%</td>
<td>20.5%</td>
<td>31.3%</td>
<td>35.2%</td>
<td>30.6% Partial Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort 4 (13-15)</td>
<td>5.8%</td>
<td>10.3%</td>
<td>13.7% Partial Data</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- Of the students in the population* working post HS exit:
  - 7% were employed full-time one year post high school exit.
  - 50% were employed full-time 10 years post high school exit.

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Employment Outcomes – Annual Income by Education

Average Income of the Students in the Population* Employed Post HS Exit by Highest PS Credential Earned, 2006 - 2019

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Students in the population* that were employed after high school exit had the highest concentration of employment in the following sectors:

- Retail Trade = 20%
- Healthcare and Social Assistance = 17%
- Accommodation and Food Service = 14%
- Manufacturing = 9%
- Administrative and Support and Waste Management and Remediation Services = 9%
- Educational Services = 4%

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Employment Outcomes – Post HS Employment by Year

Percentage of Students in the Population* Employed after High School by Industry Sector and Year Post HS Exit, 2006-2019

* Students in this population identify as having a Primary Disability of Deaf/Hard of Hearing, Deaf and Blind, or a Combination of Both
Questions?

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