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DEPARTMENT OF EDUCATION

Students Who Are Blind or Visually Impaired

Biennial Report to the Legislature: 2022

As required by Minnesota Statutes, section 125A.63

June 15, 2022

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As requested by Minnesota Statutes, section 3.197: This report cost approximately $13,474.53 to prepare, including staff time, printing and mailing expenses.

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Legislative Charge

Minnesota Statutes 2021, section 125A.63, was amended to include the updated legislative charge:

Subd. 4. Advisory committees. (a) The commissioner shall establish advisory committees for the deaf and hard-of-hearing and for the blind and visually impaired. The advisory committees shall develop recommendations and submit an annual report to the commissioner on the form and in the manner prescribed by the commissioner.

(b) The advisory committees for the deaf and hard-of-hearing and for the blind and visually impaired shall meet periodically at least four times per year. The committees must each review, approve, and submit a biennial report to the commissioner, the education policy and finance committees of the legislature, and the Commission of Deaf, DeafBlind, and Hard-of-Hearing Minnesotans. The reports must, at least:

(1) identify and report the aggregate, data-based education outcomes for children with the primary disability classification of deaf and hard-of-hearing or of blind and visually impaired, consistent with the commissioner's child count reporting practices, the commissioner's state and local outcome data reporting system by district and region, and the school performance report cards under section 120B.36, subdivision 1; and

(2) describe the implementation of a data-based plan for improving the education outcomes of deaf and hard-of-hearing or blind and visually impaired children that is premised on evidence-based best practices, and provide a cost estimate for ongoing implementation of the plan.

Blind or Visually Impaired (BVI) advisory committee members (2021–22) with term end dates

- Angie Ardolf: Parent Representative (2023)
- John Davis: Director, Minnesota State Academy for the Blind (2023)
- Steve Jacobson: Program Representative, National Federation of the Blind (2024)
- Bradley Johnson: Parent Representative (2022)
- Sheila Koenig: State Services for the Blind Representative (2022)
- Barb Lhotka: Higher Education Representative, Low Incidence Project Metro ECSU (2022)
- Sara Stack: Administrator Representative, Minneapolis Public Schools (2022)
- Erin Toninato: (Chair) Administrator Representative, South Central Service Cooperative (2022)
- Ken Trebelhorn: Program Representative, American Council of the Blind (2024)
- Kristin Oien: MDE Representative, Specialist for the Blind/Visually Impaired

Executive Summary

The 2019–20 and 2020–21 school years were unprecedented because of the COVID-19 pandemic, and the impacts on students who are blind or visually impaired, their families and educators were profound. National research has indicated a range of challenges and successes in educational service provision, student and family engagement, and accessing tools and online learning programs. In Minnesota, local education agencies, teachers of the blind or visually impaired (TBVI), and certified orientation and mobility specialists (COMS) experienced similar challenges. They also worked to create safe engagement strategies with students and their families and safe learning options.

This report includes summaries of student demographics, child count, enrollment counts, graduation rates, and assessment results for the 2020–21 school year. As a result of the COVID-19 pandemic, rapid shift to remote learning for almost all students in Minnesota for the last several months of the 2019–20 school year, and resulting federal waivers of standardized assessments, the state suspended the Minnesota Comprehensive Assessments (MCA) and Minnesota Test of Academic Skills (MTAS) for the 2019-20 school year. **Therefore, testing data is not available for 2020.** The trend data that is included reflects the achievements, milestones, and areas of concern for students with the primary disability classification of blind or visually impaired (BVI) [1] at the statewide and regional levels. Also included are the needs, recommendations, and statewide resources specific to BVI.

Recommended solutions to improve educational outcomes for students who are BVI include increasing access to accessible education materials, addressing shortages in educated and licensed TBVI and COMS, and providing the time needed to teach the expanded core curriculum (ECC). It is crucial that students who are BVI in Minnesota receive the education necessary to reach their postsecondary educational, personal, and employment goals. With a quality education, students will be empowered to become contributing members and future leaders in the state.

More information is included in the appendices on guidelines for determining workloads for TBVI and COMS (Appendix A); the ECC (Appendix B); collaborative statewide resources (Appendix C); early childhood outcomes (Appendix D); and outcomes for students who are deafblind (Appendix E).

[1] This report also uses “BVI students” in the charts and figures to save space.

Introduction

The 2019–20 and 2020–21 school years were unprecedented because of the COVID-19 pandemic, and the impacts on students who are blind or visually impaired, their families and educators were profound. Results from two nationwide surveys conducted early in the pandemic in 2020 and then a year later indicated a range of challenges and successes in educational service provision, student and family engagement, and accessing tools and online learning programs.[2] [3] In Minnesota, local educational agencies, teachers of the blind or visually impaired (TBVI), and certified orientation and mobility specialists (COMS) experienced similar challenges and successes. They worked to create safe engagement strategies with students and their families and safe learning options such as virtual braille[4] and virtual orientation and mobility (O&M) resources.

This report summarizes the educational outcomes for students with the primary disability classification of BVI for the 2020–21 school year. Educational outcomes are based on Minnesota Comprehensive Assessment (MCA) and Minnesota Test of Academic Skills (MTAS) results by state, region and district, when possible.[5] The report also includes summaries of early childhood data, student demographics, child count, enrollment counts, and graduation rates. The outcomes reflect the achievements, milestones and areas of need for students who are BVI. To address the areas of need and improve outcomes for students who are BVI, the BVI Advisory Committee has reviewed and approved recommendations contained in the report.

[2] Rosenblum, L. P., Chanes-Mora, P., Fast, D., Kaiser, J. T., Wild, T., Herzberg, T. S., Rhoads, C. R., Botsford, K. D., DeGrant, J. N., Hicks, M. A. C., Cook, L. K., & Welch-Grenier, S. (2021). Access and Engagement II: An Examination of How the COVID-19 Pandemic Continued to Impact Students with Visual Impairments, Their Families, and Professionals Nine Months Later, American Foundation for the Blind.

[3] Rosenblum, L. P., Herzberg, T. S., Wild, T., Botsford, K. D., Fast, D., Kaiser, J. T., Cook, L. K., Hicks, M. A. C., DeGrant, J. N., & McBride, C. R. (2020). Access and Engagement: Examining the Impact of COVID-19 on Students Birth-21 with Visual Impairments, Their Families, and Professionals in the United States and Canada. American Foundation for the Blind.

[4] A description of virtual braille instruction and resources is available at: https://education.mn.gov/mdeprod/idcplg?IdcService=GET_FILE&dDocName=PROD045572&RevisionSelectionMethod=latestReleased&Rendition=primary.

[5] To avoid identifying individuals, groupings with fewer than 10 students are not reported.

Data Sources

MDE collected information from multiple data sources to produce and present the information for this report. The charts and tables describe demographics and academic outcomes using the following sources:

- Minnesota Automated Reporting Student System (MARSS)
- MDE Assessment Data
- Early Childhood Child Outcome Survey Data
- Minnesota Statewide Longitudinal Education Data System (SLEDS)

Throughout this report, results are reported only on population groups greater than 10 to protect individual privacy. While overall student counts for all 11 regions in the state are included on page 17, three had 10 or more students who were BVI with math and reading assessment results (Region 7, Region 10, and Region 11). Only demographic data and assessment data trends summaries for those three regions are included in the report. Within the three regions, no district-level results are included because there are too few students who are BVI to include.

Data Challenges

Impacts of COVID-19 on Assessment Data Reporting and Results

Due to the COVID-19 pandemic and the rapid shift to remote learning for almost all students in Minnesota for the last several months of the 2019–20 school year, the state received federal government waivers to suspend standardized exam testing. **Therefore, MCA and MTAS testing data is not available for 2020.** That is reflected in the statewide student assessment data trends section starting on page 25 of the report, where graphs and tables do not have test result data for 2020.

Additionally, it may not be appropriate to compare math and reading assessment results from 2019 to 2021. Students in Minnesota spent most, if not all, of the 2020–21 school year learning remotely. Educators and researchers are still attempting to understand the impact of full remote learning, and the other effects of the pandemic, on student academic achievement.

Other Challenges

It is important to note that the assessment data from this report does not accurately reflect the overall status and scope of services for students who are BVI served by TBVI and COMS. Students who are not primarily identified as BVI (which includes students with multiple impairments or low vision) are not identified in this data. MDE does not require or have systematic access to data that reflects all services provided by TBVI. TBVI are required to provide services to this uncounted population that are not represented in this report.

Additionally, there are several testing challenges students who are BVI encounter:

- **Accessibility**: Existing adaptive online tests are not accessible to students who are blind. Instead, they receive a hard copy test in braille.

- **Fatigue**: Students who are BVI often spend twice as much time testing as their peers.
- **Assessment validity with tactile graphics**: Issues with the tactile graphics provided in test materials have put into question whether a student is being assessed for their math skills or their tactile graphics skills. The existing tests do not always provide good data regarding learned skills.
- **Test appropriateness**: Many students who are BVI may be given the MTAS in error—data indicates that the appropriateness of the test provided may not be correct.[6]

Updates on Previous Report Recommendations for Improving Student Outcomes

The 2020 report made three recommendations to improve outcomes for students who are BVI. This section describes updates since those recommendations were submitted to the Legislature.

Make curricula accessible for all students.

MDE has created the Minnesota Access Center (MAC) to provide resources and information to all educators and families to address this need.

- **The Access Center Vision:** All Minnesotans receive access to living, learning, and work environments.
- **The Access Center Mission:** To increase awareness of access, provide information to help with the consideration, selection, and use of accessible material and assistive technology whenever and wherever it will be used.
- **The Access Center Rationale:** Coordinate existing state and local supports into a central hub to assist Minnesotans with accessing materials, resources, and assistive technologies.

Within the MAC, MDE is offering "Open Office Hours" (OOH) the first and third Tuesday of every month as an opportunity for Minnesota educators and related service personnel to interact with specialists and providers, as well as ask questions regarding specific products and services.

Increase the number of educated and licensed TBVI and COMS.

A BVI feasibility report was conducted to gather data and information regarding the need for and establishment of a Minnesota Graduate VI Program. The BVI Advisory Committee also developed a resource called, "Talking Points for the Establishment of a Visually Impaired (VI) Graduate Program"[7] to share with stakeholders and constituents for support in the legislative process.

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[6] Ferrell, K. A., S. Bruce, and J. L. Luckner (2014). *Evidence-based practices for students with sensory impairments*. (Document No. IC-4). Retrieved from University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center website: http://ceedar.education.ufl.edu/tools/innovation-configurations/.

[7] "VI" stands for visually impaired.

Increase awareness of the expanded core curriculum.

During the 2021–22 school year, MDE sponsored two expanded core curriculum (ECC) focused professional development opportunities that included ECC assessments, checklists, rigorous instruction techniques, and ECC data gathering methods. This information was then shared and discussed at Regional Communities of Practice meetings across the state and shared with individual TBVI and COMS in each region.

Recommendations for Improving Student Outcomes

Based on the educational assessment results described in this report, research and results from the BVI Feasibility Report,[8] and input from the BVI Advisory Committee members, the advisory committee presents the following recommendations for improving outcomes for students who are BVI. The recommendations are focused on four areas:

Recommendation 1: Increase Access to Accessible Educational Materials

Software purchased by local educational agencies (LEAs) and current curricula materials developed by general education teachers are not consistently in accordance with Web Content Accessibility Guidelines (WCAG 2 AA).[9] More targeted guidance is needed for LEAs to reliably test the materials they intend to purchase to ensure accessibility for all students.

MDE should:

- **Provide LEAs with procurement guidance to assist curriculum committees with the purchase of accessible software and digital learning platforms.** The advisory committee also strongly recommends that LEAs ensure all staff create learning materials that are accessible at the beginning of the process rather than attempt to fix retroactively.
- **Continue using the Minnesota Access Center (MAC) and Open Office Hours (OOH)** to provide platforms for open dialogue around equitable access and resources to include recorded professional development and research-based best practice around Universal Design for Learning, assistive technology and accessibility.

[8] The BVI Feasibility report can be downloaded directly at: https://education.mn.gov/mdeprod/idcplg?IdcService=GET_FILE&dDocName=PROD045863&RevisionSelectionMethod=latestReleased&Rendition=primary.

[9] More information about WCAG 2 AA can be found at: http://www.w3.org/TR/WCAG20/.

Recommendation 2: Address Shortages in Educated and Licensed TBVI and COMS

Minnesota has not had a university program to prepare educators who specialize in BVI since 2010. The number of students who receive vision services in Minnesota is increasing, while the number of TBVI and COMS is decreasing. An estimated one-third of TBVI and COMS are at or near retirement age.[10] MDE is aware of this situation and is working towards legislative support of the establishment of a Minnesota Graduate VI Program.

The Legislature should:

- **Fund the creation of a university program to educate TBVI and COMS** (such as the Visually Impaired (VI) Graduate Program described previously) to address the emergency-level need for qualified instructors of students who are BVI.
- **The BVI advisory committee continues to strongly encourage LEAs to expand recruitment efforts to fill open TBVI and COMS positions** from within the school districts and from out of state. The LEAs should explore creative hiring incentives such as covering moving costs and providing a vehicle for TBVI and COMS to travel between schools. In order to retain existing staff, LEAs should determine appropriate workload analyses to account for TBVI and COMS instruction, travel and material preparation. Appendix A on page 58 has a workload analysis sample.

Recommendation 3: Provide Time Needed to Teach the Expanded Core Curriculum in Minnesota

Individualized Education Program (IEP) teams need time to observe, review data and discuss the current expanded core curriculum (ECC) strengths and needs of their students. LEAs need to be more aware of the importance of regular student review time with team members to update progress, communication, and learning plans.

LEAs and IEP teams should:

- **Set aside time for school-based student teams to meet to update ECC progress, communication, and learning plans of students who are BVI.**
- **Share ECC activities and "how-to" resources with families and IEP team members on a regular basis** to increase awareness of ECC topics and student involvement.

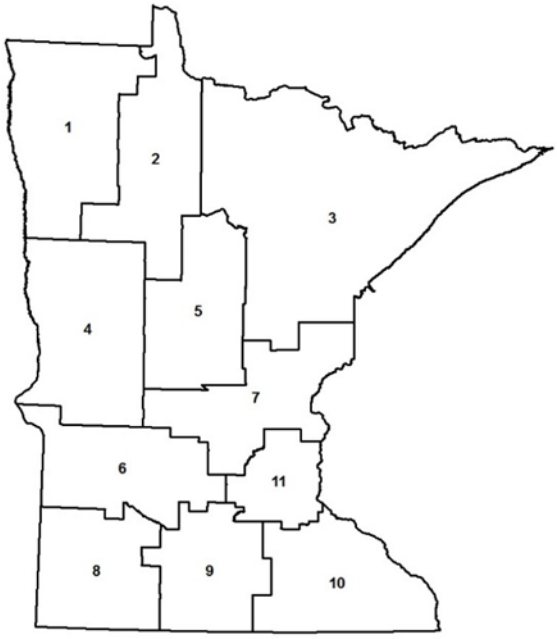
Appendix B on page 64 contains more detailed information on the ECC.

[10] More information can be found in the Teacher of Special Education Licensure Report to the Minnesota Legislature from November 2018: https://www.leg.state.mn.us/docs/2018/mandated/181136.pdf.

Student Enrollment and Demographic Data

The demographic data presented, unless otherwise noted, are based on student data from the 2020–21 school year. The tables and figures include summaries of student enrollment, child count, age, gender, race and ethnicity, home languages, and graduation rates.

Figure 1. Map of Minnesota's regional development commissions



The number of students on individual TBVI workloads can vary significantly due to individual student need, school district size, district sparsity, travel distance between schools, and travel times in rural and metropolitan areas (Table 1).

Table 1. BVI students, TBVI, and COMS by region

Region name	Number of students on 2021 Unduplicated Child Count (ages 0 to 21)	Number of students on 2020 APH Federal Quota Count	Estimated number of students on TBVI caseloads (blind, low vision, deafblind, and multiple needs)	Number of TBVI	Estimated number of students on each TBVI caseload	Number of COMS
Regions 1 and 2	19	35	57	9	6	3
Region 3	23	52	91	3.5	30	3 (part-time contracted)
Region 4	24	47	77	4	19	1 (part-time)
Regions 5 and 7	76	151	243	15	16	7
Regions 6 and 8	25	43	61	4	17	2
Region 9	14	28	39	3	13	1
Region 10	83	109	216	MSAB (5)[11] 16	13	MSAB (1) 5
Region 11	228	569	681	52	14	19
Statewide total	492	1,034	1,445	106.5	16 (average)	41

Enrollment Summary

Table 2 shows how enrollment for students who are BVI compares with other student populations in 2020–21. At the statewide level, students whose primary disability was BVI made up 0.05 percent of the overall student population and 0.33 percent of the population of students receiving special education services. The largest number of students who are BVI were located in Region 11, while the largest percentage within a single region was in Region 10. Because there were fewer than 10 students who are BVI enrolled in Regions 6 and 8, the data were not reported in the table (noted with "NR").

Table 2. K–12 enrollment of student categories by region 2020–21

Region name	All students K–12 fall enrollment	BVI K–12	Percent BVI	K–12 special education enrollment	Percent BVI
Regions 1 and 2	27,172	16	0.06%	4,732	0.34%
Region 3	40,881	21	0.05%	7,480	0.28%
Region 4	34,283	22	0.06%	5,680	0.39%
Region 5	24,645	NR	NR	4,781	NR
Regions 6 and 8	42,298	17	0.04%	6,959	0.24%
Region 7	101,637	62	0.06%	15,881	0.39%

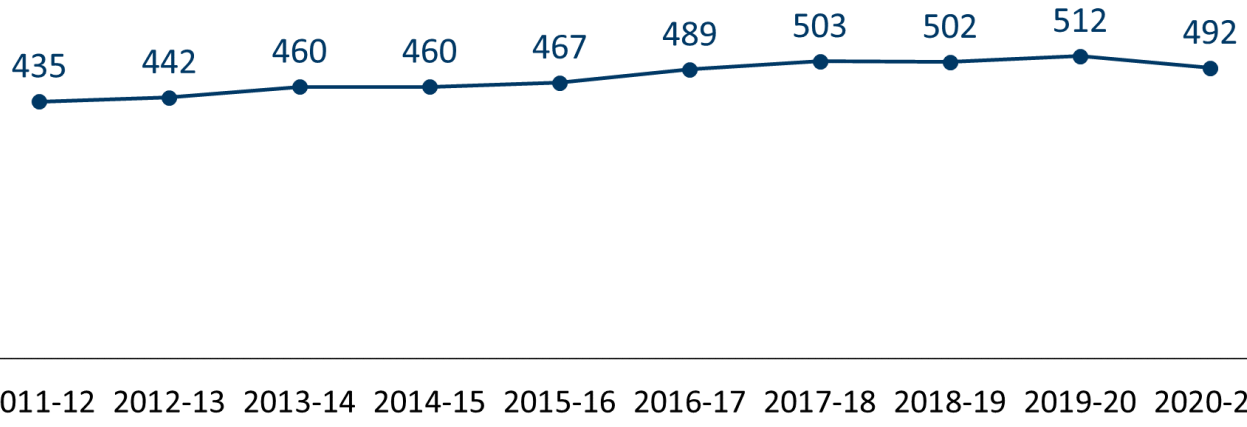
[11] MSAB: Minnesota State Academy for the Blind located in Faribault, Minnesota.

Region name	All students K–12 fall enrollment	BVI K–12	Percent BVI	K–12 special education enrollment	Percent BVI
Region 9	32,715	12	0.04%	5,355	0.22%
Region 10	76,163	77	0.10%	12,027	0.64%
Region 11	471,647	195	0.04%	67,074	0.29%
Statewide total	851,441	431	0.05%	129,969	0.33%

Child Count

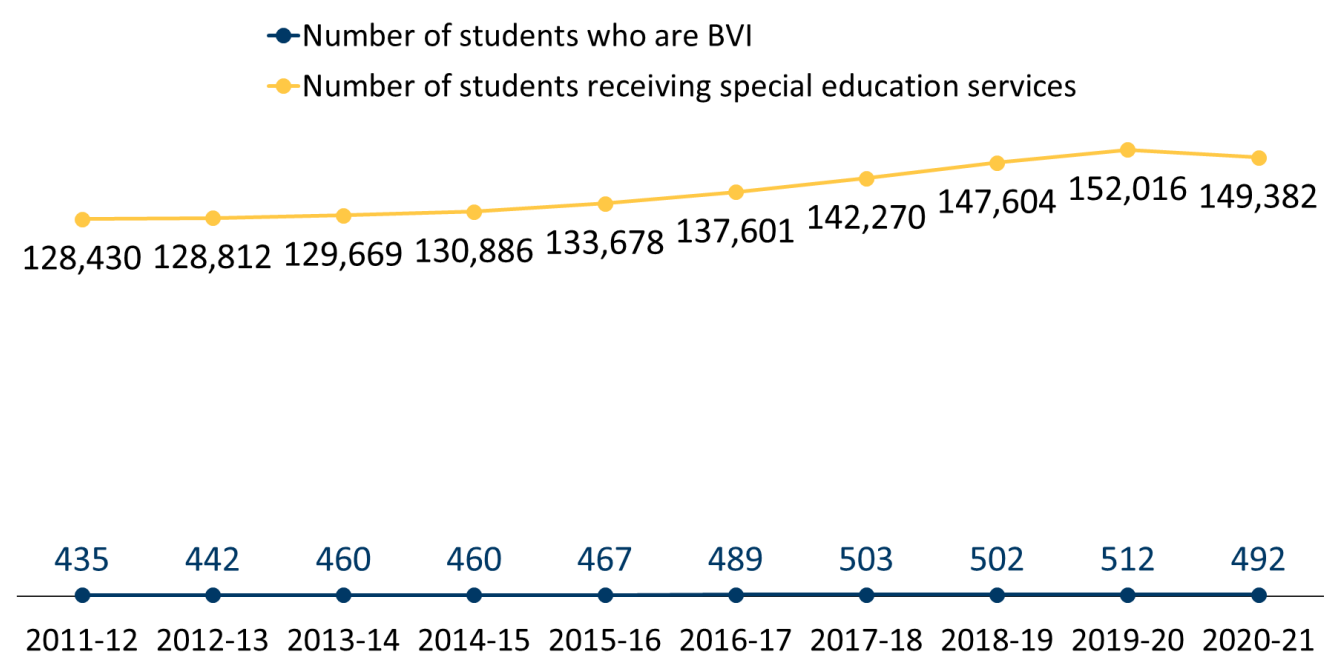
Enrollment numbers are based on the number of students enrolled in grades K–12 in the fall of the school year. Child count data is broader and includes all students in the school system, ages 0 through 21. The number of students who are BVI based on child count data increased slightly over the last several years reaching the largest count of 512 in 2019–20, but then decreased for first time in the 10-year period in 2020-21 (Figure 2).

Figure 2. Statewide BVI child counts, 2011–12 to 2020–21



During this same period, the total number of students across Minnesota based on child count receiving special education services increased by over 20,000 students, including an increase of nearly 15,000 students from 2016–17 to 2019–20 (Figure 3). However, the child count of all students receiving special education services decreased for the first time in the 10-year period in 2020-21.

Figure 3. Statewide special education and BVI counts, ages 0–21, 2011–12 to 2020–21

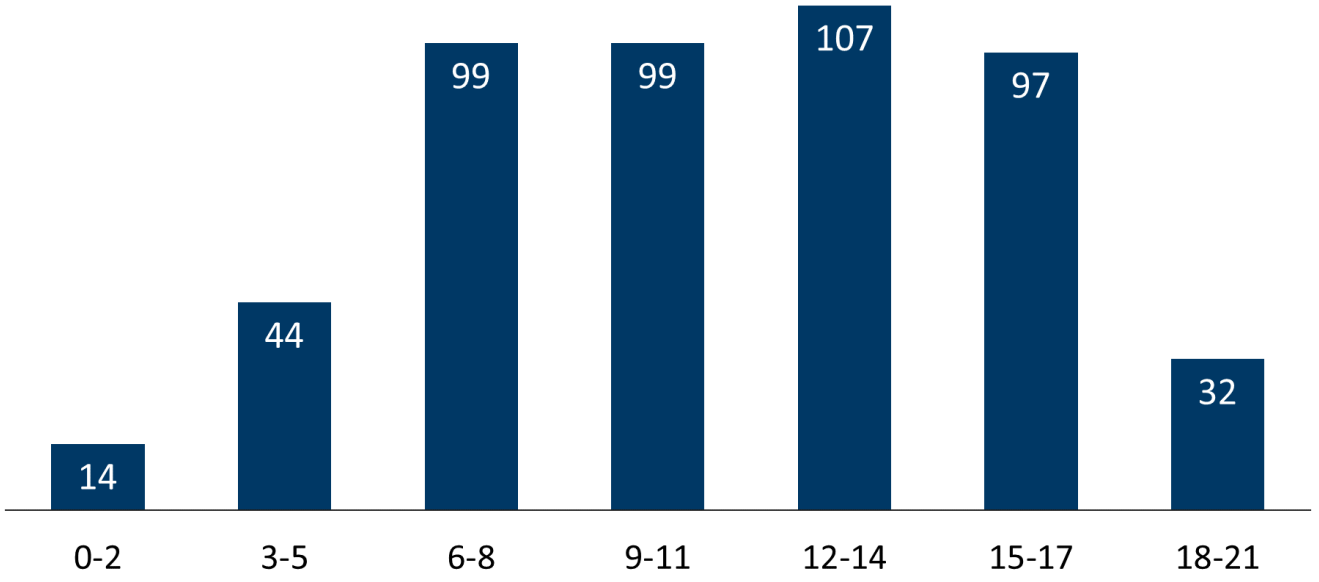


Demographics

The demographic data is presented here to help understand the student populations that make up the group of students who are BVI. The demographic breakdowns are based on child count data from the 2020–21 school year, which includes students ages 0–21 who are enrolled in the school system. A total of 492 students were counted as BVI that school year.

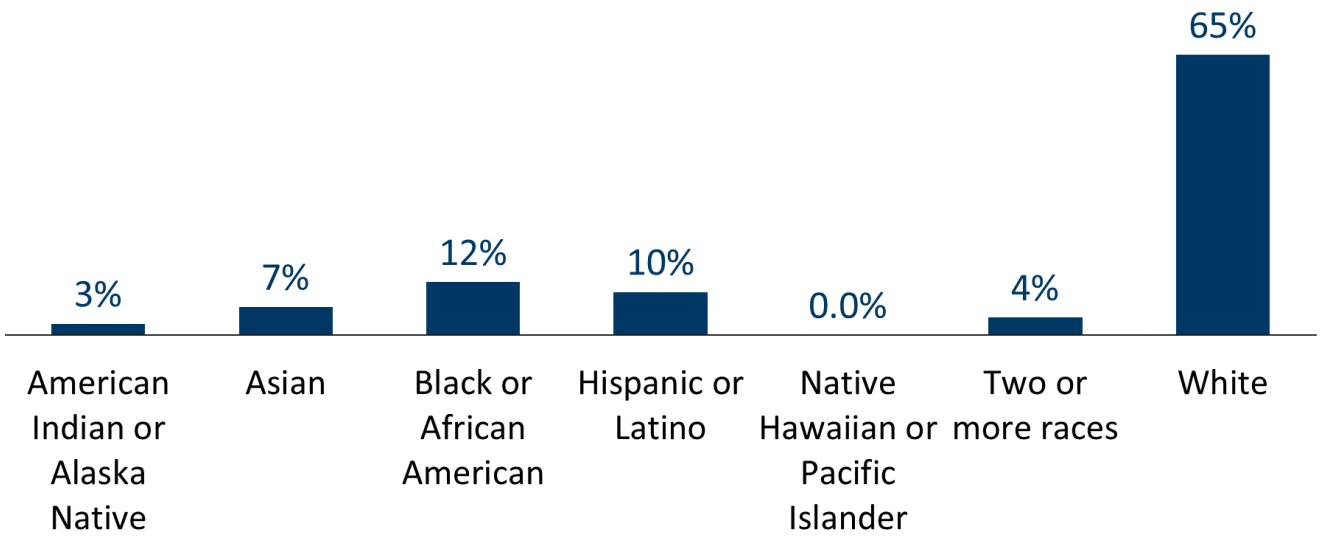
The highest concentrations of students who are BVI are ages 6–17 (Figure 4). The lowest concentrations are in the youngest and oldest age groups.

Figure 4. Child count by age distribution of BVI students, 2020–21



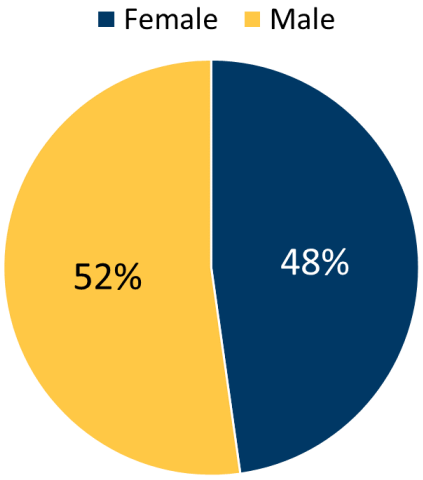
The majority of students (65 percent) who are BVI are white (Figure 5).

Figure 5. Race and ethnicity of students who are BVI, 2020–21



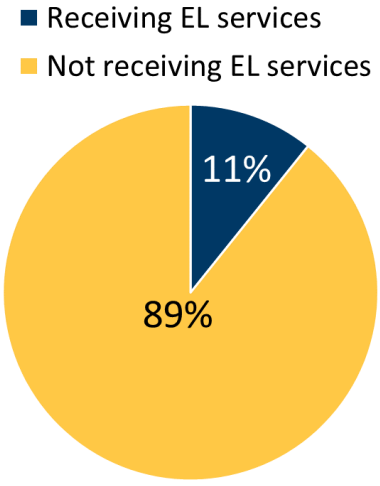
Students who are BVI were slightly more likely to be male (52 percent) than female (48 percent) (Figure 6).

Figure 6. Gender of students who are BVI, 2020–21



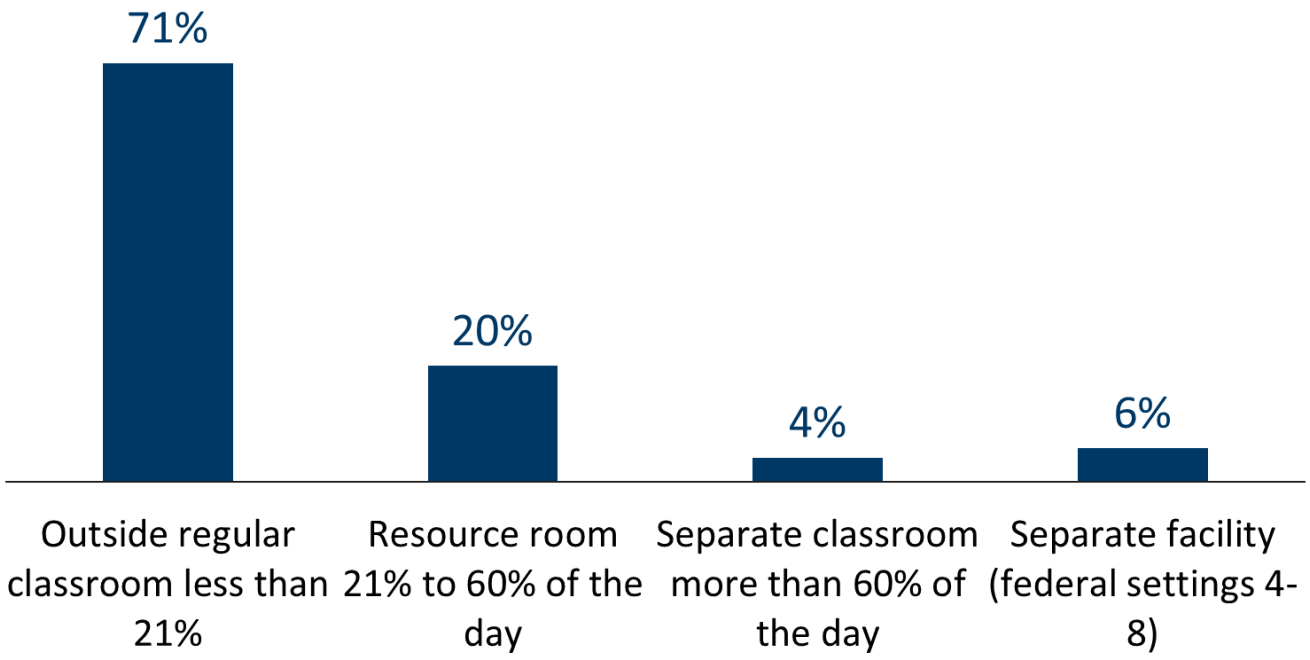
The majority of students who are BVI do not receive English Learner (EL) services. In 2020–21, 11 percent of students who are BVI were also receiving EL services (Figure 7).

Figure 7. Percent of students who are BVI who are receiving English Learner (EL) services, 2020–21



The majority of students who are BVI (71 percent) are in the least restrictive federal special education setting, spending less than 21 percent of their school day outside of a regular (i.e., general education) classroom (Figure 8).

Figure 8. Federal instructional settings for BVI students, 2020–21



Other Information Sources

Early Childhood Outcomes

Child Outcomes Summary (COS) Overview

School districts and local education providers that operate early childhood special education (ECSE) programs report back to MDE ratings on the Child Outcomes Summary (COS) assessment for infants, toddlers, and preschool children with disabilities they serve.

COS ratings are a tool used at the state level for assessing early childhood development for children with disabilities. COS was developed by the U.S. Department of Education and summarizes information on a child's functioning in three outcome areas using a seven-point scale. The three outcome areas are:

- Positive social-emotional skills;
- Acquisition and use of knowledge and skills; and
- Use of appropriate behaviors to meet needs.[12]

The seven-point scale in each of the three areas helps compare an individual child's development with the typical development of same-age peers, with a score of seven meaning a child shows functioning expected for their age in all or almost all situations.

The most recently available COS ratings data for children who are blind or visually impaired is provided in Appendix A on page 72.

Many stakeholders are interested in knowing whether special education programs in early childhood are successfully preparing children who are blind or visually impaired for elementary school. However, MDE early childhood experts caution against using COS data to evaluate that question for reasons described further below. MDE early childhood experts also caution against focusing on whether children are ready for kindergarten, and instead recommend that kindergarten and elementary programs focus on being ready to meet the needs of all children, regardless of disability or how they perform on any particular assessment when exiting early childhood programming.

Limitations of Available Early Childhood Data Reported to MDE

At this time, COS ratings are the only standardized assessment for which early childhood outcomes can be reported by MDE for children with disabilities. While the ratings can provide helpful insights when used appropriately, MDE early childhood experts caution against using aggregated COS data for year-to-year comparisons, as the information cannot reasonably be used to understand the impact of early intervention programs, which are individualized by nature, over time.

Also, because the number of students in ECSE programs who are identified as blind or visually impaired is so small, variability from year-to-year, even with a different assessment tool, would make it challenging to interpret the results in a meaningful way.

An additional challenge of interpreting COS results is the variability among districts in how they derive a child's COS rating.

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[12] More information about the three childhood outcomes can be found at: https://ectacenter.org/~pdfs/eco/three-child-outcomes-breadth.pdf.

Use of Data for Decision-Making in Early Childhood

The limitations of using COS ratings for policy decision-making does not mean that early childhood programs are not using data to make decisions regarding supports and instruction for children with disabilities on a day-to-day basis. On the contrary, ECSE programs, just like special education programs in elementary and secondary schools, collect and use data on a regular basis to monitor progress of individual students and adjust supports or accommodations.

Students are comprehensively evaluated by Individualized Family Service Plan (IFSP) and Individualized Education Program (IEP) teams, who set goals for an individual child and then use many methods for data collection to monitor the child's progress toward their goals over time. Depending on a child's need, a practitioner may use a variety of methods to track progress, including criterion- or norm-referenced tools, check lists, observations, parent interviews and reviews of student work. Most evaluations of child progress require both the use of a standardized tool and affirmation of those results from a criterion-referenced tool, observation, interview, or other method.

Outcomes for Students Who Are Deafblind

Deafblindness is defined under the Individuals with Disabilities Education Act (IDEA) as "concomitant (simultaneous) hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness." Under Minnesota Administrative Rules 3525.1327, a student is eligible for special education services under the deafblind category if they have medically verified visual loss coupled with medically verified hearing loss that, together, interfere with acquiring information or interacting with the environment.

Although students who are deafblind (DB) are not mentioned in the statute describing this report (Minnesota Statutes, section 125A.63), the staff who serve these students also serve students who are deaf and hard-of-hearing (DHH) and blind or visually impaired (BVI). Therefore, the recommendations for improving outcomes for students who are BVI could also have positive impacts on students who are DB. However, it is important to note that deafblindness is a separate disability with a multiplicative impact with a high degree of heterogeneity due to the exponential number of possible combinations of hearing and vision loss.

Appendix D on page 75 contains a full summary of enrollment, demographics and reading and math outcomes for students who are DB. In the 2020–21 school year, there were 129 children and students from birth to age 21 whose primary disability category was DB in MDE's child count data who are DB. However, approximately 250 more students in Minnesota have met eligibility for both DHH and BVI but do not have DB as the primary disability. Some data on the educational outcomes of students who are DB cannot be reported, as data is suppressed for groups smaller than 10.

Statewide Student Assessment Data Trends

Minnesota Statutes, section 125A.63, subdivision 4(b), requires that this report include aggregated, data-based education outcomes consistent with the commissioner's school performance report cards. Math and reading proficiency, as demonstrated on the math and reading MCA and MTAS, are major elements of MDE performance report cards. These tests are intended to measure whether students have achieved proficiency on the state standards for their grade level in math and reading.

Consistent with the commissioner's school performance report cards, this section reports on aggregate math and reading assessment data at the state, regional and district levels, comparing proficiency rates in math and reading for students who were identified as BVI with all students who receive special education services and with all students generally.

Assessment results are reported here as "proficient" and "not proficient." Students are considered proficient if they meet or exceed the state proficiency standards for their grade level, while students are considered not proficient if they only partially meet or do not meet the standards. The MCA and MTAS are only given in grades 3 through 8, and either grade 10 (reading) or grade 11 (math).

The MTAS is an adapted test for students with the most significant cognitive disabilities and must be required by a student's IEP; the MTAS assesses proficiency in the same way as the MCA, so the results are presented in this section using similar terminology and visualizations.

Impacts of COVID-19 on Assessment Data Reporting and Results

As described previously, due to the COVID-19 pandemic and the rapid shift to remote learning for almost all students in Minnesota for the last several months of the 2019–20 school year, the state received federal government waivers to suspend standardized exam testing. **Therefore, MCA and MTAS testing data is not available for 2020.** That is reflected in this section of the report, where graphs and tables do not have test result data for 2020.

Additionally, it may not be appropriate to compare math and reading assessment results from 2019 to 2021. Students in Minnesota spent most, if not all, of the 2020–21 school year learning remotely. Educators and researchers are still attempting to understand the impact of fully remote learning, and the other effects of the pandemic, on student academic achievement.

Other Limitations

It should be noted that there are several challenges students who are BVI encounter on the MCA and MTAS assessments, which should be considered when interpreting the results:

- **Accessibility**: Existing adaptive online tests are not accessible to students who are blind. Instead, these students receive a hard copy test in braille.
- **Fatigue**: Students who are BVI often spend twice as much time testing as their peers.

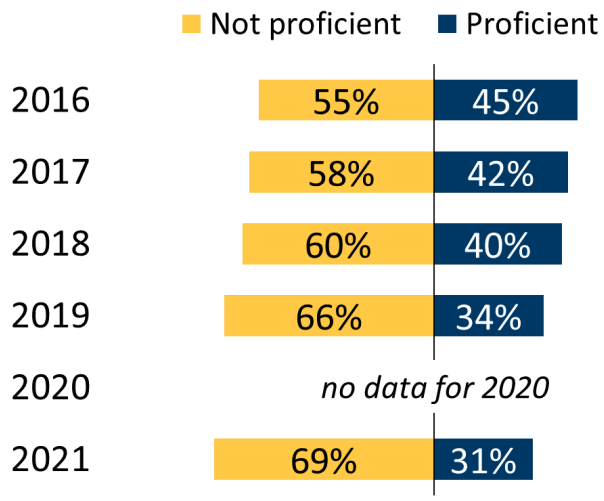
- **Assessment validity with tactile graphics**: Issues with the tactile graphics provided in test materials put into question whether a student is being assessed for their math skills or their tactile graphics skills. The existing tests do not always provide good data regarding learned skills.
- **Test appropriateness**: Many students who are BVI may be given the MTAS in error—data indicates that the appropriateness of the test provided may not be correct.[13]

As noted previously, results are reported only for groups with 10 or more students to protect individual privacy. The note "not enough data" or "cell too small to report" means the number of students was too small to report, or that there were fewer than 10 students in that group. Three of the 11 regions had 10 or more students who were BVI with math and reading assessment results (Region 7, Region 10, and Region 11). Only demographic data and assessment data trends summaries for those three regions are included in the report. Within the three regions, no district-level results are included because there are too few students who are BVI to include.

MCA Math

Rates of proficiency in math, as measured by the MCA assessment, had been declining for students who are BVI, from 45 percent in 2016 to 31 percent by 2021 (Figure 9), although they still had higher rates of proficiency on the MCA math assessment than all students who receive special education services (Figure 10). While higher than students who are BVI and all students who receive special education services, the math proficiency rates for all students also declined year-to-year during the same period (Figure 11).

Figure 9. Percentage of **students who are BVI** who are proficient and not proficient on the MCA math assessment



[13] Ferrell, Bruce & Luckner (2014)

Figure 10. Percentage of **all students who receive special education services** who are proficient and not proficient on the MCA math assessment

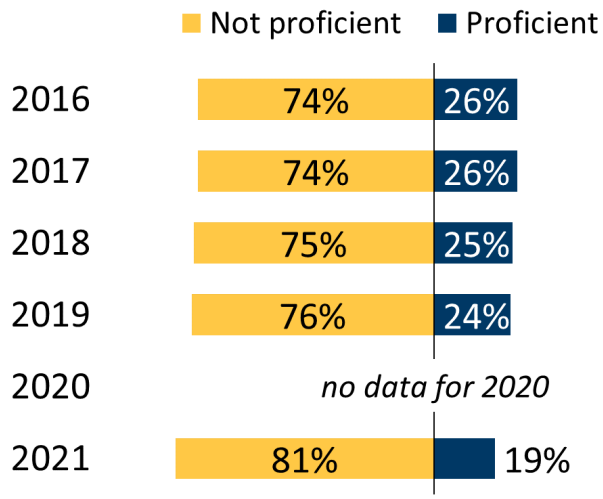
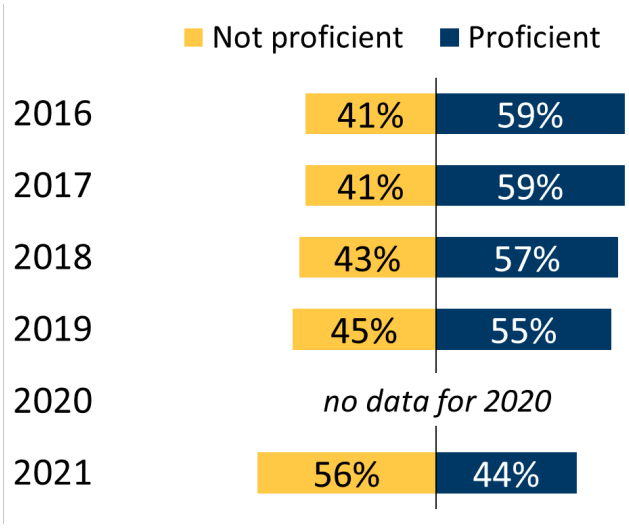


Figure 11. Percentage of **all students in Minnesota** who are proficient and not proficient on the MCA math assessment



The decline in MCA math proficiency from 2019 to 2021 did not occur for students who are BVI across all grade levels. While there were declines for nearly all the grade levels, students who are BVI in 3rd and 11th grades increased their proficiency rates from 2019 to 2021 (Figure 12 and Figure 13).

Figure 12. Percentage of students who are BVI who are proficient on the MCA math assessment, grades 3–5

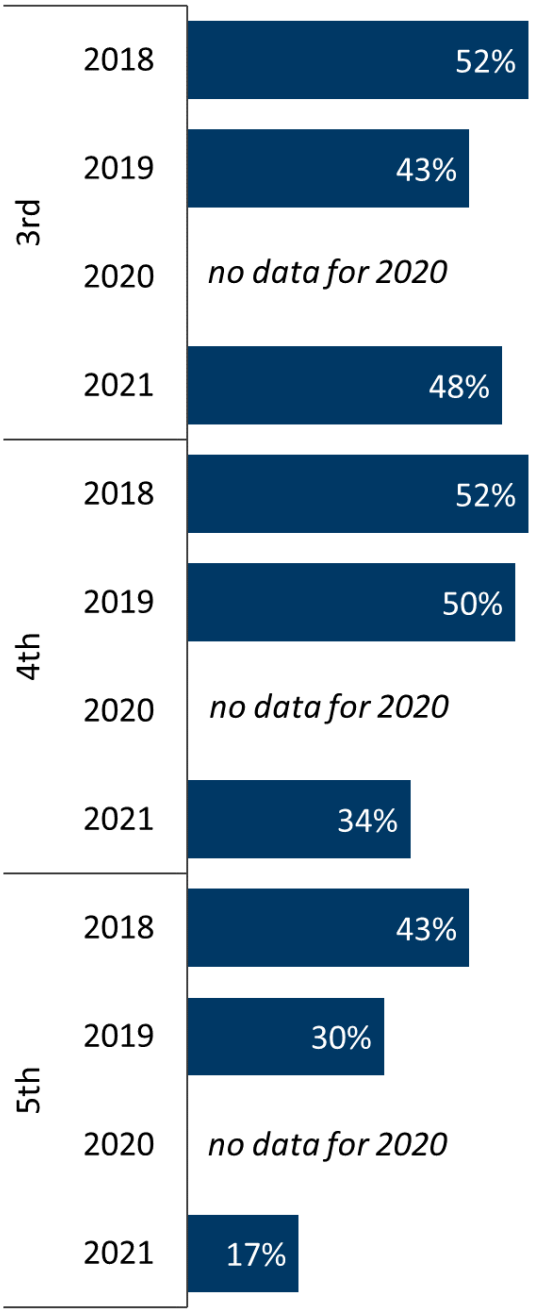
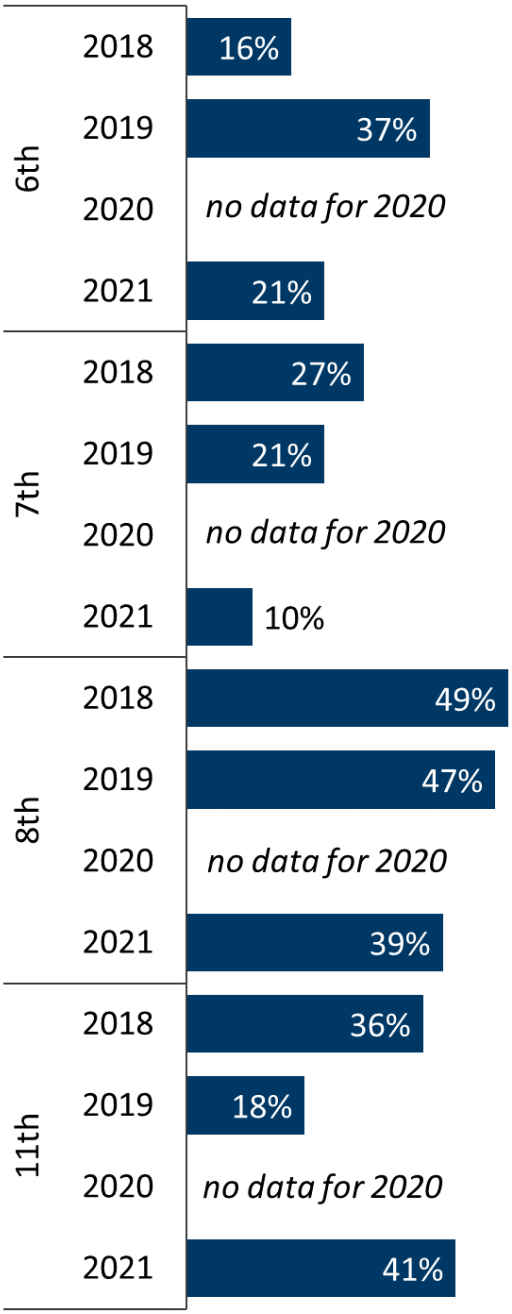


Figure 13. Percentage of students who are BVI who are proficient on the MCA math assessment, grades 6–11



MTAS Math

Only students who receive special education services take the MTAS math assessment, an adapted version of the MCA for students with significant intellectual disabilities. From 2019 to 2021, the percentage of students

who are BVI who are proficient on the MTAS math assessment increased 10 percentage points, from 73 to 83 percent (Figure 14). Meanwhile, the math proficiency rate on the MTAS for all students who receive special education services remained the same, at 62 percent (Figure 15).

Figure 14. Percentage of **students who are BVI** who are proficient and not proficient on the MTAS math assessment

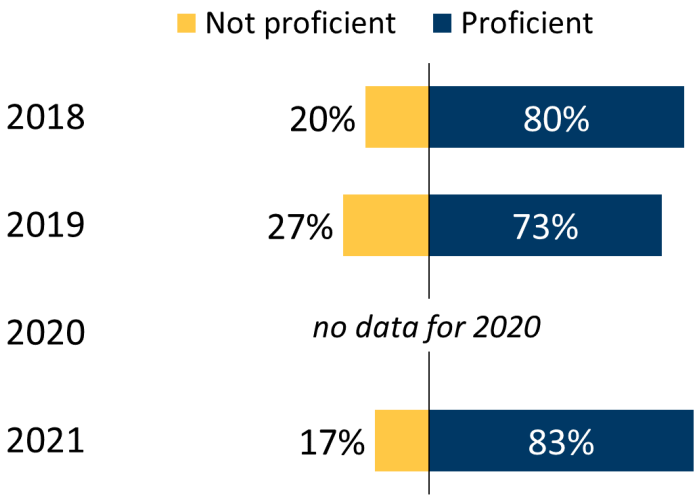
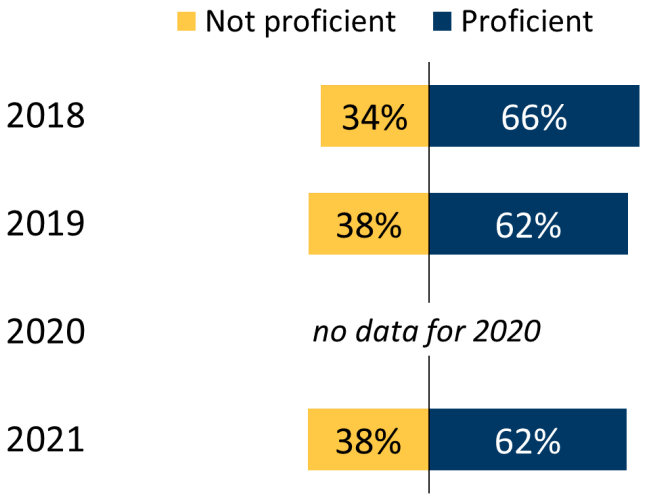


Figure 15. Percentage of **all students who receive special education services** who are proficient and not proficient on the MTAS math assessment



MCA Reading

While the MCA math proficiency rate declined from 2019 to 2021, reading proficiency increased two percentage points for students who are BVI, from 40 percent to 42 percent (Figure 16). Meanwhile, the MCA reading proficiency rate for all students who receive special education services and all students in Minnesota declined (Figure 17 and Figure 18).

Figure 16. Percentage of **students who are BVI** who are proficient and not proficient on the MCA reading assessment

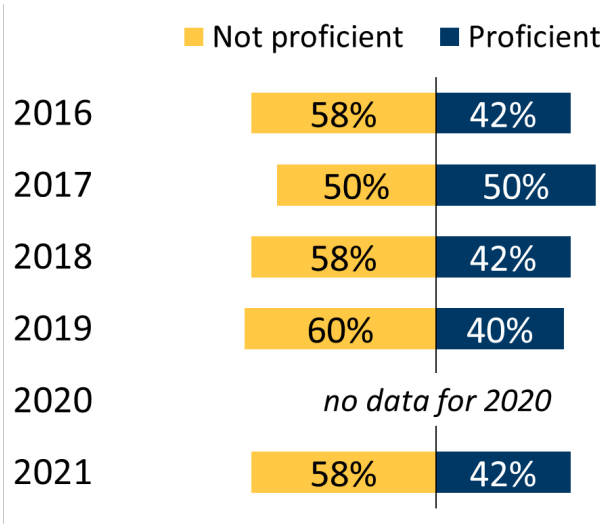


Figure 17. Percentage of **all students who receive special education services** who are proficient and not proficient on the MCA reading assessment

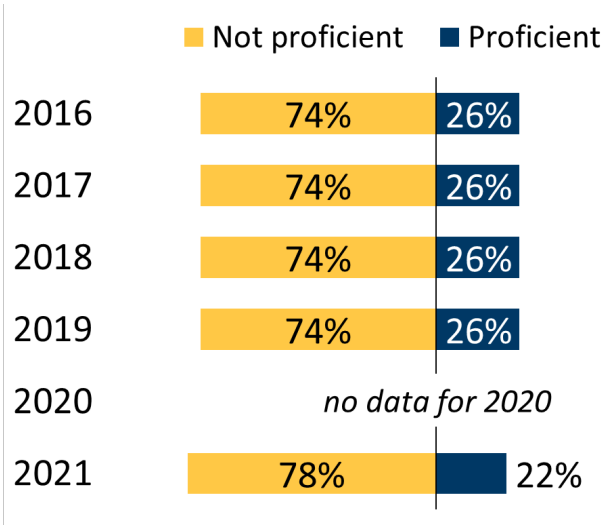
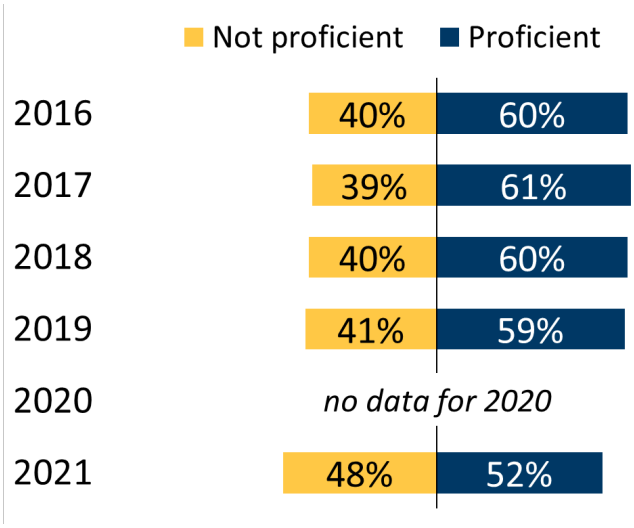


Figure 18. Percentage of **all students in Minnesota** who are proficient and not proficient on the MCA reading assessment



Among students who are BVI, not every grade level experienced the same increases in MCA reading assessment proficiency from 2019 to 2021. Fifth and 6th grade declined from 51 percent to 33 percent, while grades 3, 4, 7, 8, and 10 all had increases (Figure 19 and Figure 20).

Figure 19. Percentage of students who are BVI who are proficient on the MCA reading assessment, grades 3–5

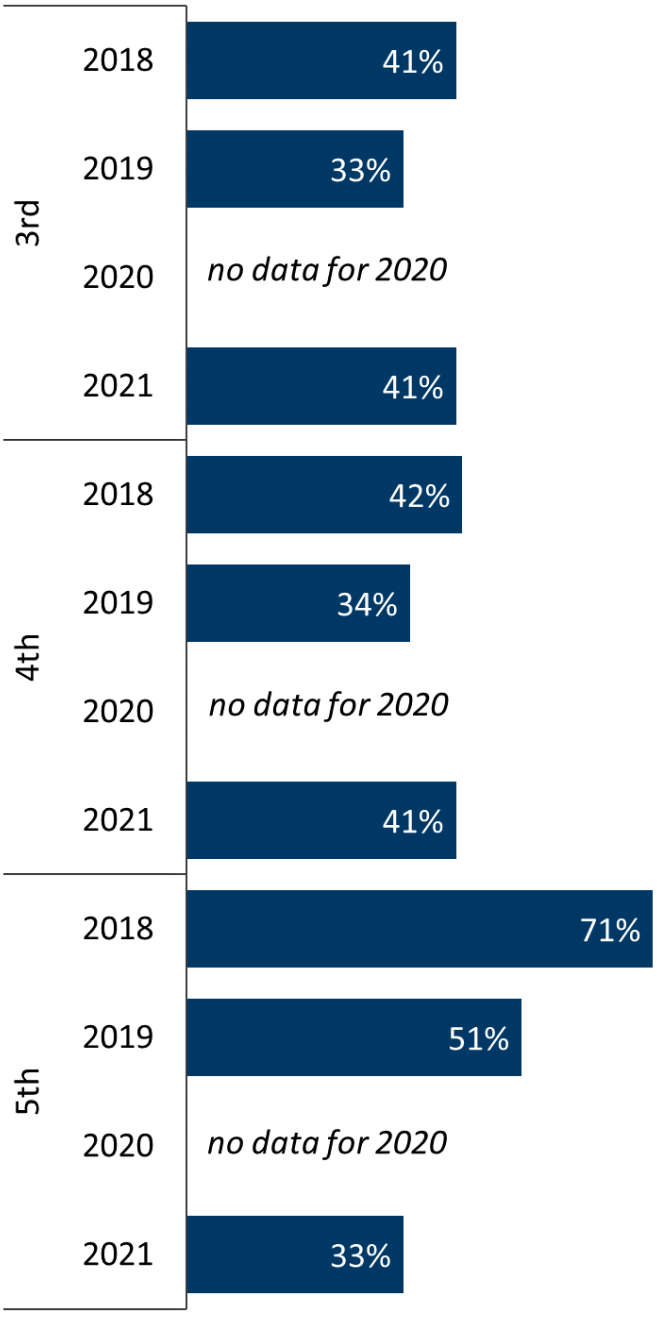
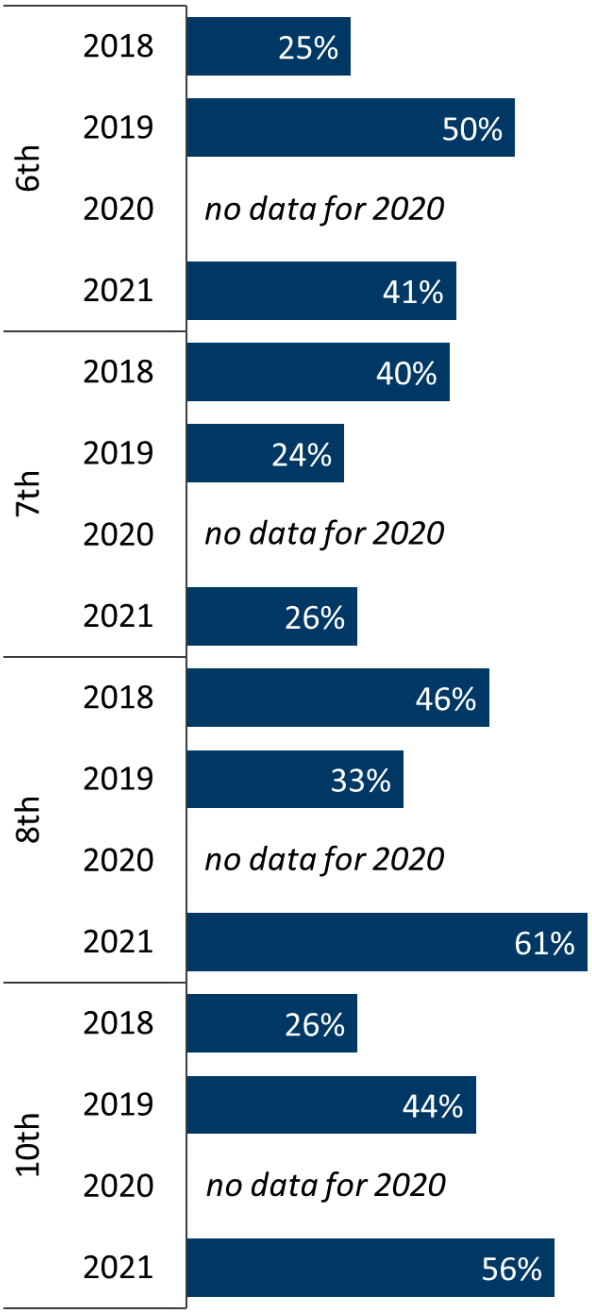


Figure 20. Percentage of students who are BVI who are proficient on the MCA reading assessment, grades 6–10



MTAS Reading

The percentage of students who are BVI who were proficient increased on the MTAS reading assessment, an adapted version of the MCA for students with significant disabilities, from 82 percent in 2019 to 85 percent in

2021 (Figure 21), while the proficient rate on the MTAS reading assessment for all students who receive special education services declined one percentage point (Figure 22).

Figure 21. Percentage of **students who are BVI** who are proficient and not proficient on the MTAS reading assessment

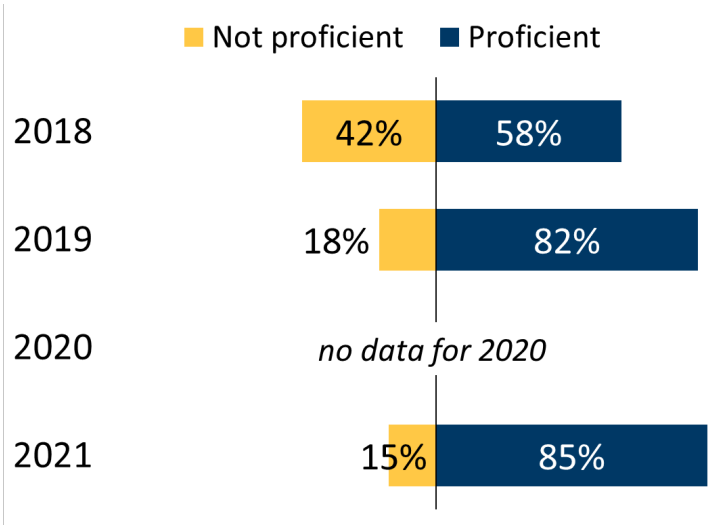
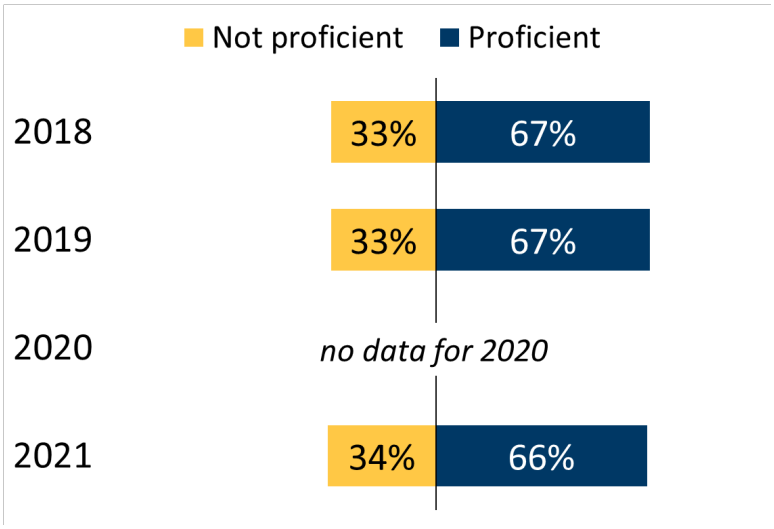


Figure 22. Percentage of **all students who receive special education services** who are proficient and not proficient on the MTAS reading assessment



Regional Assessment Data Trends

Region 7

Figure 23. Shaded map of Region 7

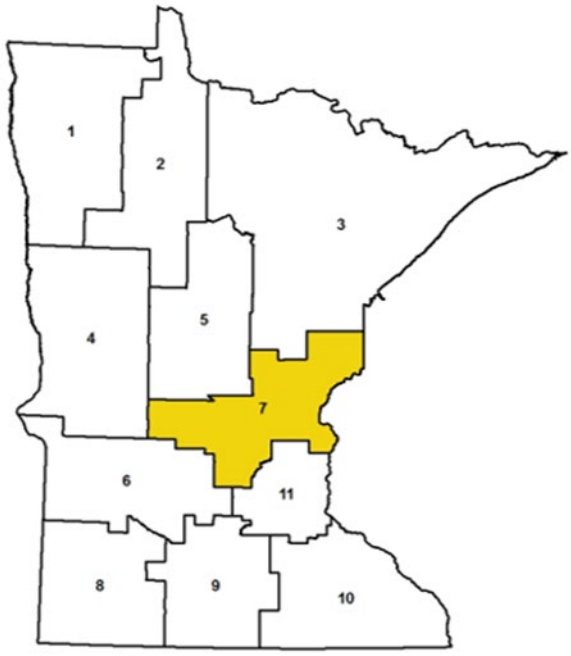


Table 3 includes the number of K–12 students enrolled in Region 7 from 2017–18 to 2020–21. Enrollment increased each year during the period. Data from years prior to 2017–18 had been combined with Region 5.

Table 3. Number of BVI students enrolled in Region 7 by year, 2017–18 to 2020–21

Year	BVI enrolled
2017–18	52
2018–19	56
2019–20	61
2020–21	62

MCA Math

Students in Region 7 who are BVI increased their math proficiency rate on the MCA from 2019 to 2021, from 23 percent in 2019 to 40 percent in 2021 (Figure 24). The MCA math proficiency rates for students in Region 7 who are BVI are higher than for all students who receive special education services (Figure 25), but lower than all students in the region (Figure 27). Additionally, the math proficiency scores for all students in Region 7 and all students in Region 7 who receive special education services decreased from 2019 to 2021.

Figure 24. Percentage of **students in Region 7 who are BVI** who are proficient and not proficient on the MCA math assessment

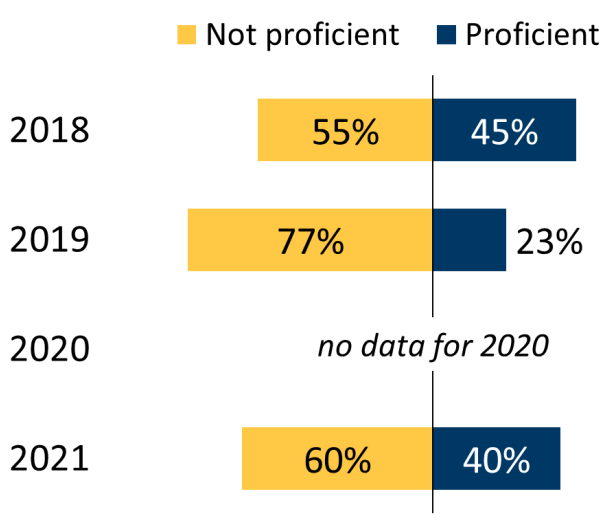


Figure 25. Percentage of **all students in Region 7 who receive special education services** who are proficient and not proficient on the MCA math assessment

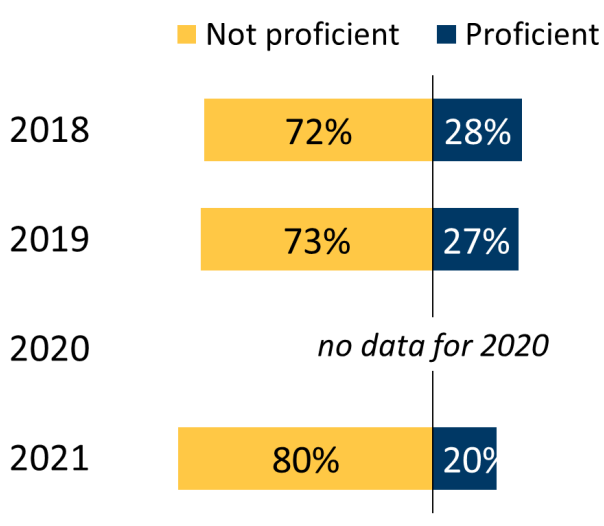
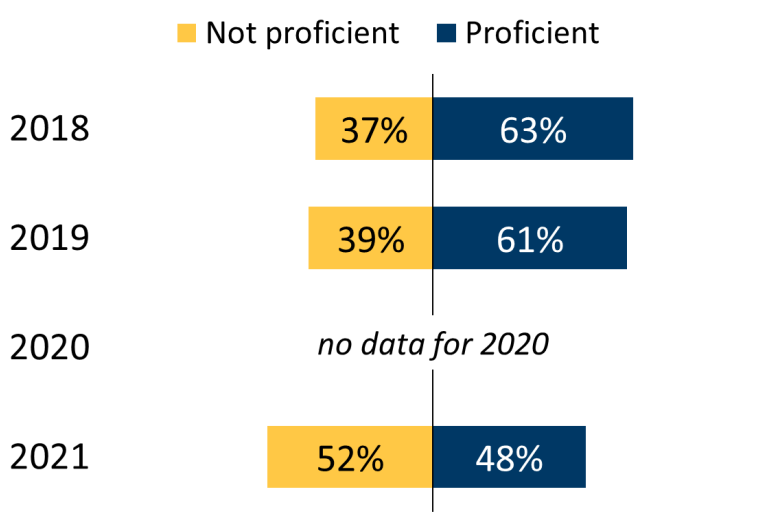


Figure 26. Percentage of **all students in Region 7** who are proficient and not proficient on the MCA math assessment



MCA Reading

Like the MCA math assessment, reading proficiency, as measured by the MCA reading assessment, increased for students in Region 7 who are BVI, from 36 percent in 2019 to 56 percent in 2021 (Figure 27). Meanwhile, proficiency rates on the MCA reading assessment for all students in Region 7 (Figure 29) and all students in Region 7 who receive special education services declined (Figure 28).

Figure 27. Percentage of **students in Region 7 who are BVI** who are proficient and not proficient on the MCA reading assessment

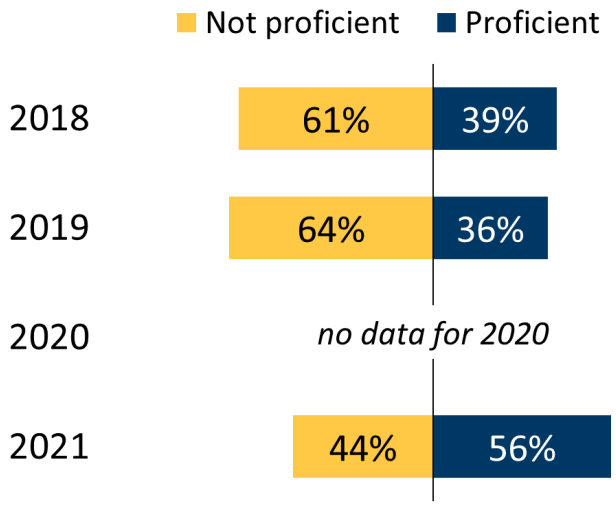


Figure 28. Percentage of **all students in Region 7 who receive special education services** who are proficient and not proficient on the MCA reading assessment

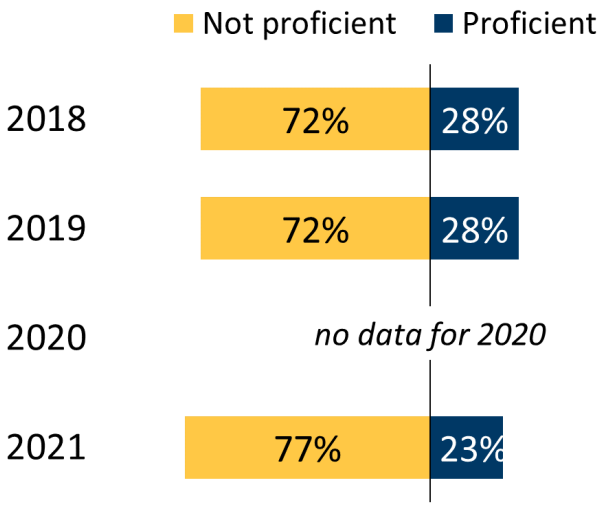
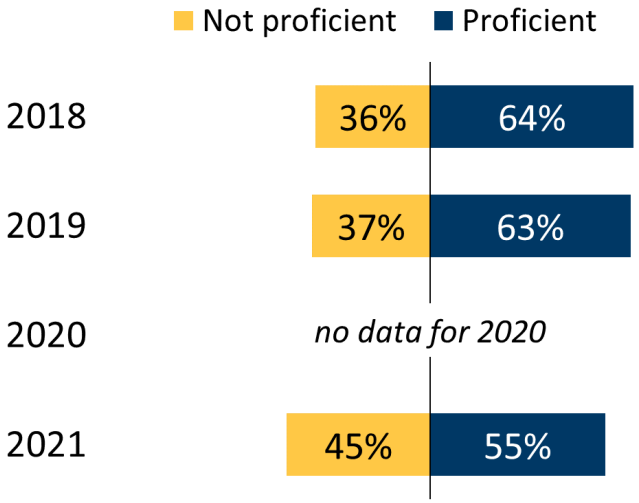


Figure 29. Percentage of **all students in Region 7** who are proficient and not proficient on the MCA reading assessment



Region 10

Figure 30. Shaded map of Region 10

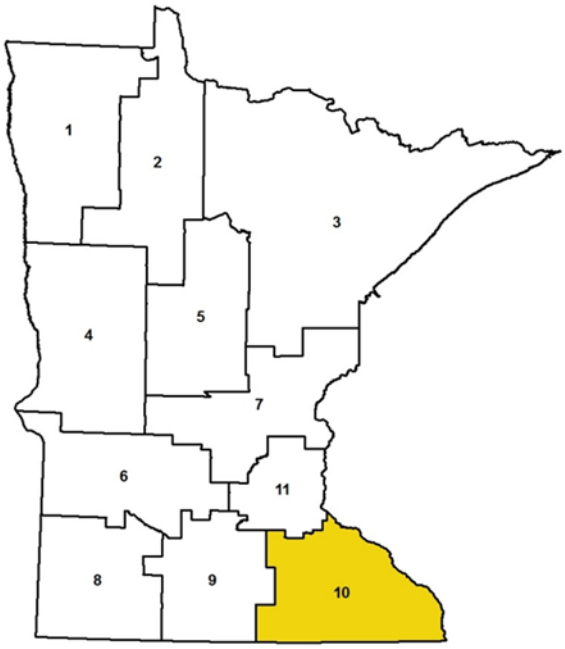


Table 4 includes the number of K–12 students enrolled in Region 10 from 2012–13 to 2020–21. The number of students who are BVI in Region 10 increased overall during the period.

Table 4. Number of BVI students enrolled in Region 10 by year, 2012–13 to 2020–21

Year	BVI enrolled
2012–13	50
2013–14	56
2014–15	60
2015–16	65
2016–17	71
2017–18	72
2018–19	66
2019–20	70
2020–21	77

MCA Math

MCA math proficiency rates for students in Region 10 who are BVI declined year-to-year from 2018 to 2021 (Figure 31). Fourteen percent of students who are BVI were proficient on the math MCA in 2021. Although

students who are BVI have similar proficiency rates to all students who receive special education services (Figure 32), theirs are lower than those of all students in Region 10 (Figure 34).

Figure 31. Percentage of **students in Region 10 who are BVI** who are proficient and not proficient on the MCA math assessment

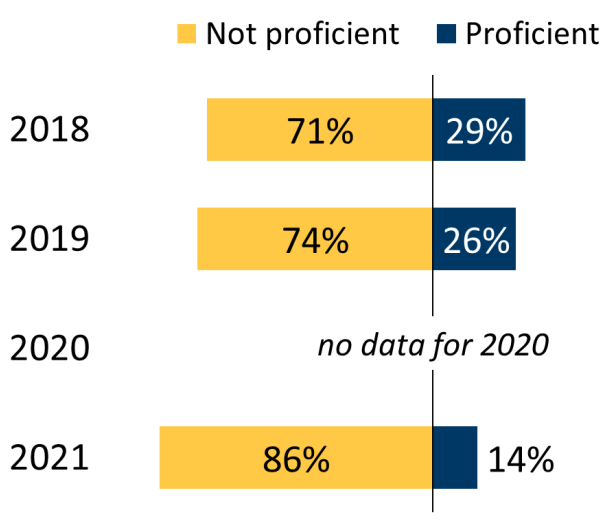


Figure 32. Percentage of **all students in Region 10 who receive special education services** who are proficient and not proficient on the MCA math assessment

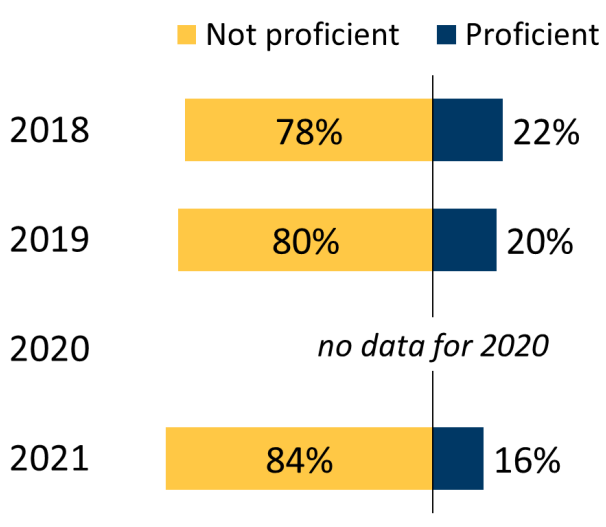
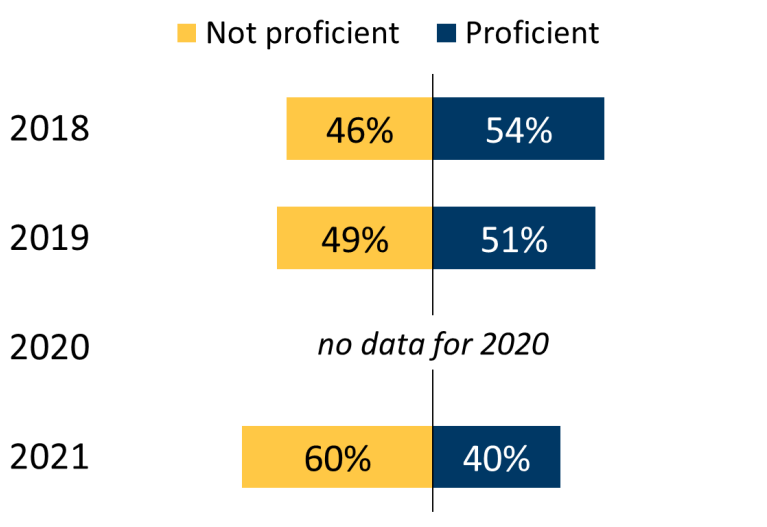


Figure 33. Percentage of **all students in Region 10 who are proficient and not proficient** on the MCA math assessment



MCA Reading

The MCA reading proficiency rate for students in Region 10 who are BVI increased from 21 percent in 2019 to 38 percent in 2021 (Figure 34). Meanwhile, the MCA reading proficiency rate for all students who receive special education services and all students in Region 10 declined (Figure 35 and Figure 36). Students who are BVI in Region 10 have higher proficiency rates than those of all students in the region who receive special education services, but lower than those of all students.

Figure 34. Percentage of **students in Region 10 who are BVI** who are proficient and not proficient on the MCA reading assessment

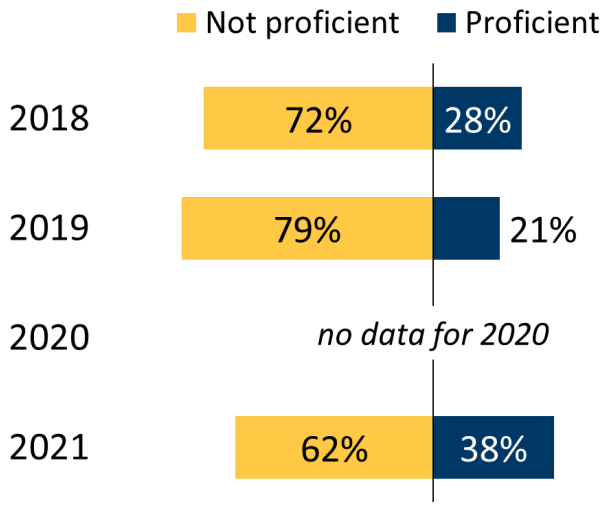


Figure 35. Percentage of **all students in Region 10 who receive special education services** who are proficient and not proficient on the MCA reading assessment

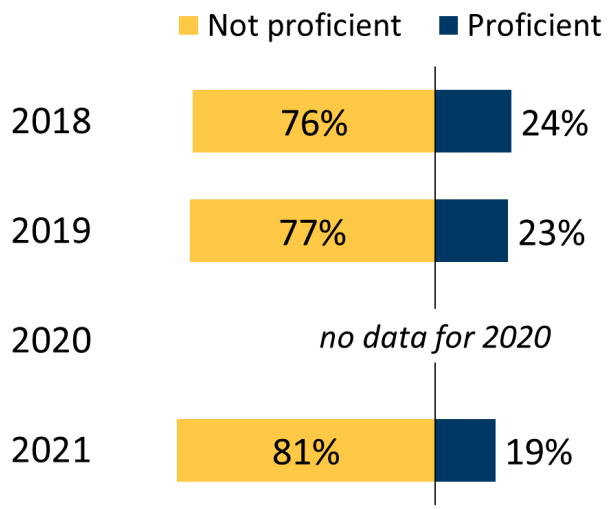
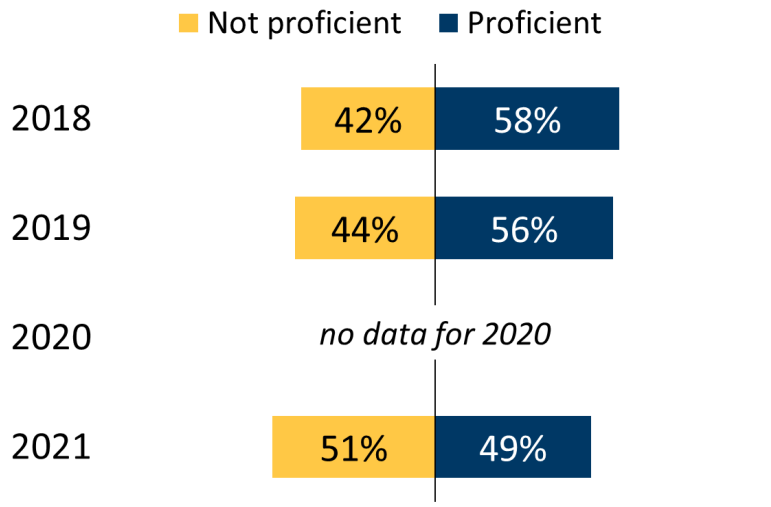


Figure 36. Percentage of **all students in Region 10** who are proficient and not proficient on the MCA reading assessment



Region 11

Figure 37. Shaded map of Region 11

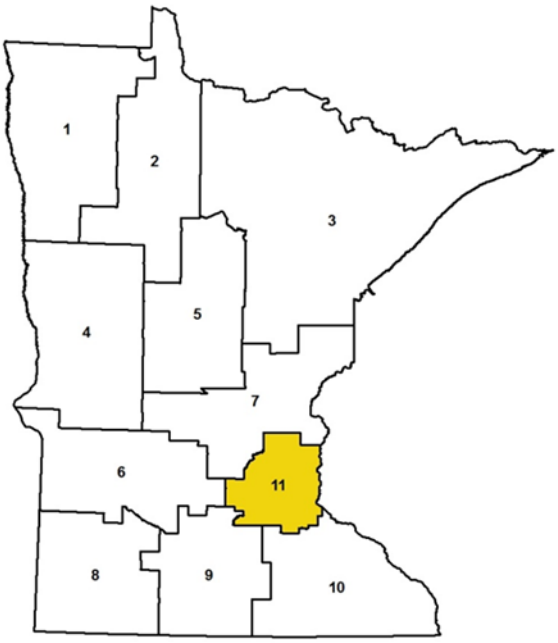


Table 5 includes the number of K–12 students enrolled in Region 11 from 2012–13 to 2020–21. The number of students who are BVI in Region 11 increased overall during the period.

Table 5. Number of BVI students enrolled in Region 11 by year, 2012–13 to 2020–21

Year	BVI enrolled
2012–13	157
2013–14	163
2014–15	173
2015–16	176
2016–17	182
2017–18	186
2018–19	194
2019–20	202
2020–21	195

MCA Math

The MCA math proficiency rate for students in Region 11 who are BVI declined from 37 percent in 2019 to 31 percent in 2021 (Figure 38). Math proficiency also declined for all students who receive special education

services and all students in Region 11 (Figure 39 and Figure 40). Compared with all students who receive special education services, students in Region 11 who are BVI have had higher rates of proficiency on the math MCA. However, their proficiency rates are lower than for all students.

Figure 38. Percentage of **students in Region 11 who are BVI** who are proficient and not proficient on the MCA math assessment

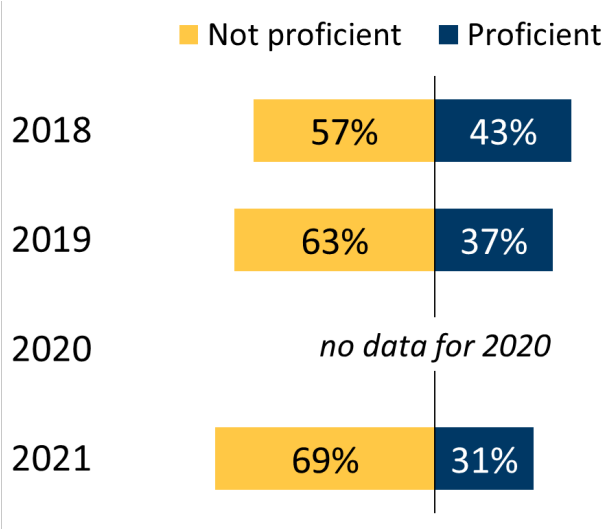


Figure 39. Percentage of **all students in Region 11 who receive special education services** who are proficient and not proficient on the MCA math assessment

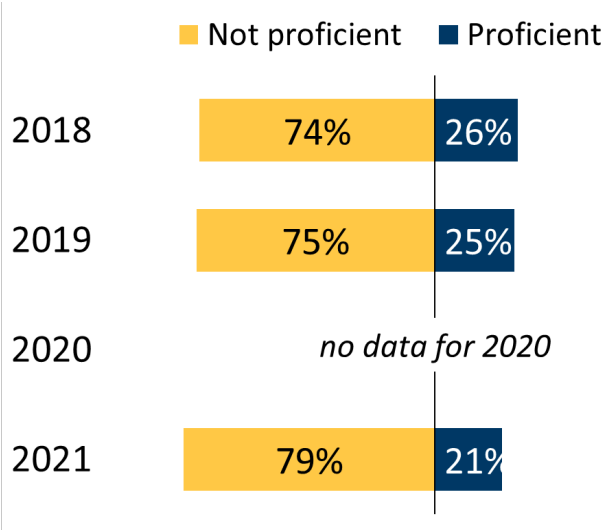
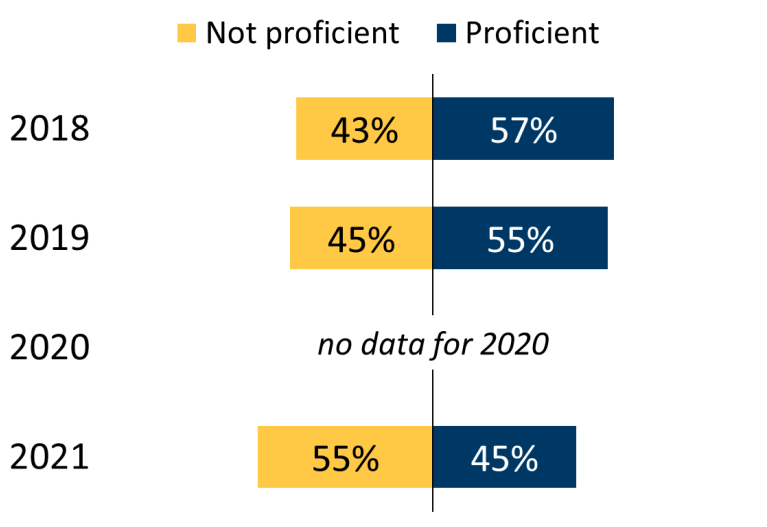


Figure 40. Percentage of **all students in Region 11** who are proficient and not proficient on the MCA math assessment



MCA Reading

Similar to the math MCA assessment, proficiency rates on the MCA reading assessment declined from 2019 to 2021 for students who are BVI Figure 41), all students in the region receiving special education services (Figure 42), and all students in Region 11 (Figure 43). Like math proficiency, all students who receive special education services in Region 11 have lower reading proficiency rates on the MCA than those who are BVI. Also, reading proficiency rates for students who are BVI are lower than those for all students.

Figure 41. Percentage of **students in Region 11 who are BVI** who are proficient and not proficient on the MCA reading assessment

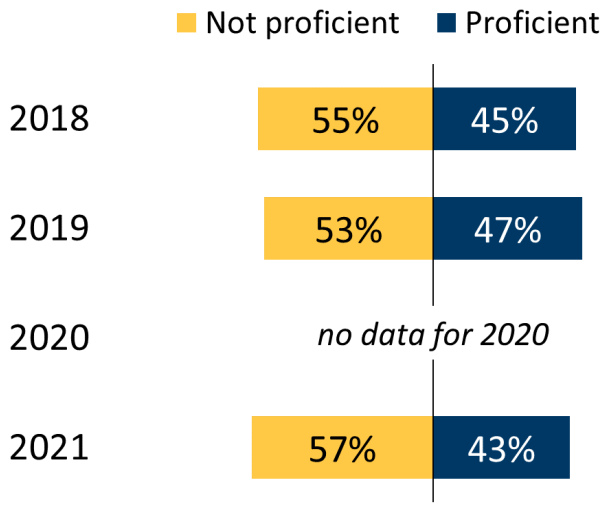


Figure 42. Percentage of **all students in Region 11 who receive special education services** who are proficient and not proficient on the MCA reading assessment

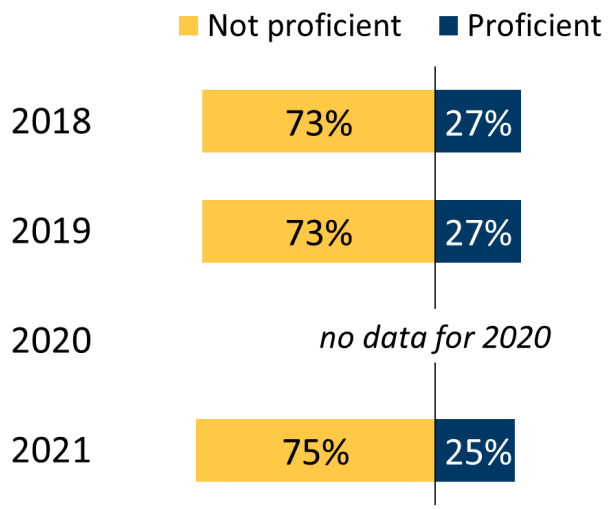
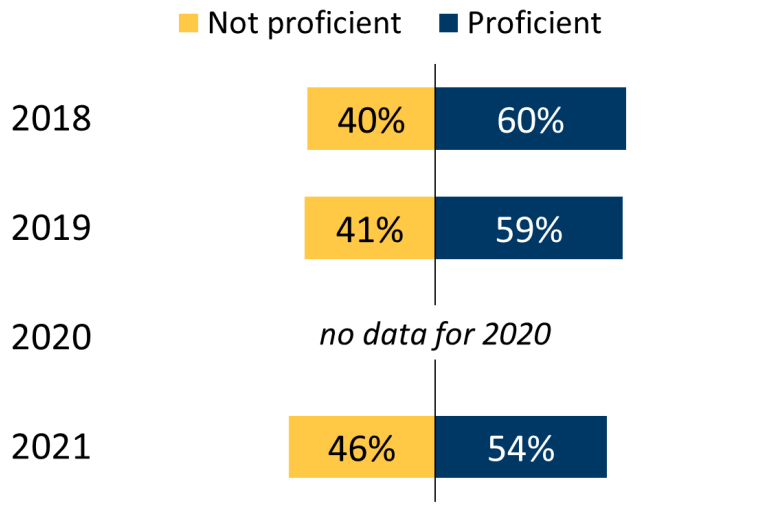


Figure 43. Percentage of **all students in Region 11** who are proficient and not proficient on the MCA reading assessment



Graduation Rates

The most recent graduation rate data available at the time of writing this report is from 2020, which includes four-year graduation rate data for the class of 2020 and seven-year graduation rate data for the class of 2017.

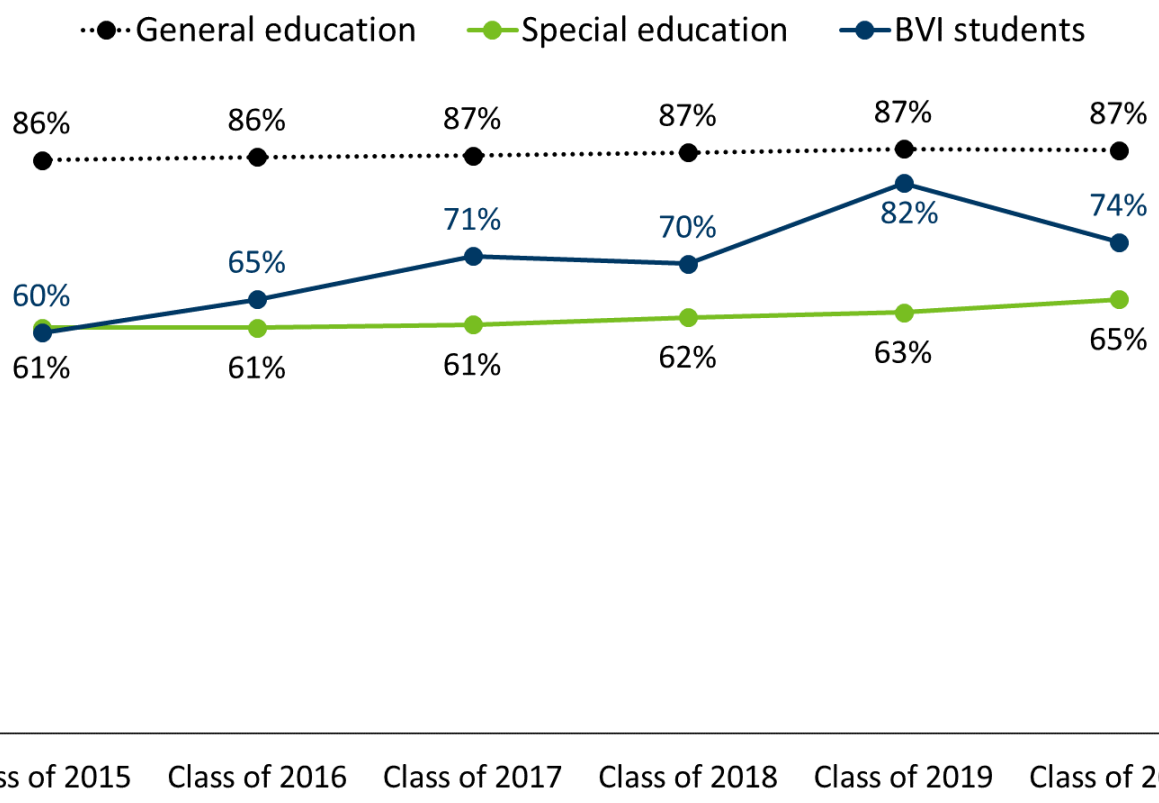
Students are counted in the graduation rate as BVI only if their primary disability category was BVI in their last known enrollment record found by MDE.

About 30 students who are BVI are included in any statewide four-year graduation rate calculation. Since the size of the group is so small, just a few students' outcomes can change the graduation rate significantly from year to year. Therefore, the graduation rate trend over time for BVI students may fluctuate.

The four-year graduation rate[14] for students who are BVI declined from the class of 2019 to the class of 2020 (Figure 44). Students who are BVI are a smaller group within the group of all students who receive special education services, but students who are BVI have consistently higher four-year graduation rates than all students in special education. The four-year graduation rate for students who are BVI is lower than for general education students.

[14] From the MDE Report Card description of how graduation rates are calculated: "Starting in 2012, Minnesota began using the federally required 'adjusted cohort graduation rate' model. This model follows students in a group, or a 'cohort,' throughout high school and determines if they graduate within four, five, six, or seven years. The four-year graduation rate shows the number of students graduating from high school within four years after entering grade nine. To determine this rate, we identify all students who entered ninth grade four years ago. The next step is to add in any students who moved into the school and subtract out any students who moved away. This adjusted number represents the total number of students who are eligible to graduate. The actual graduation rate is determined by dividing the total number of students who actually graduated by the number of those eligible to graduate."

Figure 44. Four-year graduation rate comparison



There are four possible outcomes for a student with a graduation cohort:

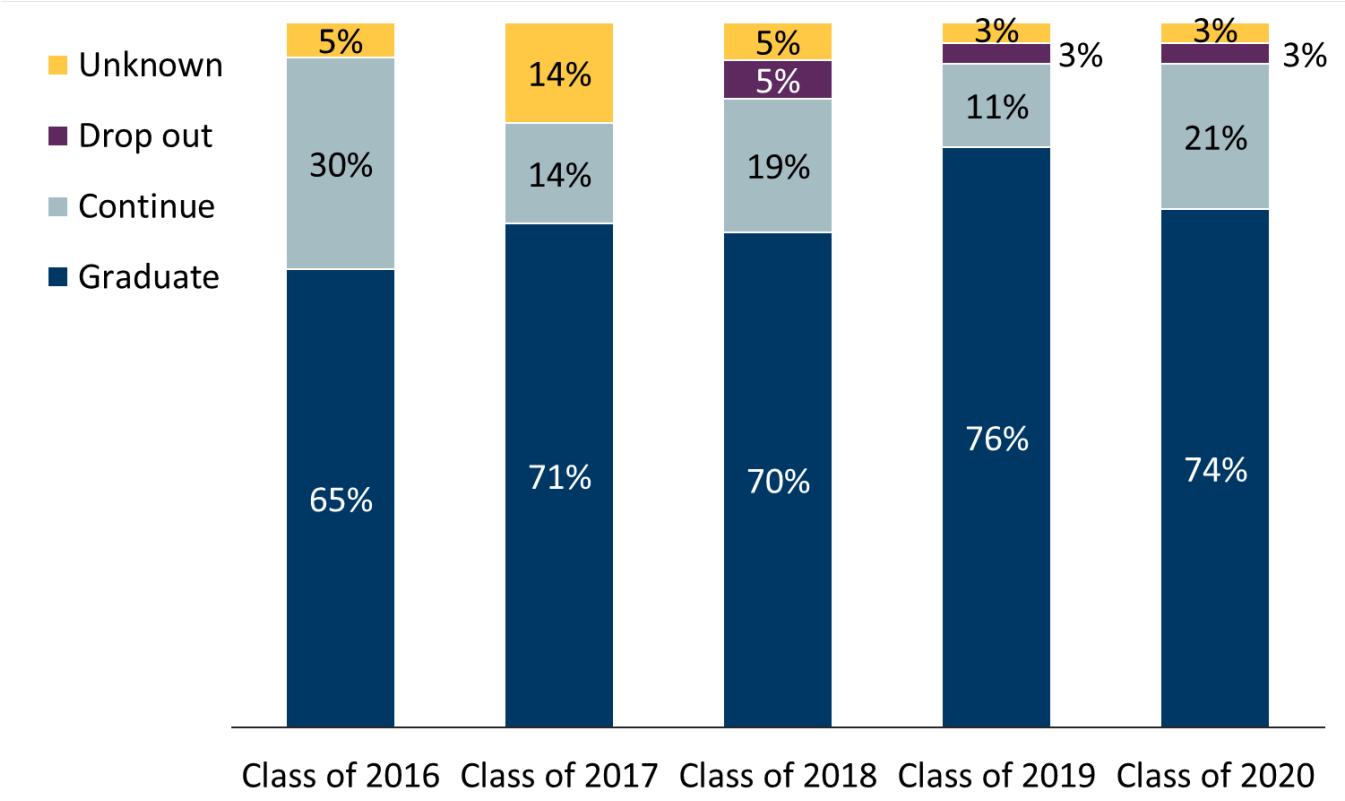
- **Graduate** – the student received a diploma.
- **Continue** – the student is found to be enrolled in public education in Minnesota the next school year; if a student enrolls in a transition program, or has a second senior year, they are counted as "continuing."
- **Drop out** – the student's last confirmed code indicating why they unenrolled from school is a "drop out" code; this includes students who are automatically counted, by law, as dropouts if they do not attend school for at least 15 consecutive days.
- **Unknown** – the student's last enrollment or unenrollment code cannot be verified by MDE; for example, a school may report to MDE that a student transferred, but if MDE cannot find an enrollment record anywhere else in the state, then that student is counted as "unknown."

Some students remain enrolled in school until they are 21 years old, as allowed by law, including students who are eligible to receive special education services and who enroll in transition programs. As noted above, these students are in the "continue" category.

Figure 45 provides a breakdown of the four outcomes within the four-year graduation rate for students who are BVI. The unknown and dropout rates are relatively low and have not changed significantly in the last few years.

Differences in the graduation rate from year to year can instead be attributed to larger or smaller percentages of students who are BVI continuing in school beyond four years.

Figure 45. Four-year graduation outcomes for students who are BVI, class of 2016 to class of 2020



As noted above, students who continue their education after four years of high school are not captured in the four-year graduation rate, even if they technically have enough credits to graduate in four years.[15] They are more likely to be captured in the seven-year graduation rate.[16]

[15] Schools cannot receive funding for the education of a student if that student has already graduated. So, if a student who has enough credits, or who met their Individualized Education Program (IEP) goals for graduation, received a diploma from their high school at the end of four years, they would not be eligible to enroll in a transition program.

[16] Some students, depending on how old they are when they start high school, may be in high school or a transition program for more than seven years. For example, if a student in the class of 2016 is 17 years old at the end of four years of high school and enrolls in a transition program until they turn 21, they may stay in school until 2020 and would not be

The seven-year graduation rate[17] for students who are BVI rose to 95 percent for the class of 2016 and remained there for the class of 2017 (Figure 46). The seven-year rate for students who are BVI has been consistently higher than the seven-year rate for all students who receive special education services, and it is now higher than the rate for general education students.

Figure 46. Seven-year graduation rate comparison

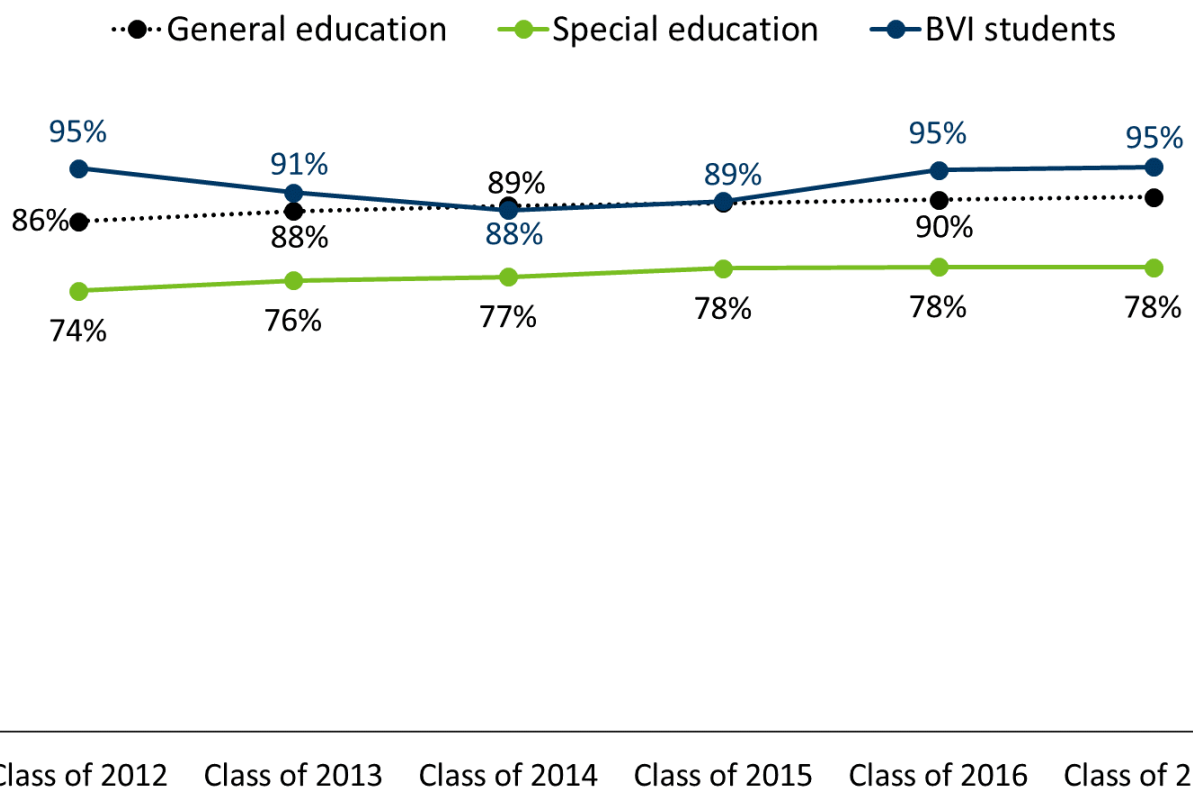


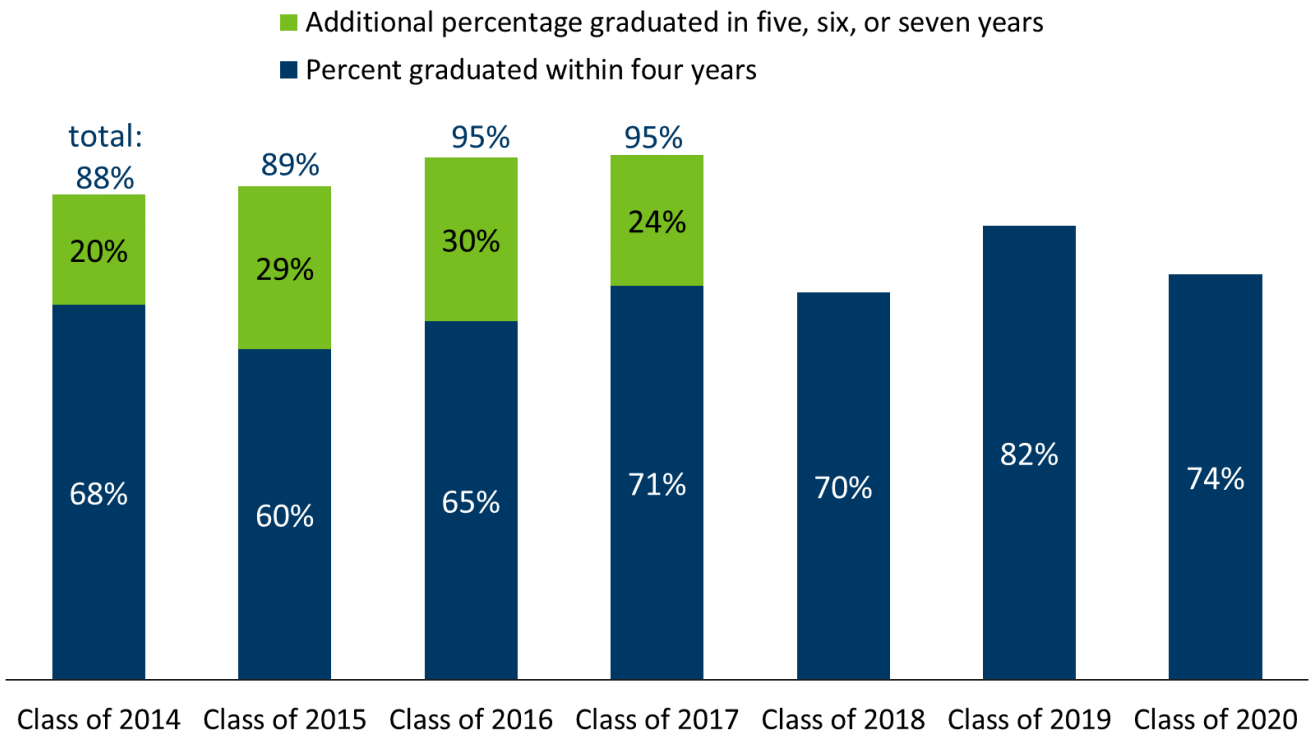
Figure 47 combines the four-year and seven-year graduation rates for students who are BVI, from the class of 2014 through the class of 2020. Seven-year graduation rates are not yet available for the class of 2018 through the class of 2020. Even in years where the four-year graduation rate was lower, the additional percentage who

counted as graduating in the seven-year graduation rate of the class of 2016, since they are continuing in school beyond seven years.

[17] From the MDE Report Card description of how graduation rates are calculated: "The five-, six- and seven-year graduation rates show the number of students who graduated in four years added to the number of students who took additional time to earn sufficient credits or meet other graduation requirements and to receive a high school diploma from their district. These three extended year graduation rates are calculated in the same way as the four-year rate but instead determine the percentage of students graduating in five, six and seven years."

graduated within five, six, or seven years has kept the seven-year graduation rate for students who are BVI almost at or above 90 percent for the last several years.

Figure 47. Four-year and seven-year graduation rates for students who are BVI, class of 2014 to class of 2020



Postsecondary Outcomes

In March 2021, the Office of Higher Education (OHE) released a report titled Pathways to College and Career for Students Identifying as Deaf, Hard of Hearing, or Deaf/Blind (Pathways), which was completed through a partnership between OHE and the Minnesota Statewide Longitudinal Education Data System (SLEDS).

In the study, five cohorts (or groupings) were created to increase the number of students included for comparison over time. In additional figures, BVI students were used as a comparison group. Relevant information for BVI students from the Pathways report is included in this section, specifically data from graphs on pages 16, 17 and 19.

Figure 48 shows the average ACT composite scores for students in Minnesota by primary disability category. The highest possible composite score on the ACT is a 36. Students with no reported disability had the highest average score, at 22.1 points. The average for students whose primary disability is BVI was lower, at 19.6 points.

For context, among the admitted freshman applicants to the University of Minnesota Twin Cities for fall 2021, the middle 50 percent of students scored between 28 and 33 on the ACT.

Figure 48. Average ACT composite scores for students in Minnesota by primary disability

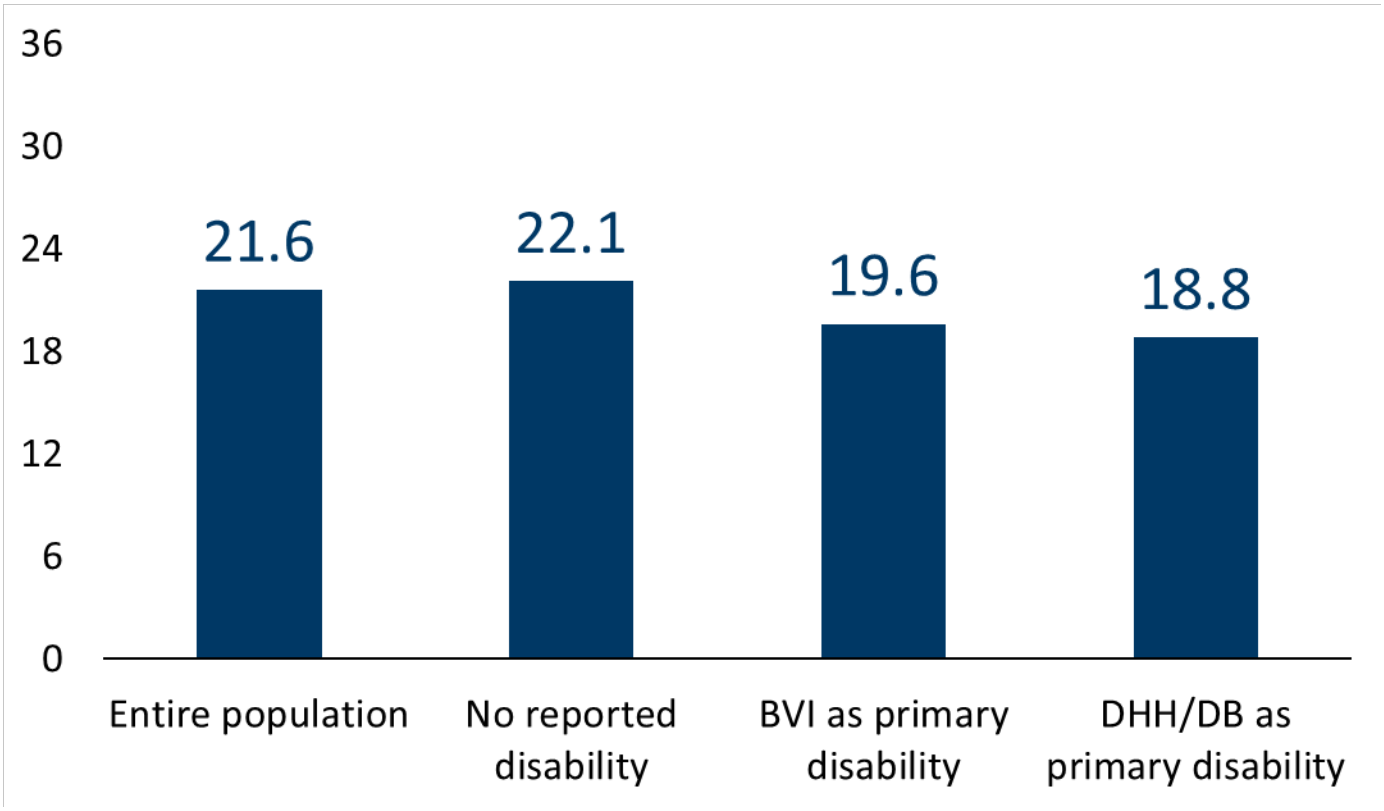


Figure 49 compares percentage of high school graduates who enrolled in a post-secondary institution after high school. Cohort 3 includes students who entered 9th grade from 2010 to 2012, and Cohort 4 includes students who entered 9th grade from 2013 to 2015. Students who are BVI had a lower rate of postsecondary enrollment than all students, as well as students with no reported disability.

Figure 49. Percentage of high school graduates in Minnesota that enrolled at a postsecondary institution by primary disability

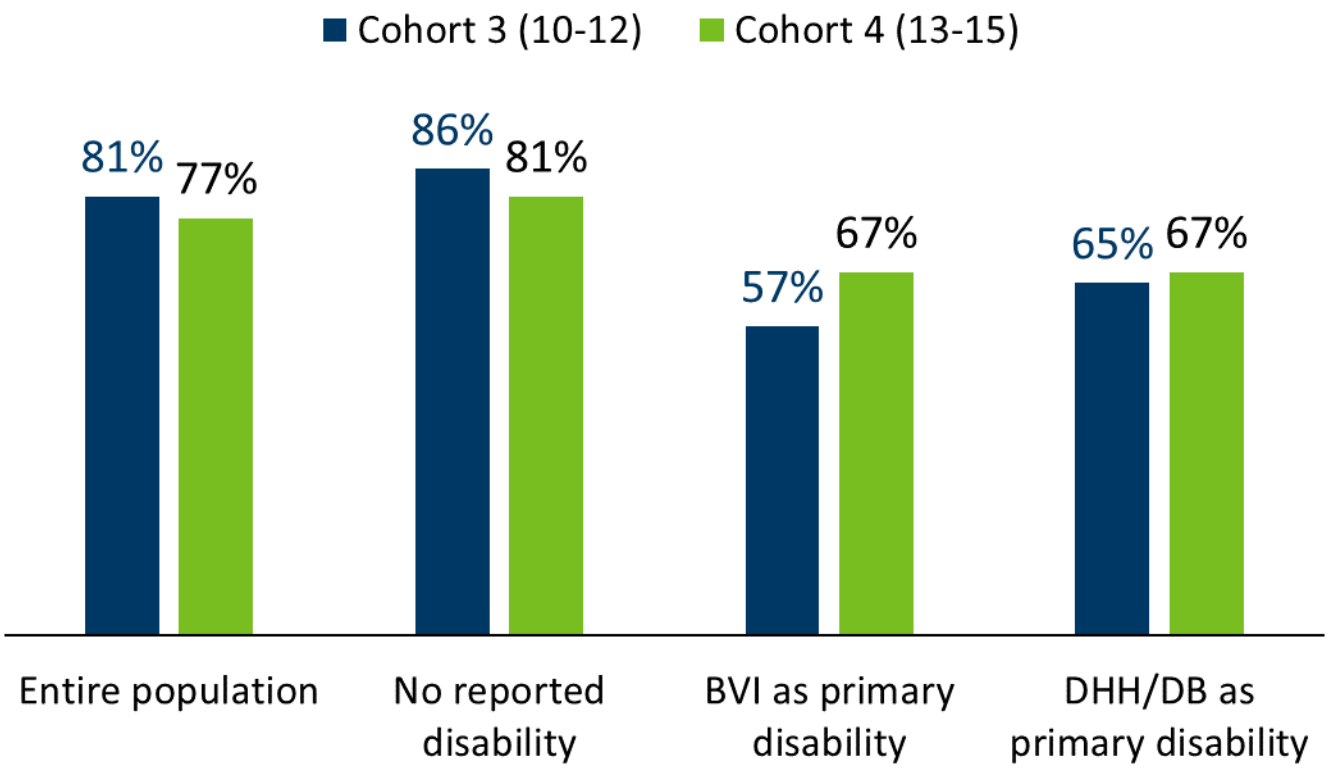
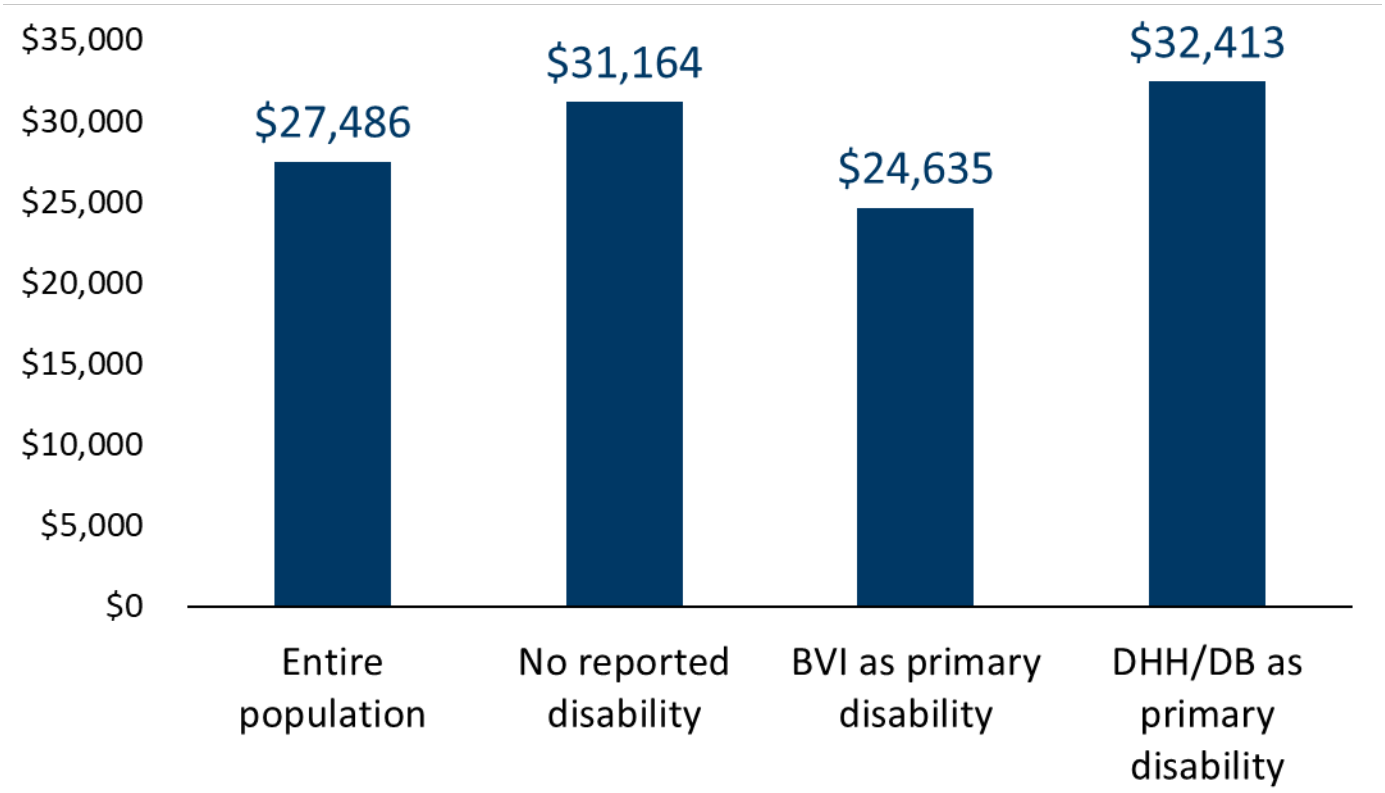


Figure 50 compares the average income of students in Minnesota by 10 years after exiting high school. Students who are BVI have a lower average income after 10 years than all students and students with no primary disability.

Figure 50. Average income of the students in Minnesota employed 10 years after exit from high school by primary disability



Conclusion

The 2019–20 and 2020–21 school years were unprecedented because of the COVID-19 pandemic, and the impacts on students who are BVI, their families and educators were profound. Local educational agencies, TBVIs and COMS experienced similar challenges and successes and worked to create safe engagement strategies with students and their families and safe learning options such as virtual braille and virtual orientation and mobility (O&M) resources.

Based on the data available, students who were BVI and were assessed by MCA testing for math or reading scored higher than their peers in special education, but not at the same level as their peers in general education. In order to effectively and safely support the students in both online and in-person educational settings while also improving proficiency levels in reading and math and increase graduation rates, the BVI Advisory Committee believes the most effective way to increase outcomes for students who are BVI is to:

- **Increase access to accessible educational materials.**
    - Provide LEAs with procurement guidance to assist curriculum committees with the purchase of accessible software and digital learning platforms.
    - Continue using the Minnesota Access Center (MAC) and Open Office Hours (OOH) to provide platforms for open dialogue around equitable access and resources to include recorded professional development and research-based best practice around Universal Design for Learning, assistive technology, and accessibility.
- **Address shortages in educated and licensed TBVI and COMS.**
    - Fund the creation of a university program to educate TBVI and COMS to address the emergency-level need for qualified instructors of students who are BVI.
    - The BVI advisory committee continues to strongly encourage LEAs to expand recruitment efforts to fill open TBVI and COMS positions from within the school districts and from out of state.
- **Provide time needed to teach the expanded core curriculum.**
    - Set aside time for school-based student teams to meet to update ECC progress, communication, and learning plans of students who are BVI.
    - Share ECC activities and "how-to" resources with families and IEP team members on a regular basis to increase awareness of ECC topics and student involvement.

Thank you for taking the time to read and consider this report. Please feel free to contact Kristin Oien (kristin.oien@state.mn.us) with questions.

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Appendix A: Guidelines for Determining Workloads for TBVI and COMS

Note: This document was created from a variety of online sources, including the "APSEA Guidelines for Determining Caseload Size for Teachers of Students with Visual Impairments," "Connecticut Plan for Determining Caseload Size for Teachers of the Visually Impaired," and "Michigan State Severity of Needs Rating Scale."

Introduction

Children and young adults with visual impairments served by Minnesota's TBVI and COMS are an extremely heterogeneous group. They vary in age (birth to 21 years), degree of vision loss, grade placement, cognitive ability, presence of additional disabilities, and degree of independence and motivation. TBVI and COMS must develop schedules to accommodate an array of responsibilities, such as direct instruction of compensatory skills; adaptation of materials; assessment; programming; planning; consultation with parents, teachers, and medical personnel; creating, ordering, and distributing adapted materials; teaching orientation and mobility skills; intersection analysis; and bus route planning (COMS only).

In addition, these professionals must travel from school to school. When assigning caseloads to itinerant teachers and mobility specialists, their supervisors must attend to all these considerations along with those associated with environmental factors (e.g., weather conditions, road conditions, distance between schools, school policies, and practices relevant to inclusion). The inclusion of these factors means the following suggested service levels function as guidelines in developing TBVI or COMS workloads.

Rating Scale: Based on a student's IEP, a rating of 0 to 4 is assigned in each of the following areas: medical, reading medium, compensatory skill needs, environmental/instructional adjustments, O&M and travel time. The total points offer a baseline in the amount of vision- and mobility-related service that the TBVI or COMS should provide.

Once the rating scale has been applied to each student on the TBVI's and or COMS's caseload, the following applies:

- 2.5 points = 1 hour of teacher time per week.
- Half-time teacher: no more than 45 total points.
- Full-time teacher: no more than 90 total points.

Medical

0 Points:

- Visual acuity between 20/20 and 20/60 with full visual field
- No significant pathology

1 Point:

- Possible progressive disease, but one eye still within normal limits

- Mild nystagmus
- Bilateral strabismus, which cannot be corrected: pre/post eye surgery
- Other severe temporary eye treatments, such as patching; significant bilateral field loss

2 Points:

- Acuity 20/70 to 20/200 in best eye after correction
- A visual field of more than 20 degrees
- Cortical visual impairment

3 Points:

- Acuity 20/200 to object perception in best eye after correction
- A visual field of 20 degrees or less

4 Points:

- Object perception to total blindness
- A visual field of 10 degrees or less

Primary Reading Medium

0 Points:

- Regular print with no modifications
- Nonreader
- Uncontracted braille reader mastery level

1 Point: (one to five times per year)

- Regular print with occasional magnification (i.e., video magnifier, handheld magnification) in addition to correction

2 Points: (one to two times per month)

- Regular print with consistent use of magnification in addition to correction
- Contracted braille reader mastery level
- Audio or large print

3 Points: (one to two times per week)

- Uncontracted braille reader instructional level

4 Points: (three or more times per week)

- Contracted braille reader instructional level

Compensatory Needs and Adaptive or Developmental Skills Instruction

0 Points:

- Needs no compensatory skills instruction

1 Point: (one to five times per year)

- Needs compensatory skills instruction in fine and gross motor areas, physical education and recreational activities, basic concepts, developmental and sensory awareness, augmentative communication devices, and/or functional life skills for supported living and work environment

2 Points: (one to two times per month)

- Needs compensatory skill consultation and/or instruction in use of remaining vision and low-vision aids, calculator usage, pre-vocational skills, adaptive equipment, and/or assistive technology
- Auditory computer user, mastery level

3 Points: (one to two times per week)

- Needs compensatory skill consultation and/or instruction in computer and keyboarding, map reading, geographical and science concepts, and/or career and vocational training
- Auditory computer user, instructional level

4 Points: (three or more times per week)

- Needs compensatory skill instruction in tactual development, abacus, slate and stylus, and/or independent daily living skills
- Auditory computer user, introductory level
- Electronic note taker instruction
- Tactile development: raised line drawing, abacus

Environmental and Instructional Adjustments

0 Points:

- Needs no adaptations of educational materials or presentations

1 Point: (one to five times per year)

- Needs some adapted written materials, special seating, some magnification, and/or adaptive lighting
- Consultation regarding best vision use with assistive technology and/or positioning

2 Points: (one to two times per month)

- Classroom teacher needs some consultation and support in materials modifications
- Needs some adaptation of maps and graphs, frequent magnification

3 Points: (one to two times per week)

- Needs minimal tactile modifications and enlargement, adaptation of maps and graphs, pictures, and braille production
- Tactile communication and calendar box system

4 Points: (three or more times per week)

- Needs all curricular materials in braille and/or tactile format

Orientation and Mobility (O&M)

0 Points:

- Needs no further O&M instruction

1 Point: (one to five times per year)

- Needs O&M monitoring and consultation
- Orientation to new environments
- On campus routes and mobility

2 Points: (one to two times per month)

- Needs O&M supportive instruction
- O&M concept instruction
- Wheelchair mobility

3 Points: (one to two times per week)

- Needs intensive O&M instruction
- Emerging O&M and white cane skills
- White cane for identification purposes, low-vision safe street crossing skills
- Beginning bus travel, exploring taxi, paratransit use

4 Points: (three or more times per week)

- Needs comprehensive O&M instruction
- Nonvisual traveler learning to become a safe and independent traveler
- Street crossings, bus routes, route planning, business travel

Travel Time

Travel points measure distance in miles (one way) from TBVI and COMS office and portal to student instructional site (home, school, business, or neighborhood):

0 Points:

- Full-time resource room based at school
- Students within a 0–10-mile radius

1 Point:

- Students within a 10–20-mile radius

2 Points:

- Students within a 20–30-mile radius

3 Points:

- Students within a 30–40-mile radius

4 Points:

- Students within a 40-plus-mile radius

Interpretations:

Once the rating scale has been applied to each student on the TBVI's and or COMS's caseload, the following applies:

- 2.5 points = 1 hour of teacher time per week
- Half-time teacher: no more than 45 total points
- Full-time teacher: no more than 90 total points

There should not be more than three academic braille students assigned to one itinerant TBVI.

Figure 51. Workload rating worksheet example

Students	Medical	Primary Access Medium	Compensatory Skill / Adaptive Instructions	Environmental Instructional Adjustments	O&M	Travel Time	Totals
#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#
#	#	#	#	#	#	#	#
Teacher Total: #							

Appendix B: Expanded Core Curriculum

What is the Expanded Core Curriculum?

The term "Expanded Core Curriculum" (ECC) defines concepts and skills that require specialized instruction for students who are blind or visually impaired (BVI). Instruction of the ECC is necessary in order to compensate for the decreased opportunities to learn incidentally by visually observing others. The ECC provides students who are BVI with improved access to the general education core curriculum (arts, science, language arts, social studies, mathematics, physical education, health, career, and technical education and world languages). Students with visual impairments, starting at birth, need instruction in the ECC in order to participate fully in general education. The ECC areas include "(A) needs that result from the visual impairment that enable the student to be involved in and make progress in the general education curriculum; and (B) other educational needs that result from the child's disability as required by IDEA (34 CFR 300.320 (a)(2)(A)(B))." The presence of a visual impairment requires that teachers with specialized expertise thoroughly evaluate and systematically teach the skills listed below. Without specialized instruction, children with vision loss may not be aware of the activities of their peers or acquire other critical information about their surroundings (NASDSE, 1999, p. 70).

ECC Areas:

A. Assistive Technology, Including Optical Devices
B. Career Education and Planning
C. Compensatory Skills
D. Independent Living Skills
E. Orientation and Mobility (O&M)
F. Recreation and Leisure Skills
G. Self-Determination
H. Sensory Efficiency, Including Visual, Tactual, and Auditory Skills
I. Social Interaction Skills

A. Assistive Technology, Including Optical Devices:

"Assistive technology" (AT) is an umbrella term that includes assistive and adaptive tools as well as instructional services that permits students with visual impairments to access the general curriculum, increase literacy options and enhance communication. There are a variety of high- and low-tech assistive technology tools designed specifically for students with visual impairments that require specialized instruction from a TBVI or COMS. These tools and devices include, but are not limited to, electronic braille note takers, video magnifiers, screen reader software, screen enlarging software, hand-held optical devices, slate and stylus, abacus, colored line guides and overlays, white canes, wayfinding, and Global Positioning System (GPS) applications and devices.

B. Career Education and Planning:

Students with visual impairments need to be taught about the variety of work and career options available, as they cannot casually observe people in different job roles. They need opportunities to explore their strengths

and interests in a systematic, well-planned manner. This includes the acquisition of specialized skills and equipment to compete in the job market. Students must be prepared for a wide range of vocational choices and the adaptations, including technological devices, that make them attainable. It is important to have opportunities to job shadow with concrete experiences of different career choices and to learn about other persons with visual impairments who have successful vocational outcomes. Through job experiences, students learn work-related skills such as assuming responsibility, punctuality and staying on task. Career education provides opportunities for students to explore and discover their strengths and interests, and plan for transition to adult life.

C. Compensatory Skills:

Compensatory skills include skills necessary for accessing the core curriculum including concept development; communication modes; organization and study skills; access to print materials; and the use of braille/Nemeth, tactile graphics, object and/or tactile symbols, sign language and audio materials. For students who are BVI, an increased reliance upon tactual skills is essential to learning. Tactile skills should be considered in the development of the Individualized Family Service Plan (IFSP) and Individualized Education Program (IEP). It takes detailed “hands-on” interaction and repetition to understand a concept tactually, such as relative size, which may be visually captured with a glance.

D. Independent Living Skills:

Independent living skills include the tasks and functions people perform in daily life to increase their independence and contribute to the family structure. These include personal hygiene, eating skills, food preparation, time and money management, clothing care, household tasks and organizational skills, which are critical for successful transition from school to independent living. People with vision typically learn such daily routines through observation, whereas individuals with visual impairments often need systematic instruction and frequent practice in these daily tasks.

E. Orientation and Mobility (O&M):

O&M instruction enables students of all ages and motor abilities to be oriented to their surroundings and to move as independently and safely as possible. Safe and efficient travel through the environment is a critical component in the education of students with visual impairments. O&M evaluation and instruction should begin in infancy with basic spatial concepts, purposeful and exploratory movement and progress through more independent age-appropriate motor and travel skills in increasingly complex environments. Vision provides the primary motivation for infants to begin to move their bodies: to raise their heads to see people, to reach toward objects, to move through the environment and to begin to play. Significant delays and differences in meeting motor milestones can affect overall development. A child who is blind needs to know how classrooms or other environments are arranged in order to independently move with confidence. Systematic orientation to a space may be needed before the placement and function of furniture and objects are understood. As the student gets older, they need more advanced age-appropriate travel skills such as street crossings, bus travel, and community experiences. Students with multiple impairments benefit from O&M instruction that facilitates purposeful movement and increases independence to the greatest degree possible.

F. Recreation and Leisure Skills:

Students who are BVI need to be exposed to and taught recreation and leisure activities they can enjoy as children and throughout their lives. Recreation skills requiring physical activity enable students to learn about and practice a healthier lifestyle. They are often not aware of the options or the possible adaptations that would allow them to participate in these activities. Such skills include both individual and organized group activities for students at all ages and levels that should focus on the development of lifelong skills.

G. Self-Determination:

Self-determination includes personal decision-making, self-advocacy, problem solving and goal setting. Students with visual impairments often have fewer opportunities to develop and practice the specific skills that lead to self-determination. Students who know and value who they are and who have self-determination skills become effective advocates for themselves and therefore have more control over their lives. Students can then meaningfully participate in their educational and transition planning and make positive adult lifestyle, job, and other life choices.

H. Sensory Efficiency (Includes Visual, Tactual, and Auditory Skills):

Sensory efficiency includes instruction in the use of vision, hearing, touch, smell, and taste. Students who are BVI need systematic instruction to learn efficient use of their senses. Instruction in visual efficiency must be individually designed and may include using visual gaze to make choices, tracking car movements when crossing the street, responding to visual cues in the environment, and using optical devices such as magnifiers and telescopes. Sensory efficiency also addresses the development of the proprioceptive, kinesthetic, and vestibular systems. Learning to use their senses efficiently, including the use of optical devices, will enable students with visual impairments to access and participate in activities in school, home, and community environments.

I. Social Interaction Skills:

Social interaction skills include awareness of body language, gestures, facial expressions, and personal space. Instruction also includes learning about interpersonal relationships, self-control, and human sexuality. Visual impairments can socially isolate students, impede typical social interactions, or limit social skill development. Students with visual impairments may not be able to see facial expressions and subtle body language in order to fully participate in conversations and activities. Almost all social skills are learned by visually observing other people. Instruction in social interaction skills in school, work and recreational settings is crucial. Having appropriate social skills can often mean the difference between social isolation and a fulfilling life as an adult.

Appendix C: Collaborative Statewide Resources

The following table and listed information show which collaborative agency supports and MDE initiatives align with ECC learning opportunities across Minnesota. This is not an exhaustive list of resources and supports available. There are other activities and groups that are specific to regions within Minnesota that are not highlighted in this report. For assistance with questions regarding what resources might be available in your area, contact Kristin Oien (kristin.oien@state.mn.us).

A brief description of each collaborative agency is included after the table. Readers are encouraged to follow the link to each agency's website for more information.

Table 6. MDE initiatives and collaborative agency supports

ECC Skills	Compensatory	O&M	Social Interaction	Career Education and Planning	AT and Optical Devices	Independent Living	Recreation and Leisure	Self-determination	Sensory efficiency
American Printing House for the Blind (APH)	X	X	X	X	X	X	X	X	X
Accessible Educational Material-Interagency Agreement	X		X	X		X	X	X	X
Email Lists for TBVI's and COMS	X	X	X	X	X	X	X	X	X
BVI Communities of Practice	X			X	X				
District 917 ECC	X	X	X	X	X	X	X	X	X
Low Vision Clinics	X	X	X	X	X	X	X	X	X
Minnesota Mentoring Program	X	X	X	X	X	X	X	X	X
Minnesota Resource Libraries	X	X	X	X	X	X	X	X	X
Minnesota State Academies	X	X	X	X	X	X	X	X	X
Parent Child Institute/Transition Weekend	X	X	X	X	X	X	X	X	X
State Services for the Blind	X	X	X	X	X	X	X	X	X
Statewide Vision Professional Development	X	X	X	X	X	X	X	X	X
Summer Transition Program (STP)	X	X	X	X	X	X	X	X	X

The following non-profit agencies collaborate to provide all the ECC skills learning opportunities noted in the previous table.

- American Council of the Blind (ACB) of Minnesota
- American Foundation for the Blind (AFB)
- BLIND, Inc.
- Camp Butterscotch
- Minnesota Deafblind Project
- Deafblind Services of Minnesota
- Duluth Center for Vital Living
- Minnesota Division on Vision Impairments (MDVI)
- Minnesota National Association of Parents of Children with Visual Impairments (MNAPVI)
- National Federation of the Blind (NFB) of Minnesota
- Vision Loss Resources (VLR)

Accessible Educational Material/State Services for the Blind Interagency Agreement: This interagency agreement between MDE and State Services for the Blind (SSB) supports individual school districts with the provision of Accessible Educational Material (AEM) in the form of braille and audio materials. School districts in Minnesota who agree to participate in the special education assurances are provided with certain braille and audio materials at no cost.

American Printing House for the Blind: The American Printing House for the Blind (APH) is the world's largest nonprofit organization creating educational, workplace and independent living products and services for people who are visually impaired. Founded in 1858 under the 1879 federal Act to Promote the Education of the Blind, APH is the official supplier of educational materials for visually impaired students in the U.S. who are working at less than college level. APH provides products, services, resources, and field services to students who are BVI.

BVI Email Lists: MDE sponsors three BVI-specific electronic lists through the Statewide Low-Incidence Projects dedicated solely to the education of children and youth who are blind or visually impaired in Minnesota. The lists are a public place where anyone interested in this field can post a question or an answer, share a BVI-specific announcement, or stimulate discussion related to the education or service delivery of children and youth who are BVI.

Communities of Practice: MDE facilitates communities of practice (CoP) which include TBVI, COMS, and collaborative partners from other state, local and nonprofit agencies who provide services to students who are BVI. The CoPs change as needs fluctuate throughout the state. The current CoPs are American Printing House and Tactile Graphics Producers, Low Vision, Assistive Technology and BVI Mentoring.

District 917 Extended School Year/ECC: Intermediate School District 917 Vision Program offers an extended school year (ESY) ECC program for students in grades 6–10. This is a day program that focuses on the nine areas of the ECC. Instruction is individualized to meet each student's specific needs.

Low Vision Clinics: A Low Vision Community of Practice Group composed of TBVI, COMS and Mayo Clinic/St. Cloud Clinic Optometrists have provided input to determine a process of providing low vision clinic services to students with the highest low vision needs around the state. Low Vision Clinics provided from 2005 to 2019 have served over 800 students from every region in Minnesota. They provide a unique and specific educational service to students who have low vision. Along with written reports and recommendations provided by the eye care specialists, low vision devices and training are provided for the recipients, parents, and educators.

Minnesota Mentoring Program: The BVI Mentoring CoP collaborated to build a research-based mentoring program that supports teachers in BVI higher education programs, newly licensed TBVI and experienced TBVI who may need specific topic assistance throughout their career. The Minnesota Mentoring Program (MMP) has grown to include professionals in other low-incidence disability categories through the Minnesota Low Incidence Project. For more information regarding the MMP, contact Kayna Plaisted (kayna.plaisted@metroecsu.org).

Minnesota Resource Libraries: Minnesota Resource Libraries (MNRL) is a statewide library operated by the Minnesota State Academies providing information and resources to help families and educators meet the educational needs of Minnesota children and youth who have hearing and or vision loss.

Minnesota State Academy for the Blind: The Minnesota State Academy for the Blind (MSAB) offers a challenging and rewarding educational experience for students who are blind and visually impaired from birth through age 21 (K–12 classes and the postsecondary Academy Plus Program). Licensed teachers of the Blind and Visually Impaired provide formal instruction in small group settings. Emphasis is placed on creating an environment rich in access/exposure to braille, assistive technology, and the expanded core curriculum. The curriculum is designed to meet Minnesota Standards while accommodating the unique needs of blind and visually impaired students.

MSAB Parent Child Institute (PCI): The Parent Child Institute (PCI) is an interagency program between MDE, MSAB, and SSB. PCI addresses family BVI-specific needs for children who are ages 5 and under.

State Services for the Blind: State Services for the Blind (SSB) is a Minnesota state agency under the Department of Employment and Economic Development (DEED). SSB provides tools and training for employment, living independently, and accessing print. They assist Minnesotans who are blind, are deafblind, are experiencing vision loss, or have difficulty accessing the printed word. SSB provides a variety of supports and programs for students who are BVI, including: Transition Supports, Individualized Plan for Employment, Communication Center, Programs for Teens, Assistive Technology Lending Library, Assistive Technology Evaluations, Personal Budgeting, BLIND Incorporated Summer Program, Duluth Center for Vital Living Transition Program, Helen Keller National Center Youth Programs, and others. They publish a bi-monthly newsletter called “The Spectacle.”

Statewide Vision Professional Development: The Minnesota Statewide Vision Community of Practice provides a forum to gather and share pertinent information and evidence-based practices for TBVI and COMS in the field to build teacher capacity to increase student outcomes. Outcomes of the statewide CoP include professional sharing of information and knowledge specific to BVI and O&M, provision of in-service training and resources specific to teachers of children and youth with visual impairments, opportunities to increase awareness of new research, and data on teaching strategies and program trends for BVI.

Summer Transition Program (STP): STP provides experiences to address the specific transition needs of students who are blind, visually impaired, or deafblind. STP complements each student’s core curriculum at their local school by providing individualized opportunities in the three transition areas identified in their IEP. These unique transition activities, as part of the ECC, give each student the opportunity to increase independence in their school home, community, and work environments.

Appendix D: Early childhood outcomes summary

School districts and local education providers that operate early childhood special education (ECSE) programs report back to the Minnesota Department of Education (MDE) ratings on the Child Outcomes Summary (COS) of development for infants, toddlers, and preschool children with disabilities they serve.

COS ratings are a tool used at the state level for reporting early childhood development for children with disabilities. COS was developed by the U.S. Department of Education and summarizes information on a child's functioning in three outcome areas using a seven-point scale. The three outcome areas are:[18]

- **Outcome A: Positive Social Emotional Skills (including social relationships).** Refers to the way children relate to and get along with other children and adults, solve social problems, interact in group situations, express emotions, and learn social rules and expectations.
- **Outcome B: Acquisition and use of knowledge and skills (including early language and communication and early literacy).** Refers to young children's abilities to think, reason, remember, problem solve, and use symbols and language plus knowledge and understanding of the world around them, early concepts.
- **Outcome C: Use of appropriate behaviors to meet their needs.** Refers to children's abilities to take care of themselves in different settings. It also addresses children's integration of motor abilities to complete tasks and interact with their world.

The seven-point scale in each of the three areas helps compare an individual child's development to the typical development of same-age peers, with a score of seven meaning a child shows functioning expected for their age in all or almost all situations.

COS ratings for each of the three outcome areas are currently reported annually for children who experience:

1. Entrance to Part C Infant and Toddler Intervention
2. Exit from Part C Infant and Toddler Intervention
3. Entrance to Part B Preschool Special Education
4. Exit from Part B Preschool Special Education

To further assess the development status of children while participating in ECSE programs, MDE compares COS scores at program entry to the outcomes COS scores at exit and summarizes the results into two statements:

- Of those children who entered an ECSE program below age expectations in each outcome, the percent who substantially increased their rate of growth by the time they exited the program.
- The percent of children who were functioning within age expectations in each outcome by the time they exited an ECSE program.

[18] More information about the three childhood outcomes can be found at: https://ectacenter.org/~pdfs/eco/three-child-outcomes-breadth.pdf.

Information in this summary provides the outcome summary statement results reported to MDE for young children who were identified as blind or visually impaired (BVI), or deafblind (DB), or identified with another primary disability and vision loss, who exited Part B services between July 1, 2019, and June 30, 2020. Because there were fewer than 10 children with vision loss exiting Part C, those developmental status results are not included. Additionally, there were not enough young children who were identified as BVI, or DB, or identified with another primary disability and vision loss who exited Part C or Part B services to report the counts in any progress category within the three COS outcome ratings (i.e., Outcome A, Outcome B, or Outcome C).[19]

For more information on the COS ratings, contact MDE Early Childhood Special Education staff at mde.ecse@state.mn.us.

COS outcomes summary statement results for children identified as BVI, or DB, or have another primary disability and vision loss, at exit from Part B Preschool Special Education

The COS outcomes summary statement results at Part B exit are based on data submitted for 18 of the 19 children with vision loss because one child exiting did not have sufficient data submitted to calculate all three COS outcome ratings.

Outcome A: Positive social-emotional skills summary statements

Of the children identified as BVI, or DB, or identified with another primary disability and vision loss who entered or exited Part B services below age expectations in Outcome A, 27 percent substantially increased their rate of growth by the time they turned 6 years of age or exited the program, which is lower than the state rate for all preschool children with disabilities (61 percent).

Fifty percent of preschool children identified as BVI, or DB, or identified with another primary disability and vision loss were functioning within age expectations in Outcome A by the time they turned 6 years of age or exited the program, which is higher than the state rate for all preschool children with disabilities (48 percent).

Outcome B: Acquisition and use of knowledge and skills summary statements

Of the children identified as BVI, or DB, or identified with another primary disability and vision loss who entered or exited Part B services below age expectations in Outcome B, 33 percent substantially increased their rate of growth by the time they turned six years of age or exited the program, which is lower than the state rate for all preschool children with disabilities (63 percent).

[19] The five outcome categories include: Children who did not improve functioning, children who improved functioning but not sufficient to move nearer to functioning comparable to same-age peers, children who improved functioning to a level nearer the same-aged peers but did not reach it, children who improved functioning to reach a level comparable to same-aged peers, and children who maintained functioning at a level comparable to same-aged peers.

Sixty-one percent of preschool children identified as BVI, or DB, or identified with another primary disability and vision loss were functioning within age expectations in Outcome B by the time they turned six years of age or exited the program, which is higher than the state rate for all preschool children with disabilities (46 percent).

Outcome C: Use of appropriate behaviors to meet their needs summary statements

Of the children identified as BVI, or DB, or identified with another primary disability and vision loss who entered or exited Part B services below age expectations in Outcome C, 46 percent substantially increased their rate of growth by the time they turned six years of age or exited the program, which is lower than the state rate for all preschool children with disabilities (62 percent).

Fifty-six percent of preschool children identified as BVI, or DB, or identified with another primary disability and vision loss were functioning within age expectations in Outcome C by the time they turned six years of age or exited the program, which is lower than the state rate for all preschool children with disabilities (58 percent).

Appendix E: Deafblind Outcomes

Deafblindness is defined under the Individuals with Disabilities Education Act (IDEA) as "concomitant (simultaneous) hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness." Under Minnesota Administrative Rules 3525.1327, a student is eligible for special education services under the deafblind category if they have medically verified visual loss coupled with medically verified hearing loss that, together, interfere with acquiring information or interacting with the environment.

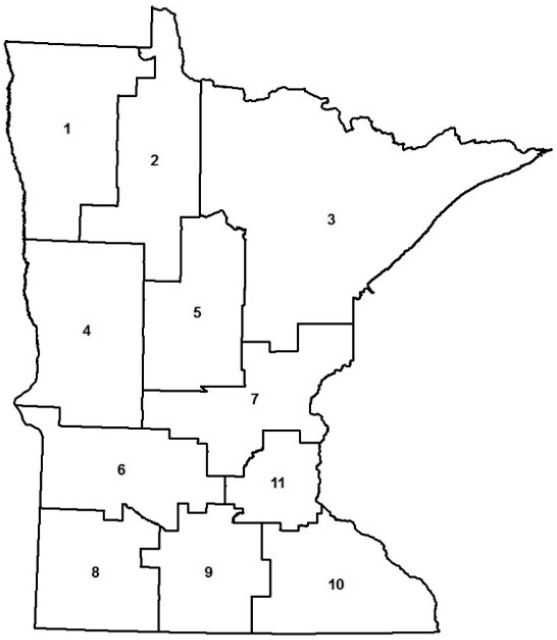
Minnesota Statutes, section 125A.63, requires the Minnesota Department of Education (MDE) to establish advisory committees for deaf and hard of hearing (DHH) and blind and visually impaired (BVI). Although students who are deafblind (DB) are not mentioned in the statute, they must be identified and meet criteria for both DHH and BVI, by nature of eligibility for special education services. Therefore, the staff who serve students who are DHH and BVI are the same staff who support and serve students who are deafblind, and recommendations made in this report could have a positive impact on students who are DB. However, it is important to note that deafblindness is a separate disability with a multiplicative impact with a high degree of heterogeneity due to the exponential number of possible combinations of hearing and vision loss.

Provided below is more information on the enrollment and demographics of students whose primary disability is identified as DB. In the data provided below, there were 129 children and students from birth to age 21 whose primary disability category was DB in MDE's child count data in the 2020-21 school year. However, approximately 250 more students in Minnesota have met eligibility for both DHH and BVI, but do not have DB as the primary disability. Also provided below are reading and math assessment outcomes for students whose primary disability is identified as DB. Please note that some data on the educational outcomes of students who are DB cannot be reported, as data is suppressed for groups smaller than 10.

Students who are deafblind enrollment and demographics

The tables and figures include summaries of student enrollment, child count, age, gender, race and ethnicity, home languages, and graduation rates.

Figure 52. Map of Minnesota's regional development commissions



The number of students who are DB on individual TBVI workloads can vary significantly due to individual student need, school district size, district sparsity, travel distance between schools and travel times in rural and metropolitan areas (Table 7).

Table 7. Students who are DB, TBVI, and COMS by region

Region name	Number of students on 2021 Unduplicated Child Count (ages 0 to 21)	Number of students listed on 2020 federal DB census	Estimated number of students on TBVI caseloads (blind, low vision, deafblind, and multiple needs)	Number of TBVI	Estimated number of students on each TBVI caseload	Number of COMS
Regions 1 and 2	3	15	57	9	6	3
Region 3	1	12	91	3.5	30	3 (part-time contracted)
Region 4	5	13	77	4	19	1 (part-time)
Regions 5 and 7	14	51	243	15	16	7
Regions 6 and 8	2	12	61	4	17	2
Region 9	4	9	39	3	13	1

Region name	Number of students on 2021 Unduplicated Child Count (ages 0 to 21)	Number of students listed on 2020 federal DB census	Estimated number of students on TBVI caseloads (blind, low vision, deafblind, and multiple needs)	Number of TBVI	Estimated number of students on each TBVI caseload	Number of COMS
Region 10	19	31	216	MSAB (5)[20] 16	13	MSAB (1) 5
Region 11	81	208	681	52	14	19
Statewide total	129	351	1,445	106.5	16 (average)	41

Enrollment summary

Table 8 shows how enrollment for K–12 students who are DB, compared with other student populations in 2020–21. At the statewide level, students whose primary disability was DB made up 0.01 percent of the overall K–12 enrollment and 0.09 percent of the K–12 enrollment of students receiving special education services in 2020–21. The largest number of students who are DB are located in Region 11 (71 students), while the largest percentage of students who are DB within special education is in Region 10 (0.13 percent).

Table 8. Enrollment of K–12 student categories by region, 2020–21

Region name	All students K–12 fall enrollment	DB K–12	Percent DB	K–12 special education enrollment	Percent DB
Regions 1 and 2	27,172	3	0.01%	4,732	0.06%
Region 3	40,881	0	0.00%	7,480	0.00%
Region 4	34,283	4	0.01%	5,680	0.07%
Region 5	24,645	2	0.01%	4,781	0.04%
Regions 6 and 8	42,298	2	0.00%	6,959	0.03%
Region 7	101,637	10	0.01%	15,881	0.06%
Region 9	32,715	3	0.01%	5,355	0.06%
Region 10	76,163	16	0.02%	12,027	0.13%
Region 11	471,647	71	0.02%	67,074	0.11%
Statewide total	851,441	111	0.01%	129,969	0.09%

Demographics

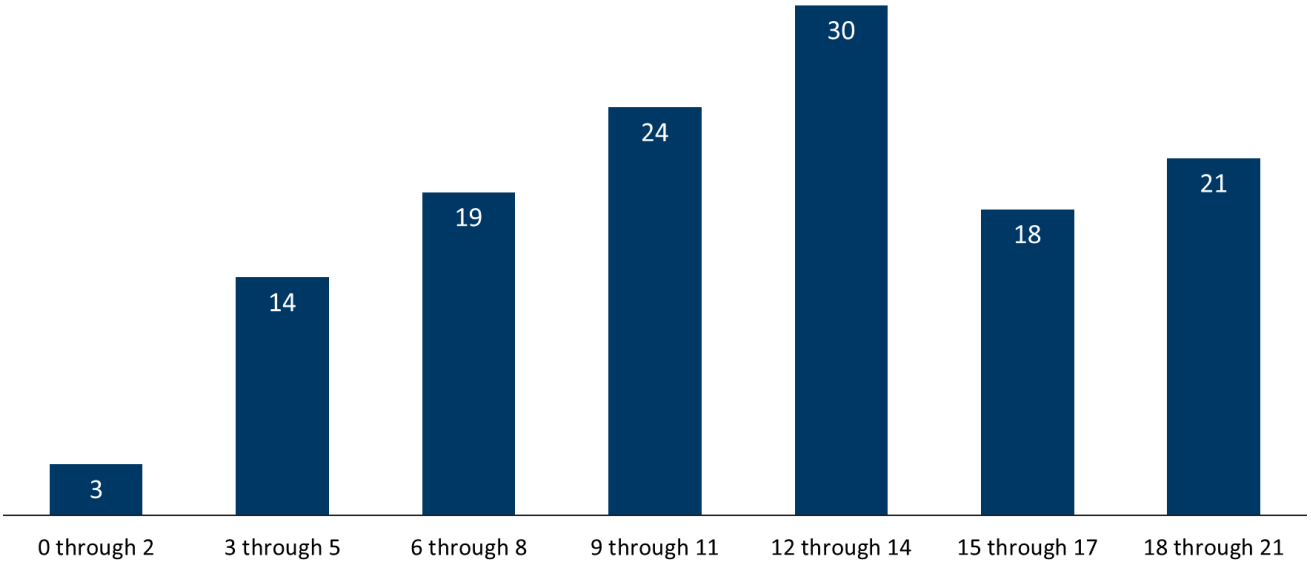
The demographic data presented here to help understand the student populations that make up the group of students who are DB are based on child count data from the 2020–21 school year, which includes students aged

[20] MSAB: Minnesota State Academy for the Blind located in Faribault, Minnesota.

birth to 21 years old who are enrolled in the school system. A total of 129 students were counted as DB that school year.

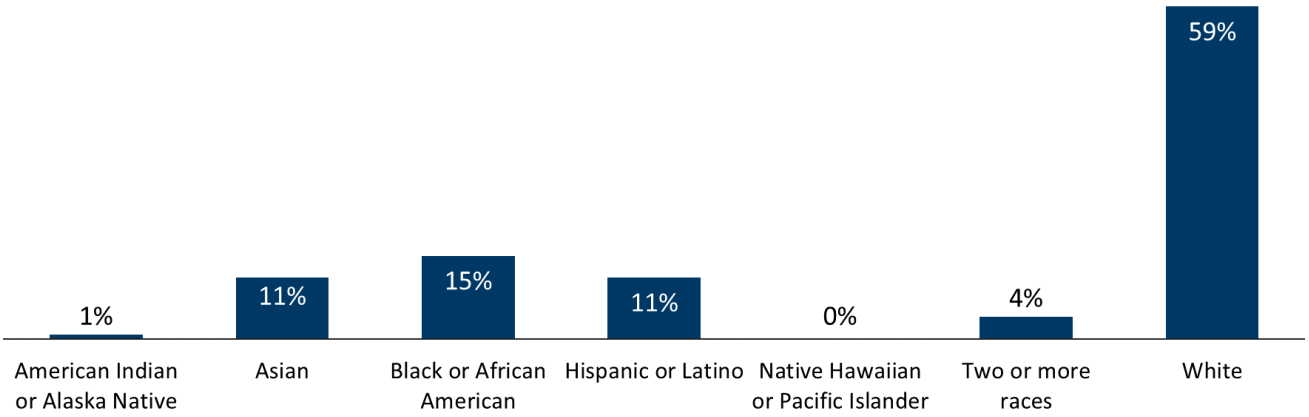
The highest concentrations of students who are DB are found in ages 9 through 11 and 12 through 14 (Figure 53). The lowest concentrations are found in the youngest age groups.

Figure 53. Child count by age distribution of DB students, 2020–21



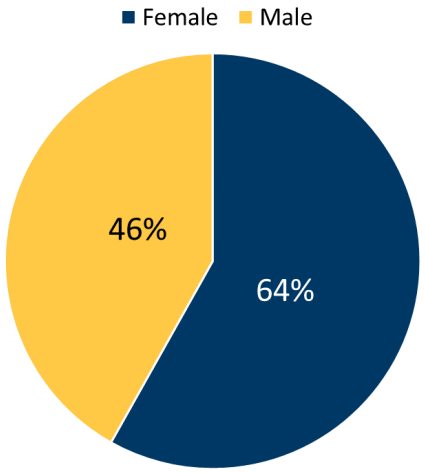
Nearly 60 percent of students who are DB are white (Figure 54). The next largest group is students who are Black or African American (15 percent), followed by Asian and Hispanic or Latino (each 11 percent).

Figure 54. Race/ethnicity of students who are DB, 2020–21



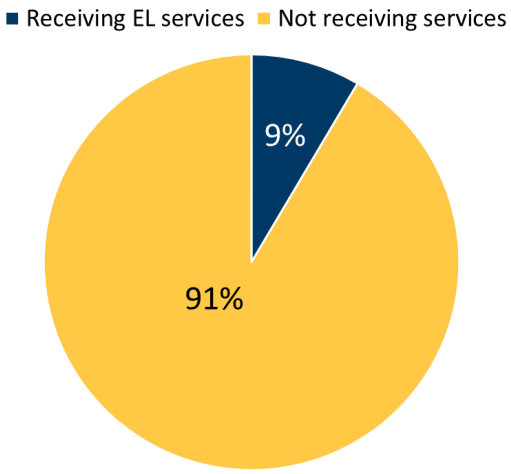
Nearly two-thirds of students who are DB are female (64 percent), and 46 percent are male (Figure 55).

Figure 55. Gender of students who are DB, 2020–21



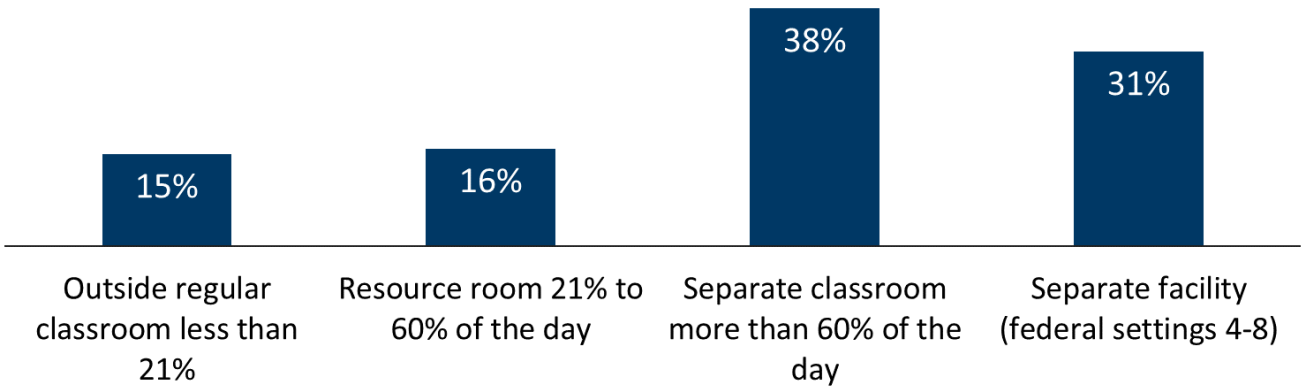
Nine percent of students who are DB also receive services for English Learners (EL) (Figure 56).

Figure 56. Percentage of students who are DB who are receiving EL services, 2020–21



In 2020–21, over one-third of students who are DB were placed in a special education federal setting that had them in a separate classroom or facility (i.e., outside of a general education classroom) 60 percent or more of the day (Figure 57). Fifteen percent of students who are DB were in the least restrictive federal setting, outside of a regular education classroom less than 21 percent of the day.

Figure 57. Federal instructional settings for DH students, 2020–21



Students Who are Deafblind Assessment Analysis

Consistent with the commissioner's school performance report cards, this section reports on aggregate math and reading assessment data at the state and regional levels for students who are DB. It is important to note the high degree of diversity in the population of students who are DB. Approximately 80 percent of students who have combined hearing and vision loss have additional disabilities and are emergent communicators (i.e., nonverbal) with variation in instructional placement for the remaining 20 percent who are receiving instruction in an academic setting have a wide degree of variability as well. In addition, the length of time for processing the test questions may be extraordinary for students who are DB, due to the demands on short-term memory to comprehend and remember test options in multiple-choice format as well as the intent of questions.

Assessment results are reported here as "proficient" and "not proficient." Students are considered proficient if they meet or exceed the state proficiency standards for their grade level, while students are considered not proficient if they only partially meet or do not meet the standards. The MCA and MTAS tests are only given in grades 3 through 8, and either grade 10 (reading) or grade 11 (math).

The MTAS is an adapted test for students with the most significant cognitive disabilities and must be required by a student's IEP; the MTAS assesses proficiency in the same way as the MCA, so the results are presented in this section using similar terminology and visualizations.

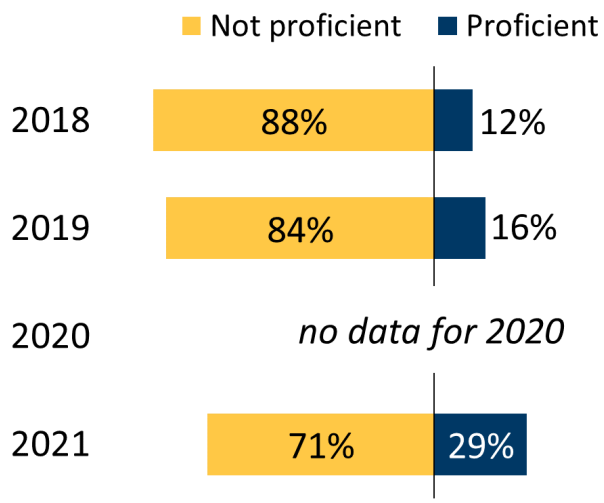
Throughout this report, results are only reported for groups with 10 or more students to protect individual privacy. The note "not enough data" or "CTSTR" means the number of students was too small to report, or that there were fewer than 10 students in that group.

Statewide Assessment Trends

Math

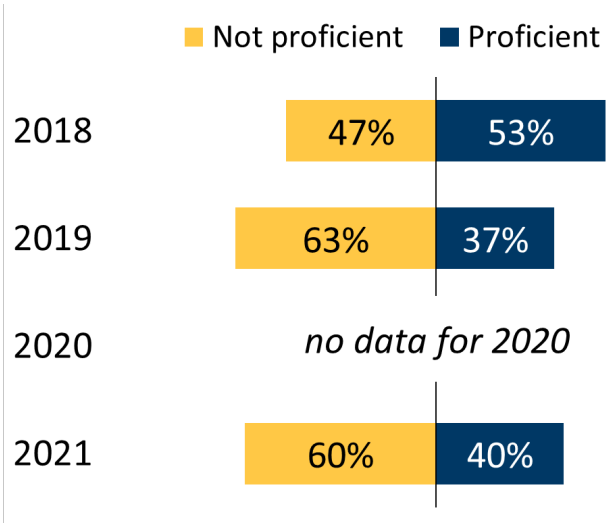
Fourteen students who are DB took the MCA math assessment in 2021. Twenty-nine percent of students who are DB are proficient on the MCA math assessment (Figure 58).

Figure 58. Percentage of students who are DB who are proficient and not proficient on the MCA math assessment



Ten students who are DB took the MTAS math assessment in 2021. Forty percent of students who are DB are proficient on the MTAS math assessment in 2021 (Figure 59).

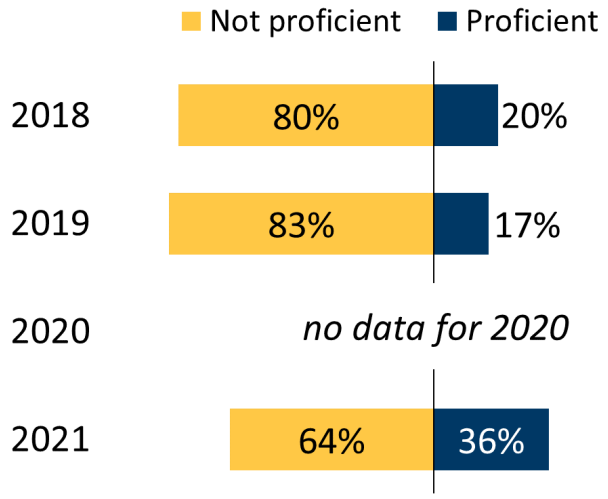
Figure 59. Percentage of students who are DB who are proficient and not proficient on the MTAS math assessment



Reading

Fourteen students who are DB took the MCA reading assessment in 2021. Thirty-six percent of them were proficient (Figure 60).

Figure 60. Percentage of students who are DB who are proficient and not proficient on the MCA reading assessment



Only eight students who are DB took the MTAS reading assessment in 2021, so those results are suppressed and not presented here.

Appendix F: Data Tables for Report Figures

Enrollment and demographic data

Table 9. Statewide BVI child counts, 2011–12 to 2020–21

School year	Number of students who are BVI	Number of students receiving special education services
2011–12	435	128,430
2012–13	442	128,812
2013–14	460	129,669
2014–15	460	130,886
2015–16	467	133,678
2016–17	489	137,601
2017–18	503	142,270
2018–19	502	147,604
2019–20	512	152,016
2020–21	492	149,382

Table 10. Child count by age distribution of BVI students, 2020–21

Age group	Number of students who are BVI
0–2	14
3–5	44
6–8	99
9–11	99
12–14	107
15–17	97
18–21	32

Table 11. Race and ethnicity of students who are BVI, 2020–21

Race and ethnicity	Number of students who are BVI	Percent of students who are BVI
American Indian or Alaska Native	13	3%
Asian	32	7%
Black or African American	60	12%
Hispanic or Latino	49	10%
Native Hawaiian or Pacific Islander	0	0%
Two or more races	20	4%
White	318	65%

Table 12. Gender of students who are BVI, 2020–21

Gender	Count of students who are BVI	Percent of students who are BVI
Female	235	48%
Male	257	52%
Total	**492**	**100%**

Table 13. Students who are BVI who are receiving English Learner (EL) services, 2020–21

EL Participation status	Count of students who are BVI	Percent of students who are BVI
Receiving EL services	53	11%
Not receiving EL services	439	89%
Total	**492**	**100%**

Table 14. Federal instructional settings for BVI students, 2020–21

Federal instructional setting	2020–21
Outside regular classroom less than 21%	315
Resource room 21% to 60% of the day	87
Separate classroom more than 60% of the day	18
Separate facility (federal settings 4–8)	25
Total	**445**

Statewide student assessment data

Math

Table 15. Percentage of students in each proficiency category on the MCA math assessment in 2021

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
All students	338,293	15%	29%	24%	32%
Students receiving special education services	47,916	6%	13%	17%	65%
Students who are blind or visually impaired	***148***	***8%***	***23%***	***21%***	***48%***
3rd grade	27	7%	41%	15%	37%
4th grade	29	17%	17%	17%	48%
5th grade	12	8%	8%	33%	50%
6th grade	24	4%	17%	21%	58%
7th grade	21	0%	10%	33%	57%
8th grade	18	11%	28%	28%	33%
11th grade	17	6%	35%	6%	53%

Table 16. Percentage of students in each proficiency category on the MTAS math assessment in 2021

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
Students receiving special education services	4,373	17%	45%	27%	11%
Students who are blind or visually impaired	***12***	***50%***	***33%***	***8%***	***8%***
3rd grade	3				
4th grade	3				
5th grade	0				
6th grade	2				
7th grade	0				
8th grade	4				
11th grade	0				

Reading

Table 17. Percentage of students in each proficiency category on the MCA reading assessment in 2021

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
All students	348,959	15%	37%	20%	27%
Students receiving special education services	49,081	5%	17%	17%	61%
Students who are blind or visually impaired	***147***	**8%**	**34%**	**16%**	**42%**

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
3rd grade	27	7%	33%	11%	48%
4th grade	29	7%	34%	21%	38%
5th grade	12	17%	17%	25%	42%
6th grade	22	9%	32%	9%	50%
7th grade	23	0%	26%	22%	52%
8th grade	18	11%	50%	6%	33%
10th grade	16	13%	44%	19%	25%

Table 18. Percentage of students in each proficiency category on the MTAS reading assessment in 2021

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
Students receiving special education services	4,396	29%	37%	19%	15%
Students who are blind or visually impaired	***13***	***38%***	***46%***	***8%***	***8%***
3rd grade	3				
4th grade	3				
5th grade	0				
6th grade	4				
7th grade	0				
8th grade	3				
10th grade	0				

Regional student assessment data

Region 7

Table 19. Percentage of students in Region 7 in each proficiency category on the MCA math assessment in 2021

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
All students	46,241	16%	32%	25%	28%
Students receiving special education services	6,677	5%	15%	18%	62%
Students who are blind or visually impaired	***30***	***13%***	***27%***	***13%***	***47%***

Table 20. Percentage of students in Region 7 in each proficiency category on the MCA reading assessment in 2021

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
All students	47,385	15%	40%	21%	25%
Students receiving special education services	6,841	4%	19%	17%	60%

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
Students who are blind or visually impaired	***27***	***15%***	***41%***	***11%***	***33%***

Region 10

Table 21. Percentage of students in Region 10 in each proficiency category on the MCA math assessment in 2021

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
All students	32,794	13%	27%	25%	35%
Students receiving special education services	4,639	4%	11%	16%	68%
Students who are blind or visually impaired	***21***	***5%***	***10%***	***24%***	***62%***

Table 22. Percentage of students in Region 10 in each proficiency category on the MCA reading assessment in 2021

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
All students	33,565	13%	36%	22%	29%
Students receiving special education services	4,681	4%	16%	15%	65%
Students who are blind or visually impaired	***21***	***0%***	***38%***	***10%***	***52%***

Region 11

Table 23. Percentage of students in Region 11 in each proficiency category on the MCA math assessment in 2021

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
All students	166,324	17%	28%	22%	33%
Students receiving special education services	21,586	7%	14%	16%	63%
Students who are blind or visually impaired	***64***	***6%***	***25%***	***23%***	***45%***

Table 24. Percentage of students in Region 11 in each proficiency category on the MCA reading assessment in 2021

Student group	Total	Exceeds	Meets	Partially meets	Does not meet
All students	173,022	17%	37%	19%	27%
Students receiving special education services	22,242	6%	19%	16%	59%
Students who are blind or visually impaired	***63***	***13%***	***30%***	***14%***	***43%***

Graduation Rates

Table 25. Four-year graduation outcomes for general education students, class of 2012 to class of 2020

Graduation outcome	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017	Class of 2018	Class of 2019	Class of 2020
Continue	4,543	3,855	3,808	3,735	3,608	3,439	3,389	3,242	3,499
Drop out	2,027	2,045	1,944	2,011	2,099	2,248	2,215	2,181	1,841
Graduate	48,049	48,213	47,819	48,193	48,210	48,723	49,471	50,486	49,890
Unknown	3,818	3,082	2,478	2,220	1,957	1,916	1,803	1,796	1,931
Total	**58,437**	**57,195**	**56,049**	**56,159**	**55,874**	**56,326**	**56,878**	**57,705**	**57,161**

Table 26. Four-year graduation outcomes for special education students, class of 2012 to class of 2020

Graduation outcome	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017	Class of 2018	Class of 2019	Class of 2020
Continue	2,674	2,623	2,576	2,526	2,427	2,372	2,436	2,501	2,378
Drop out	757	713	698	718	742	862	849	829	684
Graduate	5,564	5,652	5,614	5,957	5,861	6,120	6,398	6,685	6,794
Unknown	937	789	738	609	623	650	587	594	601
Total	**9,932**	**9,777**	**9,626**	**9,810**	**9,653**	**10,004**	**10,270**	**10,609**	**10,457**

Table 27. Four-year graduation outcomes for students who are BVI, class of 2012 to class of 2020

Graduation outcome	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017	Class of 2018	Class of 2019	Class of 2020
Continue	2	4	7	6	6	3	7	4	7
Drop out	0	0	0	1	0	0	2	1	1
Graduate	18	17	17	12	13	15	26	28	25
Unknown	0	0	1	1	1	3	2	1	1
Total	**20**	**21**	**25**	**20**	**20**	**21**	**37**	**34**	**34**

Table 28. Seven-year graduation outcomes for general education students, class of 2009 to class of 2017

Graduation outcome	Class of 2009	Class of 2010	Class of 2011	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017
Continue	15	16	13	9	12	6	7	18	10
Drop out	3,963	3,630	3,369	3,412	3,404	3,315	3,433	3,496	3,426
Graduate	52,110	51,703	51,133	50,070	50,037	49,556	49,971	50,026	50,691
Unknown	7,329	6,606	5,654	4,692	3,544	2,995	2,626	2,211	2,098
Total	**63,417**	**61,955**	**60,169**	**58,183**	**56,997**	**55,872**	**56,037**	**55,751**	**56,225**

Table 29. Seven-year graduation outcomes for special education students, class of 2009 to class of 2017

Graduation outcome	Class of 2009	Class of 2010	Class of 2011	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017
Continue	39	39	44	41	42	38	40	43	60
Drop out	1,318	1,261	1,261	1,248	1,312	1,281	1,308	1,294	1,362
Graduate	7,300	7,326	7,440	7,342	7,386	7,320	7,641	7,531	7,822
Unknown	1,629	1,524	1,342	1,239	963	900	790	737	739
Total	**10,286**	**10,150**	**10,087**	**9,870**	**9,703**	**9,539**	**9,779**	**9,605**	**9,983**

Table 30. Seven-year graduation outcomes for students who are BVI, class of 2009 to class of 2017

Graduation outcome	Class of 2009	Class of 2010	Class of 2011	Class of 2012	Class of 2013	Class of 2014	Class of 2015	Class of 2016	Class of 2017
Continue	0	0	0	0	0	0	0	0	0
Drop out	2	1	0	0	1	1	1	0	0
Graduate	25	34	21	19	20	22	17	18	20
Unknown	4	3	0	1	1	2	1	1	1
Total	**31**	**38**	**21**	**20**	**22**	**25**	**19**	**19**	**21**