Closing the Rigorous Coursework Gap, Part 2

Access & Success for Minnesota's Low-Income Students, English Learners, and Students with Disabilities

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EdAllies

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Contents

Introduction

In November 2020, EdAllies published a report highlighting the egregious gaps in rigorous coursework access and success between students of color—particularly Black, Indigenous, and Latino students—and white students and provided a series of policy recommendations to remedy the issues.[1] Building off that report, this brief provides a more comprehensive view of rigorous coursework participation and success by looking at outcomes for low-income students, English Learners (EL), and students with disabilities in Minnesota.

Using publicly available data, we focus on the entire K-12 advanced coursework experience. First, we examine participation in gifted and talented and 8th-grade algebra, where data is available for ELs and students with disabilities. Next, we examine participation and success in Advanced Placement (AP), International Baccalaureate (IB), Postsecondary Enrollment Options (PSEO), and concurrent enrollment.

Overall, we find large and unjustifiable gaps in AP, PSEO, and concurrent enrollment, as well as disparities in passage rates on AP and IB exams. To gauge the impact of these disparities, we calculated how many more students from these special populations would be enrolled in these courses or pass the exams if they participated at the same rate as their counterparts. This would equate to thousands more students enrolled in these opportunities each year, including:

- 11,825 more students identified for gifted and talented;
- 2,544 more students enrolled in 8th-grade algebra I;
- 15,956 more taking AP courses and 2,248 more passing AP exams;
- 747 more taking IB courses and 498 more passing IB exams;
- 15,323 more doing concurrent enrollment; and
- 2,221 more taking part in PSEO.[2]

WHAT IS RIGOROUS COURSEWORK?

This brief explores pathways that provide advanced academic preparation and are meant to prepare students for success in postsecondary education and careers. We specifically look at:

- Gifted and talented programming
- 8th-grade algebra 1
- Advanced Placement
- International Baccalaureate Diploma Program
- Postsecondary enrollment options
- Concurrent enrollment

IMPORTANT CAVEAT ON PSEO DATA

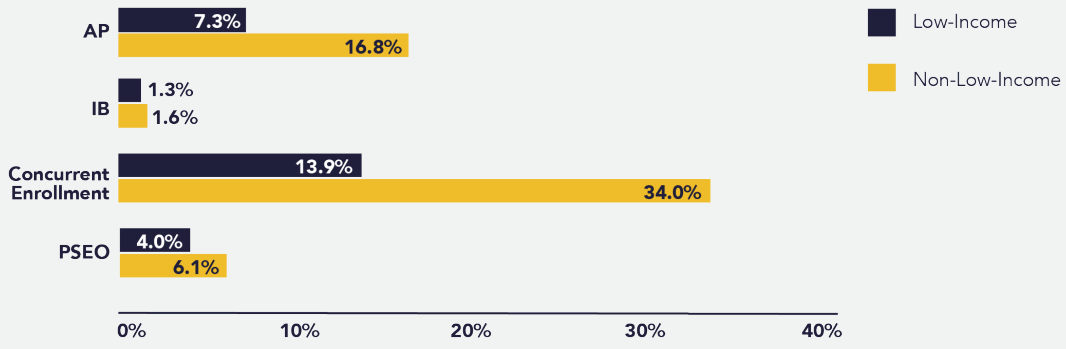
Minnesota has two methods of funding PSEO. In the traditional model, the Minnesota Department of Education pays postsecondary providers directly for credit hours taken by PSEO participants and then reduces state aid to the school district based on the amount of time a student spends participating. Under "PSEO by Contract," the school district develops an agreement to pay the college or university directly, with no change to their state aid. Many districts prefer the contract model because of the financial incentives. For context, in 2019 in the Minnesota State System, 5,960 students participated in PSEO while 9,493 students were enrolled through PSEO by contract.[3]

Unfortunately, data for students accessing PSEO through a contract model is not made available in the same way as traditional PSEO data—and what is accessible is not disaggregated for English Learners, students with disabilities, and low-income students. These are crucial missing data points and, without them, we do not have a clear picture of the impact of PSEO. It's critical that MDE update their data systems to make this data publicly available.

Different Odds for Students Based on Income

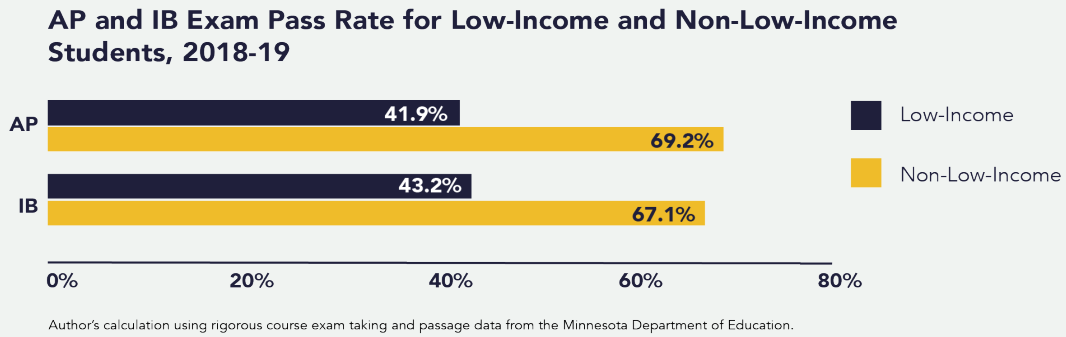
Across all measures, we identified significant gaps in access and success for students from low-income families compared to non-low-income students. We see clear disparities in the enrollment data for AP, IB, PSEO, and concurrent enrollment. Students from low-income families are far less likely to enroll in these advanced pathways. The gap is more significant for some programs than others, with the most notable disparities in concurrent enrollment and AP access. For example, while 34% of students from non-low-income families enrolled in concurrent enrollment, only 14% of students from low-income families were enrolled during the same period.

Percent of Students Enrolled in Rigorous Coursework Programs, Low-Income and Non-Low-Income, 2018-19



Author's calculation using student enrollment and rigorous course taking data from the Minnesota Department of Education.

There are not only disparities in rigorous coursework enrollment, but passage rates as well. When we look at AP and IB exam passage rates, we see that students from low-income families pass these exams at much lower rates than their peers—at least 25 percentage points. The disparities in pass rates are important because if students pass these exams, that can translate directly into college credit.



Author's calculation using rigorous course exam taking and passage data from the Minnesota Department of Education.

What can we learn from these trends? The first takeaway is around access. We see the smallest disparity around IB enrollment, and this is largely a result of where the programs are offered—many of the high schools that offer IB are larger and serve more students from low-income families.

For AP and concurrent enrollment, the two largest rigorous coursework programs in the state, the gaps are much larger. This signals potential problems in both preparation and identification. And even though enrollment in these programs has grown over time—for example, AP enrollment for students from low-income families grew by 246% from 2014 to 2019[4]—students from low-income families still enroll at less than half the rate of their peers. Combine this with the differences in exam pass rates, and it indicates that there is still work to do in supporting low-income students both during and leading up to rigorous courses.

Of note, the federal public data for gifted and talented programming and 8th-grade algebra 1 enrollment does not disaggregate by students' free and reduced-price lunch status. This means we don't have good data on gaps that emerge for low-income students in rigorous pre-high-school programs. Moreover, there are still a lot of districts and charter schools that do not report to the Minnesota Common Course Catalogue—the statewide tool that is designed to track program options and enrollment across all public schools and districts. These two issues leave a large gap in data, and addressing them would allow for more tailored supports and interventions.

RECOMMENDATIONS

Improving Access for Low-Income Students

1. **Expand meal and transportation access for PSEO.**

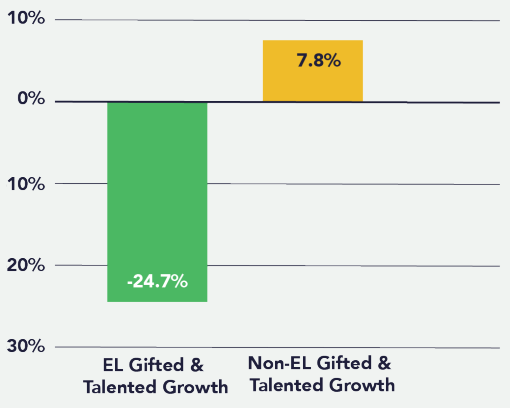
   For students who want to participate in PSEO, lack of access to transportation or subsidized meals, which are standard in the K-12 setting, could exclude them from participating. And even though low-income families are eligible for some transportation reimbursement under current law, it doesn't fully meet the needs of all students. Policymakers should remove these barriers through targeted investments and support, either directly to students and families or to schools or colleges to coordinate additional services.

Maximizing Potential for English Learners

English Learners (ELs) are Minnesota's fastest growing student population, now making up 8.4% of all students. These students bring unique assets to our schools and communities, but too often, we fail to provide effective support and access to advanced coursework. Unfortunately, there are fairly significant gaps in program participation.

This pattern starts early with gifted and talented programming and is exacerbated as students move through the grades. Overall, just 5% of ELs were identified for gifted and talented programming, compared to 29% of non-ELs.[5] Also concerning are the declines in gifted and talented identification over time. From 2012 to 2018, gifted and talented enrollment for ELs declined by 25%, while enrollment for their non-EL peers increased by 8%. Furthermore, overall EL student enrollment increased by 13.4% during this time period.[6]

Change in Gifted and Talented Enrollment, English Learners & Non-English Learners, 2012-18

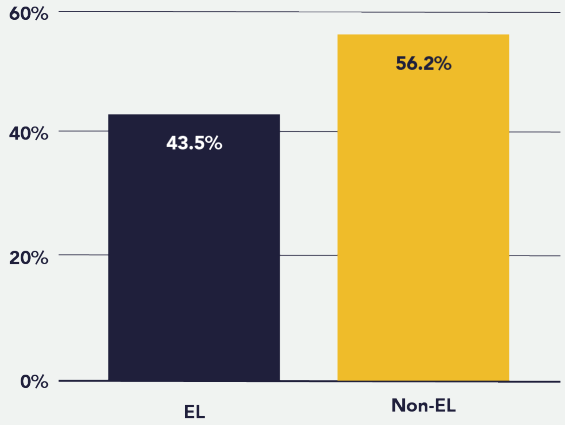


Author's calculation using student enrollment data from the Minnesota Department of Education and the Office of Civil Rights Data Collection.

These gaps are concerning because we know that ELs can benefit from being enrolled in gifted and talented, with research highlighting that those who participated had more positive interactions with teachers and students, higher feelings of belonging and engagement, and higher academic achievement.[7]

We also see gaps for 8th-grade participation in algebra 1—a key foundation for college and career and a Minnesota requirement.[8] Only 44% of ELs enrolled in 8th-grade algebra 1, compared to 56% of non-ELs.

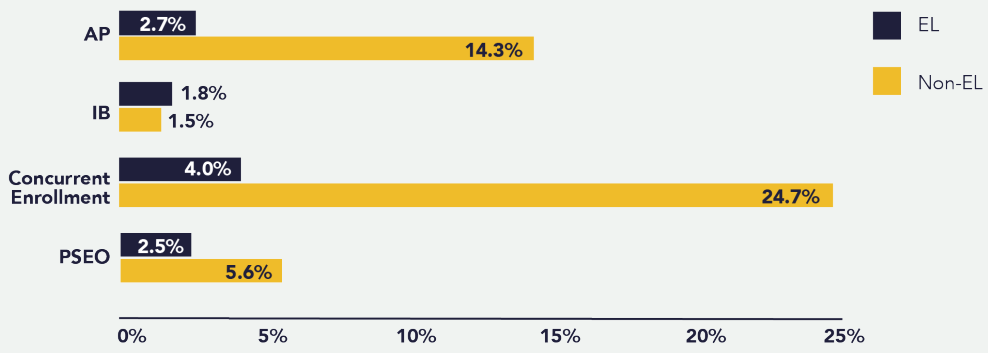
Percent of Students Enrolled in 8th-Grade Algebra, EL and Non-EL, 2017-18



Author's calculation using student enrollment data from the Minnesota Department of Education and the Office of Civil Rights Data Collection.

At the high school level, we see low rigorous coursework participation for ELs across the board and large disparities—particularly for AP and concurrent enrollment. IB program access is the only exception. And even though AP, PSEO, and concurrent enrollment for ELs have more than doubled between 2014 and 2019, still only 3% of ELs are enrolled in AP and PSEO, and 4% participate in concurrent enrollment. Low participation in these courses is particularly troubling because it means that ELs are far less likely than their non-EL peers to graduate from high school with coursework that translates directly into college credit.

Percent of Students Enrolled in Rigorous Coursework, EL and Non-EL, 2018-19



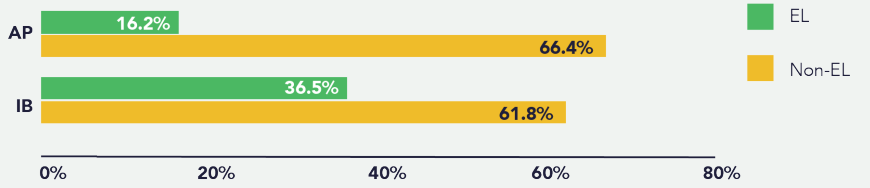
Author's calculation using student enrollment and rigorous course taking data from the Minnesota Department of Education.

NOTE ON THE DATA:

The EL enrollment data for rigorous course taking includes current EL students and doesn't include students who have exited out of EL programming. Additional disaggregated data on those who have exited EL programming could help gauge the efficacy of programming and track how students do over time.

When we look at AP and IB exam pass rates, we also see large disparities between EL and non-EL students. This is important because if they do not pass the exams, then they do not get the college credit. That said, EL students in IB programs do seem to experience greater success, both in real terms and in terms of a smaller gap with non-EL peers. Without more granular data, it is difficult to identify why the EL experience in these programs differs, but should be considered at the local level as districts are developing program strategies.

AP and IB Exam Pass Rate for EL and Non-EL Students, 2018-19



Author's calculation using rigorous exam taking and passage data from the Minnesota Department of Education.

RECOMMENDATIONS, Continued

Improving EL Access to Rigorous Coursework

2 **Provide professional development for all educators to support English Learners' language development and content learning.**

High-quality, rigorous coursework programming for English Learners must include evidence-based approaches for supporting ELs, with a focus on literacy. Moreover, all teachers should have the opportunity to build these skills, so that EL students have effective support from their primary teachers to avoid missing out on key benchmarks and content. To do this, districts and schools should incorporate English Learner-focused training and resources into professional development.

3 **Incorporate EL-focused training into teacher preparation.**

While professional development will always be important, providing a strong foundation in EL support strategies during teacher preparation is even more critical. Specifically, all teacher candidates should be learning about evidence-based approaches for reinforcing literacy and oral language skills for English Learners. However, only half of teachers feel that their preparation programs were effective in preparing them to teach English Learners.[9]

...

Minnesota's teacher preparation programs should audit their courses that are meant to prepare teacher candidates to teach ELs and ensure that they are aligned to evidence-based practices.

4 **Make materials available in families' primary languages.**

There are many options for coursework that can accelerate students' learning and sometimes earn them college credit. However, often students and families do not have access to transparent and translated information on everything that's available, as well as the benefits of the different programs. Districts and schools should ensure that all rigorous coursework materials are available in families' primary language so that parents and guardians can help encourage and guide their students.

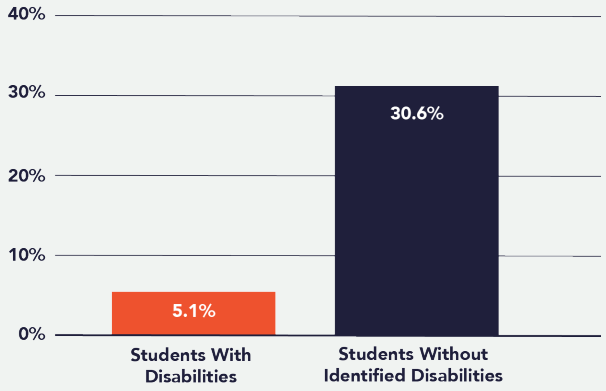
Effectively Supporting Students with Disabilities

In Minnesota, 16.7% of students are identified as having a disability—in other words, they are enrolled in a special education program to support any number of unique mental, intellectual, and physical needs. And while most spend the majority of their school days in the general education setting, they are still much less likely than their peers without disabilities to have access to advanced coursework.

Early on, just over 5% of students with disabilities are enrolled in gifted and talented. That said, there are many more with high academic potential who are overlooked due to their disability. By comparison, 31% of students without disabilities participate in gifted and talented.

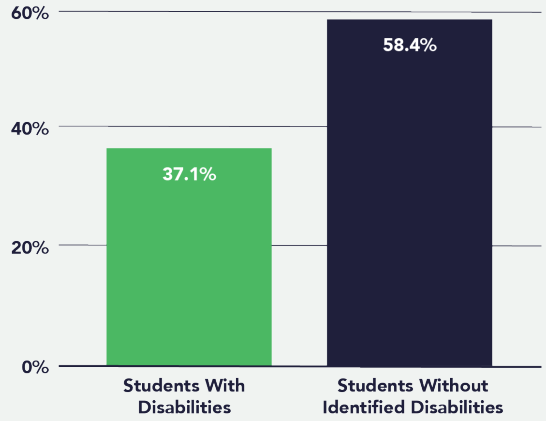
By the time students reach 8th-grade algebra 1—where state policy sets the bar that all Minnesota students should participate—we see a gap of 21 percentage points with just 37% of students with disabilities enrolled. This makes it clear that additional, intentional supports are needed to ensure students with disabilities have access to foundational math programming.

Percent of Students With and Without Identified Disabilities Enrolled in Gifted & Talented, 2017-18



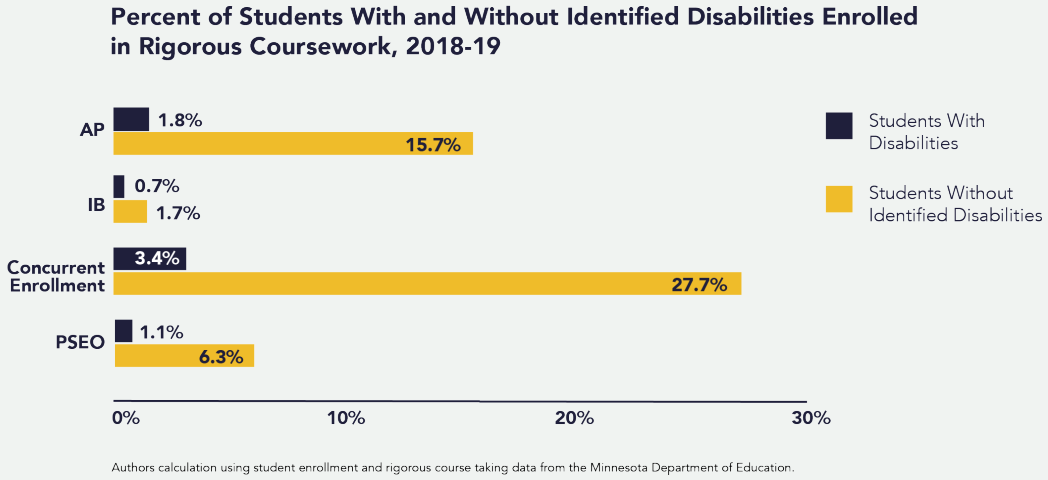
Author's calculation using student enrollment data from the Minnesota Department of Education and the Office of Civil Rights Data Collection.

Percent of Students With and Without Identified Disabilities Enrolled in 8th-Grade Algebra, 2017-18

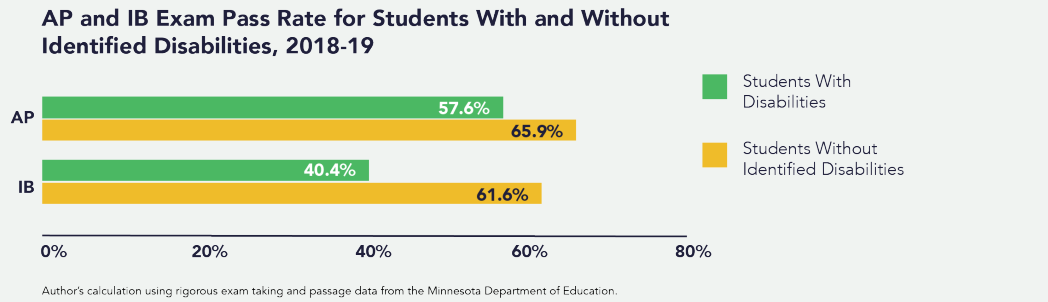


Author's calculation using student enrollment data from the Minnesota Department of Education and the Office of Civil Rights Data Collection.

At the high school level, we see gaps in rigorous coursework participation across the board, with less than 2% participation in AP, IB, and PSEO and only 3% participation in concurrent enrollment. Furthermore, growth in these programs for students with disabilities has been much smaller than for ELs and low-income students. The low enrollment rates show that we need to be doing more to ensure that students with disabilities are not overlooked for advanced coursework, and that they have the modifications and support needed to succeed.



One notable finding is that pass rates for AP exams for students with disabilities are high when compared to low-income students and ELs. While very few students with disabilities enroll in AP, this highlights the importance of effectively identifying students for these courses, ensuring they do not miss out on an opportunity that can give them a jumpstart in college.



RECOMMENDATIONS, Continued

Improving Access for Students with Disabilities

5 **Provide professional development for all educators to support students with disabilities.**

Students with disabilities are found in nearly every Minnesota classroom, so it's essential for all educators to have comprehensive professional development on evidence-based approaches for providing modifications and accommodations. Districts and schools should incorporate training and resources into professional development that are focused on students with disabilities.

...

6 **Integrate strategies for effectively serving students with disabilities into teacher preparation programming.**

All teacher candidates should learn how to use evidence-based approaches for providing modifications and accommodations, collaborate with special education teachers, and about relevant policies like the Individuals with Disabilities Act (IDEA). The vast majority of states—including Minnesota—do not articulate specific skills, knowledge, or training that general education teachers should have for working with students with disabilities.[10] This lack of training translates into how prepared teachers feel. For example, only 30% of general education teachers strongly agree that they feel prepared to successfully teach students with learning disabilities.[11]

7 **Incorporate rigorous coursework into a statewide IEP template.**

California's 2020-21 Budget Act included funding to convene a workgroup of special education experts to create a statewide template for Individual Education Plans (IEPs), which will guide a more intentional process of identifying courses, extracurricular opportunities, and support services that map to students with disabilities' long-term goals beyond K-12 education.[12] Minnesota should follow suit and ensure that our template includes advanced coursework as one of the strategies to help bridge the K-12 and postsecondary education together for students with disabilities.

Conclusion

Because of the important role rigorous coursework plays in laying the groundwork for postsecondary success, it's critical to ensure policy and practice supports all students to succeed, including students from low-income families, English Learners, and students with disabilities. On top of the recommendations specific to the student groups woven throughout the report, there are a few key overarching roles for state leaders.

RECOMMENDATIONS, Continued
Roles for State Leaders

8 **Identify and build on what's showing promise in schools today.** The Minnesota Department of Education and the Office of Higher Education should partner to identify and disseminate promising practices, with a focus on special populations. Identifying and sharing best practices is critical not only for fostering collaboration between schools, but for demonstrating that all students can succeed in rigorous coursework. This would also encourage more districts and schools to adopt policies and practices that are focused on expanding access and success for special populations.

9 **The Minnesota Department of Education should provide guidance on programs, services, and funding streams that can be used for special populations in advanced coursework.** Guidance documents from MDE are needed to clarify schools' and colleges' legal obligations for supporting students from special populations in rigorous coursework, particularly for students with disabilities.

All of this builds on twelve broader recommendations from our 2020 report on rigorous coursework access and success for students of color. We encourage you to read more here.

We are grateful that policymakers are beginning to explore ideas that would shift the landscape—like automatically enrolling students who demonstrate proficiency in rigorous course options[13] and better tracking data through existing systems like World's Best Workforce.[14] It has never been more important to support students through a rigorous and engaging education. And as we take on this work, we must bring all students along, with an intentional focus on closing long-standing gaps.

Endnotes

1 Kaput, K. (November 2020). "Closing the Rigorous Coursework Gap: Supporting College and Career Readiness for Minnesota's Students of Color." EdAllies. https://edalliesmn.org/wp-content/uploads/2020/11/EdAllies-CRR-Report-2020.pdf.

2 Author's calculation using 2018 student enrollment data from the Minnesota Department of Education, 2018 State Estimations from the Office of Civil Rights Data Collection, and 2018 rigorous course taking and exam passage rates from August 2021 Minnesota Department of Education data request.

3 January 29, 2021 PSEO update from Minnesota State's PSEO Workgroup Meeting.

4 Author's calculation using 2014-2019 student enrollment data from the Minnesota Department of Education.

5 Author's calculation using 2018 student enrollment data from the Minnesota Department of Education and student gifted and talented enrollment from the Office of Civil Rights Data Collection.

6 Author's calculation using 2012-2018 student enrollment data from the Minnesota Department of Education.

7 Pereira, N. & Gentry, M. (September 2013). "A Qualitative Inequity Into the Experiences of High-Potential Hispanic Language Learners in Midwestern Schools." Journal of Advanced Academics.

8 Minnesota Statute 120B.024.

9 Educators For Excellence. (2020). "Voices from the Classroom: A Survey of America's Educators." Educators For Excellence.

10 National Center for Learning Disabilities and Understood. (2019). "Forward Together: Helping Educators Unlock the Power of Students who Learn Differently." National Center for Learning Disabilities and Understood.

11 Ibid.

12 Petek, G. (2020). "The 2020-21 Budget: Proposition 98 Education Analysis." Legislative Analyst's Office.

13 Minnesota Senate File 1554 considered during the 2021 legislative session.

14 Minnesota House File 1712 considered during the 2021 legislative session.

EdAllies

Our Mission

EdAllies partners with schools, families, and communities to ensure that every young Minnesotan has access to a rigorous and engaging education. We advance policies that put underserved students first, remove barriers facing successful schools and programs, and foster an inclusive conversation about what's possible for students.

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3M

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