



OFFICE OF THE LEGISLATIVE AUDITOR
STATE OF MINNESOTA

EVALUATION REPORT

K-12 Online Learning

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OFFICE OF THE LEGISLATIVE AUDITOR

STATE OF MINNESOTA • James Nobles, Legislative Auditor

September 2011

Members of the Legislative Audit Commission:

Minnesota has been on the forefront of offering a wide range of learning options to K-12 students and their families. With the growing prominence of the Internet in virtually every aspect of life, it is not surprising that “online learning” is now an option available to every K-12 student statewide. It is an option that can provide significant benefits but has raised some concerns.

At your request, the Office of the Legislative Auditor evaluated the current status of K-12 online learning in Minnesota. We examined data related to the performance of students who participate in online learning. We also assessed the role of the Minnesota Department of Education in both facilitating the availability of online learning and ensuring appropriate oversight.

We found that full-time online students have low course-completion rates and higher than average school drop-out rates. They also tend to lose ground on the state’s standardized math tests. Furthermore, staffing and resource problems have hindered the Department of Education’s ability to fulfill its online learning responsibilities. We recommend that the department redesign its approach to overseeing online schools to provide greater attention to student and school performance.

This report was researched and written by Jo Vos (evaluation manager), Sarah Delacueva, Dan Jacobson, and David Kirchner, with assistance from Joel Alter, Emi Bennett, and Julie Trupke-Bastidas. The Department of Education, school districts, charter schools, and online schools cooperated fully with our evaluation.

Sincerely,

James Nobles
Legislative Auditor

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Summary

K-12 student participation in online learning is growing, and both benefits and concerns are emerging.

Major Findings:

- An estimated 20,000 K-12 students took at least one online course during the 2010-11 school year; about 8,000 students took online courses offered by their own schools, and 12,000 took courses from state-approved “online schools.” (pp. 5-8)
- With approval from the Minnesota Department of Education (MDE), any school district, intermediate school district, charter school, or consortium of school districts may establish a separate online school and be reimbursed for courses taken by students from across the state; MDE has approved 24 online schools to operate in Minnesota. (pp. 4-7)
- Between the 2006-07 and 2009-10 school years, the number of students taking courses part time from online schools nearly doubled, and the number of students taking online courses full time more than tripled. (p. 7)
- Since the 2006-07 school year, full-time online students have become less likely to finish the courses they start; when compared with students statewide, full-time online students were more likely to completely drop out of school. (pp. 31-33)
- Full-time online students made less progress on the MCA-II standardized math tests than students in traditional schools. (pp. 36-41)

- On the MCA-II reading tests, full-time online students generally kept pace with their counterparts in traditional schools in one of the two years we analyzed, but not in the other. (pp. 36-41)
- In the last few years, MDE has not reviewed applications for new online schools in a timely manner. (pp. 46-50)
- The Minnesota Department of Education has not assigned sufficient staff to fulfill its online learning responsibilities. (p. 50)

Key Recommendations:

- The Legislature should adopt specific time frames for MDE to process applications for new online schools. (p. 56)
- The Minnesota Department of Education should redesign its reapproval process for online schools to focus more attention on performance. (p. 56)
- The Minnesota Department of Education should assign sufficient staff to carry out its online learning responsibilities. (p. 57)
- To help school districts and charter schools offer online learning opportunities to their students in a cost-efficient manner, MDE should encourage the development of online learning consortia throughout the state. (p. 59)

Online learning involves interactive courses using the Internet.

Students may participate in online learning part time or full time.**Report Summary**

In contrast to the face-to-face teaching methods used in most traditional schools, online learning consists of interactive courses delivered from teachers to students using the Internet, with teachers and students separated geographically. Among other things, state law requires that online courses in public schools be rigorous, be taught by teachers licensed in Minnesota, and meet or exceed state standards.

Minnesota school districts and charter schools may provide online courses to their own students with little direct state oversight. However, school districts and charter schools that want to enroll students in online courses full time, or enroll students from other school districts or charter schools part time, must establish separate online schools approved by the Minnesota Department of Education (MDE).

Student participation in online learning is growing rapidly.

Based on data collected by MDE, between the 2006-07 and 2009-10 school years, the number of part-time students in online schools nearly doubled, and the number of full-time students more than tripled. In the 2009-10 school year, about 12,100 students (about 1.5 percent of Minnesota's K-12 population) took one or more courses from an online school.

In addition, responses to our survey of school district superintendents and charter school directors indicated that 82 Minnesota school districts and 5 charter schools offered online courses solely to their own students during the 2010-11 school year. Survey

respondents reported enrolling about 8,000 students in these online courses.

The number of school districts and charter schools providing online courses solely to their own students could double over the next three years. In our survey, 78 school districts and 14 charter schools not currently offering online courses indicated that they planned to start doing so within the next three years. Further, 49 school districts and 2 charter schools already enrolling students in online courses expect to increase their online offerings during the same time period.

Online learning offers important opportunities to students, but it also raises some concerns.

Online learning is an important and growing component of Minnesota's school choice options. Online learning can give students increased scheduling flexibility and access to course offerings beyond those available at students' local schools. Further, it can give at-risk students another way to stay in school.

However, we have some concerns about the performance of full-time online students. First, course-completion rates for full-time online students have decreased. Between the 2006-07 and 2009-10 school years, course registrations for full-time online students nearly quadrupled, going from about 20,000 courses to more than 80,000. At the same time, course-completion rates dropped from 84 to 63 percent.

Second, drop-out rates for full-time online students have increased. In 2006-07, 18 percent of full-time online twelfth-grade students dropped out of school completely by the end

The performance of full-time online students is a concern and should receive more attention.

of the school year. In 2009-10, that percentage had grown to 25 percent. In comparison, only 3 percent of twelfth-grade students statewide dropped out of school by the end of their senior year.

Third, during the 2008-09 and 2009-10 school years, full-time online students in grades 4 through 8, on average, made about half as much progress on the MCA-II standardized math tests as traditional students in the same grades. For example, during the 2009-10 school year, 39 percent of full-time online students in grades 4 through 8 experienced low growth between math assessments compared with 26 percent of their traditional school counterparts. Results from the MCA-II reading tests were mixed—full-time online students in grades 4 through 8 generally kept pace with their traditional school counterparts in 2009-10 but not in 2008-09. Test results for high school students were generally similar, although the infrequency of assessments for older students makes these data more difficult to interpret.

The Minnesota Department of Education has not processed applications for new online schools in a timely manner.

Over the last several years, MDE has developed and implemented a rigorous review-and-approval process for school districts and charter schools that want to establish online schools. Since passage of the Online Learning Option Act in 2003 and July 2009, MDE approved about 38 applications for new online schools, and it rejected at least 5 others.

Recently, though, MDE's review-and-approval process has struggled, and the department has a backlog of

new applications that it has not addressed. Between January 1, 2010, and June 30, 2011, MDE received eight applications to establish online schools—four in 2010 and four in 2011. Despite department guidelines requiring action within 60 days of receiving an application, MDE reviewed and commented on only three of the eight applications. It reviewed one immediately upon receipt, and it reviewed the other two about three to four months after their receipt. In June 2011, MDE approved two of the eight applications—one submitted almost a year earlier and another submitted less than a week prior to approval.

To help ensure more timely response, the Legislature should require MDE to process applications for new online schools within specific time frames. Although MDE guidelines currently set forth reasonable expectations for parts of the review process, MDE has not followed them. Also, MDE's guidelines do not address how long it should take the department to make a final decision about an application, nor do they address issues related to incomplete applications. Recently, MDE has proposed setting a specific deadline for submitting new applications and limiting the number of times applicants can amend their applications.

The Minnesota Department of Education should redesign its reapproval process.

To gain reapproval, MDE currently requires online schools to resubmit (with updates) the same information contained in their initial applications each year. We think the department's reapproval process for online schools should incorporate some of the performance-related elements currently used to reapprove charter

The state's oversight of K-12 online schools needs some adjustments.

The Minnesota Department of Education faces challenges in fulfilling its online learning responsibilities and needs to be more strategic.

schools. For example, MDE should approve online schools for longer time periods—three to five years. To gain reapproval, school districts and charter schools with online schools should be required to submit formal evaluations assessing their students’ performance and their schools’ progress in meeting their goals and objectives. This would free MDE of the self-imposed task of reapproving online schools each year and place greater responsibility on the entities that have established the online schools. It would also make the reapproval process more meaningful and could provide insights into the effectiveness of online learning.

Reducing oversight of online schools that only serve part-time online students could ease the Minnesota Department of Education’s staffing problems.

Staffing and budget limitations have hindered MDE’s ability to fulfill its online learning responsibilities. To better focus its resources, MDE could ask the Legislature to limit the department’s review-and-approval authority to online schools that enroll students on a full-time basis and require those enrolling only part-time online students statewide to simply register with MDE. In the 2010-11 school year, 8 of the state’s 24 online schools enrolled students on a part-time basis only.

State law already contains provisions (which would need to be retained) that safeguard students’ interests when enrolling in online courses part time. For example, online schools must notify enrolling school districts whenever one of their students registers for an online course on a part-time basis. In these cases, online schools must make certain course-specific information available to

students’ enrolling school districts, including how a course incorporates state academic standards. School districts have an opportunity to determine whether specific courses meet their graduation requirements before students complete the courses. Furthermore, enrolling school districts must designate staff to help facilitate and monitor their students’ academic progress when they enroll part time in courses at online schools. Finally, online schools that only enroll students on a part-time basis are generally administered by school district consortia that give member school districts a direct role in determining course content.

School districts and charter schools should be encouraged to develop online learning consortia statewide.

About two-thirds of school districts and charter schools are not members of online learning consortia. School district participation in online learning consortia can be beneficial to students, parents, teachers, and district administrators. For example, school districts that participate in online consortia generally lose less general education revenue when their students enroll in online consortium courses than they would if their students were taking those courses from another online school. Also, participating school districts help determine what courses online consortia offer and how they are delivered. Online consortia could also provide teachers from member districts with access to curricula, training, learning management systems, and various other tools. Because online consortia often use teachers from member school districts to teach their online courses, students and parents may also have more opportunities for face-to-face interaction.

Introduction

Our evaluation examines online learning for K-12 students in public schools.

Online learning within the K-12 setting has increased dramatically over the last several years. Researchers estimate that about 45,000 students in kindergarten through grade 12 nationwide took an online course in 2000; today, that number is more than 4 million students.¹ Other studies report that students are taking online courses in about 82 percent of K-12 school districts nationwide.² In Minnesota, approximately 1.5 percent of public school K-12 students—about 12,100— took at least one online course from one of the state’s 24 approved online schools during the 2009-10 school year. In addition, an estimated 8,000 students took one or more online courses offered by their own school districts or charter schools.

Proponents of online learning cite many advantages to offering online learning opportunities to K-12 students. For example, online learning can give students increased scheduling flexibility and access to course offerings beyond those available at students’ local schools. Advocates also point out that online opportunities give at-risk students another way to “stay in school.” On the other hand, critics point out that online learning can decrease student-teacher and student-student interaction and might not be appropriate for all types of students, courses, or grade levels.

In March 2010, the Legislative Audit Commission directed the Office of the Legislative Auditor (OLA) to evaluate K-12 online learning. We focused on the following research questions:

- **What online programs and courses are available to students in kindergarten through grade 12, and how are they offered?**
- **What types of students enroll in online learning programs and courses? Why do they enroll in online programs, and are their expectations fulfilled?**
- **To what extent does the Minnesota Department of Education (MDE) ensure that online programs provide high quality and adequately rigorous courses? What is known about the effectiveness of online learning?**

We used various research methods to answer these questions. First, we analyzed student enrollment and course data collected by MDE. Second, we examined MDE’s files regarding its review-and-approval process for online schools,

¹ Heather Staker, *The Rise of K-12 Blended Learning Models* (Innosight Institute, Watertown, MA: 2011), 1.

² North American Council for Online Learning, *Lessons Learned from Virtual Schools* (International Association for K-12 Online Learning, Vienna, VA: 2011), x.

including initial and reapproval applications, course alignment materials, guidelines, letters of approval and disapproval, and other documents. Third, in April 2011, we surveyed school district superintendents and charter school directors, online teachers employed by online schools, students in grades 9 through 12 taking at least one course online from an online school, and parents of children in kindergarten through grade 8 currently enrolled in an online school.³ Fourth, we conducted formal interviews with program administrators from half of the state's online schools. Fifth, we looked at available data on how other states provide and oversee online learning. Finally, we interviewed staff from MDE and the University of Minnesota as well as representatives from various interest groups.

Our study focuses on K-12 online opportunities offered by school districts, charter schools, and school district consortia through the Online Learning Option Act.⁴ Alternative learning centers that offer online courses to their students are not covered by the act and were excluded from our evaluation. Likewise, schools that offer postsecondary courses online to public school juniors and seniors through the Postsecondary Enrollment Options Act were excluded. We also did not include privately operated online schools that do not receive state funding for serving public school students.

This report is divided into four chapters. Chapter 1 defines online learning and briefly discusses how online schools are organized and funded. Chapter 2 describes the online learning experience in greater detail, drawing from our interviews with online school administrators and our four surveys of school district and charter school administrators, teachers, students, and parents. Chapter 3 examines student performance in online schools, including course completions, attrition, and standardized test results. Chapter 4 examines MDE's role in online learning and presents our overall conclusions and recommendations.

³ Appendix A discusses how the various surveys were administered and their response rates.

⁴ *Minnesota Statutes* 2010, 124D.095.

Background

Over the last decade, the Internet has had a large effect on K-12 education nationwide. Today, students and educators have access to a wide variety of online tools and experiences—some instructional in nature and others not. This chapter defines “online learning” and “online instruction” and discusses the different types of online opportunities available to Minnesota students in kindergarten through grade 12.¹ It also documents the growth in online opportunities and student participation over the last several years and discusses state funding for online learning.

DEFINING ONLINE LEARNING

In contrast to the face-to-face teaching models used in most traditional brick-and-mortar schools:

- **Online instruction consists of interactive courses delivered from teachers to students using the Internet, with teachers and students separated geographically.**

Although online instruction is an example of “distance education,” it differs from other forms of distance education such as correspondence courses or independent study in that online instruction relies primarily on the Internet. Online instruction is also distinct from instruction that uses the Internet or computers to supplement the teaching that takes place largely in the traditional classroom, for example, after-class computer labs.

Perhaps the most pervasive argument in favor of online instruction is that it gives K-12 students access to individual courses that their own schools may not be able to offer such as Anthropology, French, or Advanced Placement Calculus. Another often-cited benefit is that online instruction provides additional opportunities to at-risk students or those unable to attend traditional schools due to illness, injury, or other medical, safety, or personal reasons.

On the other hand, online learning may not be appropriate for all students, especially those who are poorly motivated. In addition, some students may not thrive without the daily face-to-face contact with teachers or other students that traditional schools offer. Online school administrators face challenges building a school culture, as do teachers who must often learn new technologies and skills to succeed in an online environment.

Online learning is distinct from other types of distance learning because it relies on the Internet.

¹ Technically, “online learning” and “online instruction” refer to two distinct activities. Online learning is student based—students learn online. Online instruction is teacher based—teachers teach online. For simplicity, we use the two terms interchangeably throughout this report.

In an effort to combine the best of both worlds, many schools across the country have recently begun to offer “hybrid” or “blended” online courses as opposed to “fully” online ones.² In fully online instruction, all or nearly all student-teacher interaction takes place over a computer connection. In contrast, hybrid instruction combines online learning with face-to-face learning by requiring that students spend part of their time in a traditional classroom and part of their time in an online classroom.

ONLINE LEARNING IN MINNESOTA

Online learning opportunities have been available to some public school K-12 students since at least the mid-1990s. For example, North Branch Distance Learning Program and TRIO Wolf Creek Online High School began offering online courses in 1996 as part of a regional state technology grant. Charter schools such as Cyber Village Academy and BlueSky Online Charter School began offering online courses in 1997 and 2000, respectively. Several school districts were also on the forefront of the online movement, including Rochester, St. Paul, and Bloomington.

Partly to make online learning options more readily available to students statewide and to establish a funding mechanism for such courses, the 2003 Legislature adopted the Online Learning Option Act.³ The law defines online learning as interactive courses or programs delivered by teachers to students via computer. According to the law, online learning courses and programs must be rigorous, be taught by a teacher licensed in Minnesota, meet or exceed state standards, contribute to grade progression, and incorporate other more traditional teaching methods, including frequent student assessment.⁴

The law allows K-12 students to enroll in online learning courses or programs on either a full- or part-time basis. Students enrolled full time in a “comprehensive” online learning school graduate with a diploma from that online school. Students may also enroll in individual online courses while still attending their local school at least half time. Under this arrangement, known as “supplemental” online learning, students continue to attend classes and receive student services from the local school and ultimately graduate with a diploma from their local school.⁵

Although school districts and charter schools may offer online courses to their own students:

- **School districts and charter schools must receive state approval to enroll students in online courses full time or to enroll students from other school districts or charter schools part time.**

² For example, see Heather Staker, *The Rise of K-12 Blended Learning Models* (Innosight Institute, Watertown, MA: 2011).

³ *Laws of Minnesota* First Special Session 2003, chapter 9, art. 2, sec. 20.

⁴ *Minnesota Statutes* 2010, 124D.095, subd. 2(a) and subd. 7.

⁵ For the purposes of our evaluation, we refer to students enrolled in comprehensive schools as full-time students and those who take supplemental courses online as part-time online students.

Since the 2003-04 school year, online learning has been available to all K-12 public school students in Minnesota.

To receive state funding, online schools must be approved by the Minnesota Department of Education.

In order for the state to pay for online instruction, public school students must enroll in a course offered by either their enrolling school district or charter school or an “approved online learning provider.” According to state law, any school district, intermediate school district, group of school districts working under a joint-powers agreement (referred to as a consortium), or charter school may offer online instruction.⁶ The law refers to these entities as “online learning providers,” and we simply refer to them as online schools. As we discuss in Chapter 4, state law requires the Minnesota Department of Education (MDE) to “review and approve” online schools that (a) enroll students on a full-time basis or (b) enroll students from outside their resident district on a part-time basis. The law specifically excludes school districts or charter schools that offer online courses solely to their own students on a part-time basis from MDE’s review-and-approval process.⁷ Throughout this report, we refer to these online courses and providers as those “not requiring MDE approval.”

Besides enrolling in online schools or taking online courses not requiring MDE approval through their enrolling school district, students can take online courses from a variety of private schools or learning centers based both in and outside of Minnesota. Students taking courses from private online institutions must do so at their own expense.

Online Schools

Since passage of the Online Learning Option Act in 2003, the number of MDE-approved online schools has increased by about two-thirds.⁸ According to data collected by MDE:

- **During the 2010-11 school year, 24 online schools provided online courses and programs to about 12,100 K-12 students.**

Table 1.1 lists these online schools and shows how they differ from one another in terms of administrative structure, grades served, and student enrollment.⁹ Individual school districts administered slightly more than one-third of the online schools, while charter schools and consortia each administered slightly less than one-third.¹⁰ Although MDE does not track which school districts belong to online consortia, based on the Web sites of the online learning consortia, we estimated that only 35 percent of school districts and charter schools statewide

⁶ *Minnesota Statutes* 2010, 124D.95, subd. 2(b).

⁷ Likewise, online learning providers that offer postsecondary courses to public school juniors and seniors through the Postsecondary Enrollment Options Program do not need to be approved by MDE.

⁸ Chapter 4 discusses MDE’s approval process for online schools.

⁹ Appendix B contains more detailed information on each online school.

¹⁰ Nine school districts administered ten online schools in the 2010-11 school year: Anoka-Hennepin, Brooklyn Center, Fergus Falls, Houston (two online schools), Lakeville, Minneapolis, North Branch, Rothsay, and Spring Lake Park.

were members of online consortia.¹¹ School districts in greater Minnesota were more than twice as likely as school districts in the Twin Cities metropolitan area to belong to online learning consortia. School districts that physically “housed” an online learning consortium or were in close proximity geographically to one were often members of that consortium.

Table 1.1: State-Approved Online Schools, 2010-11

Online School	Administrative Structure	Grades Served	2009-10 Enrollment
Anoka-Hennepin Compass On-Line	District	10-12	67
BlueSky Online Charter School	Charter	7-12	734
Central Minnesota Online Learning	Consortium ^a	9-12	224
Cyber Village Academy	Charter	3-12	156 ^b
EdVisions Off-Campus High School	Charter	7-12	107
INFINITY Online: Minnesota's Digital Academy	Consortium	8-12	588
Insight School of Minnesota	District	9-12	509
iQ Academy	District	6-12	610
Lakeville Careers Online	District	10-12	0 ^c
Learn At My Pace (LAMP) Online High School ^d	District	9-12	18
Minneapolis Public Schools Online	District	8-12	518
Minnesota Center of Online Learning ^d	District	K-6	448
Minnesota Connections Academy	Charter	K-12	1,347
Minnesota Online High School	Charter	9-12	363
Minnesota Service Cooperatives Online Learning Project	Consortium	7-12	538
Minnesota Virtual Academy	District	K-12	1,512
Minnesota Virtual High School	Charter	6-12	2,601
North Branch Distance Learning Program	District	K-12	73
Northern Star Online	Intermediate District	7-12	1,205
Online Development and Instructional Network	Consortium	9-12	23
SOCRATES Online	Consortium	K-12	20
Spring Lake Park Online	District	9-12	71
SW/WC Online Learning Community	Consortium	9-12	0 ^c
TRIO Wolf Creek Distance Learning Charter School	Charter	9-12	368

NOTES: Appendix B contains more detailed information about each school. “Enrollment” is the number of unique students enrolled at any point during the 2009-10 school year, as reported to the Minnesota Department of Education.

^a A consortium is a group of school districts or charter schools working under a joint-powers agreement to provide part-time online courses to K-12 students.

^b Cyber Village Academy did not begin enrolling students in grades 9 through 12 until the 2010-11 school year.

^c Lakeville Careers Online and SW/WC Online Learning Community did not report student enrollment in the 2009-10 school year.

^d Both Learn At My Pace (LAMP) Online High School and Minnesota Center of Online Learning closed at the end of the 2010-11 school year.

SOURCES: Minnesota Department of Education and individual online schools.

¹¹ See Appendix B for maps showing the school districts that were members of each online learning consortium during the 2010-11 school year.

Only a few of the state's 24 online schools enroll elementary students.

Although online schools can enroll students from any part of the state, only about one-third have a truly statewide reach.¹² Most consortium-administered schools primarily served students from their member school districts in April 2011. Similarly, school district-administered online schools in Lakeville, Minneapolis, North Branch, and Spring Lake Park catered primarily to students from their own school districts. Two online charter schools, Cyber Village Academy and TRIO Wolf Creek, educate many of their students using a hybrid approach that required students to be on campus frequently—these two schools also drew nearly all of their students from a limited geographic area. On the other hand, Minnesota Connections Academy and Minnesota Virtual High School, both of which are administered by charter schools, attract students statewide, as does Minnesota Virtual Academy administered by the Houston School District.

During the 2009-10 school year, most online schools served only middle or high school students, although some offered elementary programs for full-time students. With the exception of online schools administered by consortia, which only enroll students on a part-time basis, about half of the other online schools enrolled both full- and part-time students.

Approved online schools offered nearly 1,900 separate courses across all subject areas during the 2010-11 school year, with the number of courses offered at each school ranging from 2 to 239.¹³ Eight of the 24 online schools offered Advanced Placement courses, and one school offered International Baccalaureate courses for middle school students. Online schools that enroll full-time students must offer a full complement of courses that meet state graduation requirements. Online schools that enroll only part-time online students (which include all consortia) may have more limited course offerings.

The number of students taking courses from online schools has rapidly increased. We found that:

- **In the last four years, the number of part-time students in online schools nearly doubled, and the number of full-time students more than tripled.**

Although online enrollment still makes up a relatively small percentage of the K-12 population (less than 2 percent), it has steadily grown. In the 2006-07 school year, approximately 4,600 K-12 students took at least one online course from an online school, about 2,000 students part time and 2,600 students full time. By 2009-10, student enrollment had risen to more than 12,000, including about 3,800 students part time and 8,300 students full time.

¹² See Appendix B for maps that detail the enrollment patterns of each online school.

¹³ The Minnesota Department of Education requires that online schools submit a list of their course offerings to ISEEK each July. ISEEK's Web site provides current information on careers, education, and jobs in Minnesota.

School districts do not need state approval to offer online courses to their own students on a part-time basis.

Online Courses Not Requiring MDE Approval

As explained earlier, school districts or charter schools that offer online courses solely to their own students do not need to obtain approval from MDE. The Department of Education treats these courses the same as any other course a school district or charter school may decide to offer. As we discuss in Chapter 4, MDE does not track how many school districts or charter schools offer online courses internally.

To learn more about these online courses, we surveyed all school district superintendents and charter school directors in the state.¹⁴ We found that:

- **At least 24 percent of school districts and 3 percent of charter schools offered online courses to their own students during the 2010-11 school year, enrolling about 8,000 students.**

Overall, 82 school districts and 5 charter schools reported enrolling students in online courses during the 2010-11 school year, primarily students in grades 9 through 12.¹⁵ Thirty-six of these school districts and charter schools reported that at least some of their online courses were only available online—that is, the school districts or charter schools did not also offer the courses in a traditional face-to-face classroom. Table 1.2 shows the reasons school districts and charter schools offered their own online courses—most frequently to reduce students' scheduling conflicts and enable their teachers to be innovative.

Furthermore, survey results indicated that:

- **The number of school districts and charter schools offering online courses solely to their own students will likely increase over the next three years.**

In response to our survey, 78 school districts and 14 charter schools that did not currently offer online courses indicated that they planned to start offering such courses within the next three years. Further, 49 school districts and 2 charter schools that already enrolled students in online courses expected to increase their online offerings during the same time period. School districts in the Twin Cities metropolitan area and school districts with higher student enrollments were more likely to offer their own online courses and more likely to consider creating or expanding online options than school districts in greater Minnesota and districts with lower student enrollments.¹⁶ Nearly one-third of school districts with less

¹⁴ We received responses from 90 percent of the school district superintendents and 81 percent of the charter school directors surveyed. Appendix A discusses how each of our surveys was administered and analyzed.

¹⁵ Many charter schools offer instruction in the elementary grades only and do not serve high school students. Of the charter schools that did teach high school students, 7 percent reported enrolling students in online courses in the 2010-11 school year.

¹⁶ However, there appeared to be no relationship between consortium membership and a district's plans for starting an online program.

Table 1.2: Reasons Why School Districts and Charter Schools Offered Online Courses to Their Own Students, 2011

Reason	Percentage
Reduce scheduling conflicts for students	53%
Enable teachers to teach in innovative ways	52
Provide courses not otherwise available	49
Enable struggling students to catch up	43
Improve student achievement	43
Address students' preferences for online courses	41
Meet the needs of students who have difficulty attending school due to personal issues	33
Improve students' technological skills	24
Address shortages in teaching staff	13
Address space issues caused by changing enrollment patterns	7
Reduce costs	6

NOTES: Survey question asked: "Why does your district or charter school offer online learning courses?" Respondents could check more than one answer. Respondents include only administrators from the 85 school districts and charter schools that reported enrolling students in online courses offered solely to their own students.

SOURCE: Office of the Legislative Auditor, survey of school district superintendents and charter school directors, April 2011.

than 500 students and three-fourths of all charter schools reported that they did not offer online courses and had no plans to do so. Only 3 percent of school districts with enrollments over 5,000 students reported no plans for online courses.

School districts are concerned about losing state funds when their students enroll in online schools.

The differences in interest between school districts and charter schools may be partly due to concerns about potential decreases in funding caused by students leaving local schools to explore online options. In our survey, 77 percent of school district administrators, but only 18 percent of charter school directors, agreed or strongly agreed with the statement "I am concerned about the amount of money our district or charter school could lose to certified online providers if more students opt to take online courses." For example, one superintendent wrote:

There should be some "equity" in the process of funding the online learning options. Although there is certainly an investment from schools and districts that offer the online option beyond the district boundaries, the home district should not be penalized in regard to funding for students who choose to take courses outside the resident school district. I am not sure how to achieve the balance, but the student should be able to "count" in both the resident and provider districts to provide some equity in the process.

Our survey of school district superintendents and charter school administrators also showed that:

- **School district and charter school respondents perceived many obstacles to offering online learning, with lack of resources cited most frequently.**

We listed several potential obstacles to developing online courses and asked survey respondents to indicate whether the obstacles were large, small, or insignificant. Most obstacles we asked about were identified as “large” obstacles by at least one-fourth of survey respondents. “Lack of time or staff needed to develop online options” and “course development or purchasing costs” were cited most frequently, by 59 and 56 percent of survey respondents, respectively. According to one superintendent:

We do not have funds for technology because we are trying to manage our low class sizes. We spend to keep staff at the expense of adequate technology. I believe our legislators and voters need to provide more financial support to innovation, technology, and staff training if we are to increase online learning.

Medium-sized and small school districts were equally likely to cite lack of resources as a concern; school districts with enrollments of more than 5,000 students and charter schools were somewhat less likely to raise this as an issue. Other frequently cited obstacles included lack of teacher training; limited technological infrastructure; and concerns about course quality, course completions, and reduced interpersonal interactions.

FUNDING FOR ONLINE LEARNING

School districts and charter schools in Minnesota are primarily funded through a formula in which each student generates a legally prescribed amount of revenue for the school district or charter school he or she attends. In general:

- **Funding for online learning is not “new” money, but rather a redirection of funds that the state has already allocated for each student.**

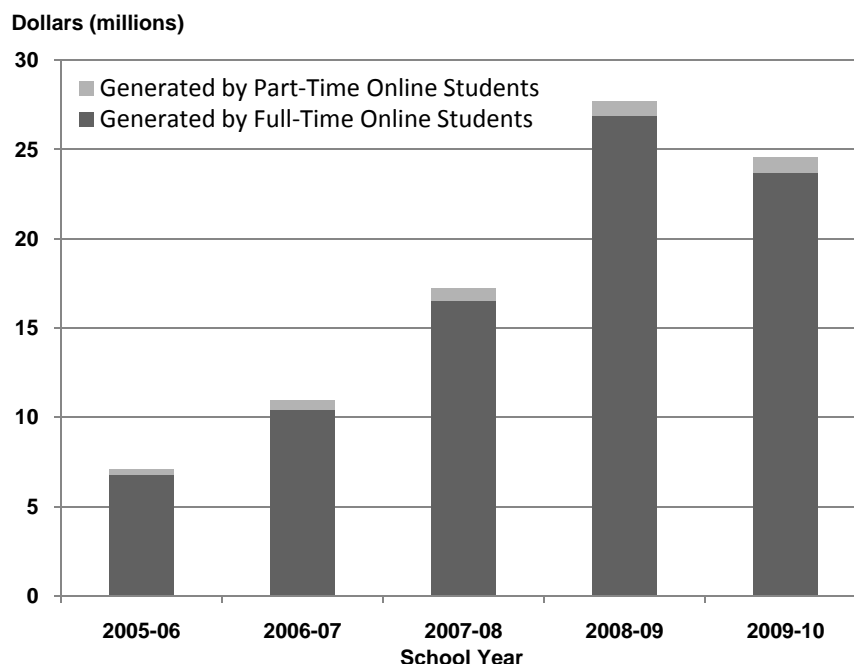
Online schools receive the general education revenue that their students generate.

When the Legislature passed the Online Learning Option Act in 2003, it funded online learning with both general education revenue and additional appropriations of \$1 million in fiscal year 2004 and \$1.25 million in fiscal year 2005.¹⁷ Since fiscal year 2006, however, state funding for K-12 online learning has come largely through the general education formula.

¹⁷ *Laws of Minnesota* First Special Session 2003, chapter 23, sec. 15-16. The additional money was used to pay for nonpublic school students taking online courses from online schools. However, in 2005, the Legislature stopped the separate appropriation for nonpublic students and made these students ineligible for state-funded online education. *Laws of Minnesota* 2005, chapter 5, art. 2, sec. 58.

When a student chooses to enroll full time in an online school, all of the funding that student generates follows him or her to the online school. During the 2009-10 school year, most school districts had at least some students living within school district boundaries enroll full time in an online school rather than one of the districts' traditional schools. However, the numbers of these online students were typically small relative to school districts' total enrollment. Almost three-quarters of school districts had less than 1 percent of the students living in the district enroll full time in online schools, and only 16 school districts had more than 2 percent do so.¹⁸ During the 2009-10 school year, online schools received slightly more than \$23.5 million in basic education revenue (which makes up the largest part of the general education formula) from full-time student enrollments. As Figure 1.1 shows, the amount of basic education revenue directed to online schools for full-time students increased over time before dipping in the 2009-10 school year.¹⁹

Figure 1.1: Revenue Paid to Online Schools, School Years 2005-06 through 2009-10



Online schools received about \$25 million in basic education revenue in the 2009-10 school year.

NOTES: The revenue paid to online schools does not represent new dollars appropriated to online schools. When full-time online students open enroll in online schools, their general education revenue follows them. The dollars generated by part-time students are transferred between school districts when students complete courses offered by online schools outside of their enrolling school districts. The dollar amounts shown represent basic education revenue only.

SOURCE: Office of the Legislative Auditor, analysis of Minnesota Department of Education data.

¹⁸ All of these districts were outside the seven-county Twin Cities metropolitan area, and most had total enrollments of fewer than 1,000 students.

¹⁹ Revenues generated by full-time online students dropped in 2009-10, despite an increase in student enrollment. While more students enrolled for some amount of time in 2009-10 than in 2008-09, collectively they did not spend as much time enrolled in online schools, and thus generated less revenue as online students.

Beyond the revenue generated by enrolling full-time students, online schools may receive additional funds (referred to as “online learning aid”) when students enroll in and complete courses on a part-time basis. Part-time online students can enroll in an online school operated by (1) their enrolling district; (2) a consortium that includes their enrolling district; or (3) another school district, charter school, or consortium approved by MDE to operate an online school. The third arrangement is the only one that results in online learning aid payments. Table 1.3 shows the financial arrangements that apply in each of these situations.

Table 1.3: Funding Arrangements by Online Student Enrollment Type

Type of Student	Funding Arrangement
Full-time online student	All of the general education revenue generated by the student goes to the charter school or school district operating the online school.
Part-time online student enrolled in courses offered by an online school <i>operated by</i> the student's enrolling district	No change. The general education revenue generated by the student continues to go to the enrolling district.
Part-time online student enrolled in courses offered by an online school <i>outside of</i> the student's enrolling district	The general education revenue generated by the student goes to the student's enrolling district. Upon completion of the online course, MDE pays the online school and makes the necessary adjustments to the enrolling district's revenue; this payment is known as “online learning aid.”
Part-time online student enrolled in courses offered by a consortium of which the student's enrolling district is a member	The student's school district pays tuition to the consortium. Tuition charges are based on enrollment in, rather than completion of, the online course. The tuition charged may be less than an online learning aid transfer would have been had the student completed the course outside of the enrolling district.
Online student enrolled in more than a full course-load (either all online or in combination with traditional courses in their enrolling district)	The state pays for public school instruction up to the equivalent of 12 semester courses per student per year. Students may enroll in “extra” online courses at their own expense.
Nonpublic student enrolled in courses offered by an approved online school	Courses taken by nonpublic students are not eligible for state funding; nonpublic students may enroll in online courses at their own expense.

NOTE: With the exception of the last row, student groups listed in this table are comprised of K-12 public school students residing in Minnesota.

SOURCES: *Minnesota Statutes* 2010, 124D.095, subd. 8, and Minnesota Department of Education.

A part-time online student only generates online learning aid when he or she completes an online course outside of his or her enrolling school district. The general education revenue associated with that student goes first to the enrolling district and, as online courses are completed, MDE pays the online school and makes necessary adjustments to the enrolling district's revenue. The amount of online learning aid transferred depends on the number and length of the courses

completed. For example, the aid transfer for a single semester-long course would equal one-twelfth of the student's legally prescribed general education revenue times 0.88. The online school would receive 88 percent of the revenue the student generates for the course or courses completed. Because the enrolling district would still be responsible for providing administrative overhead and student services for part-time online students, it would retain 12 percent of the funds. If a student enrolls in but does not complete an online learning course, no transfer of funds takes place.²⁰ In the 2009-10 school year, less than half of Minnesota school districts had funds transferred because their students enrolled part time in online schools. Only a few school districts had more than 1 percent of their students enrolled in part-time online courses outside their districts. These were mostly small school districts in northern or southeastern Minnesota.

As Figure 1.1 shows, the amount of online learning aid transferred between school districts or charter schools for part-time students has increased over time, but has remained only a small portion of the general education revenue redirected to online schools. During the 2005-06 school year, online schools received slightly more than \$300,000 in online learning aid transfers; by the 2009-10 school year, that figure had risen to almost \$900,000. This increase is directly related to the number of part-time online courses that students are completing outside of their enrolling school districts. According to data collected by MDE, the number of completed online courses resulting in aid transfers rose from about 850 in the 2005-06 school year to almost 2,000 courses completed in 2009-10.

Nationwide, states use different models for organizing and funding online learning. States that have a single state-run online school typically fund that school through direct appropriations.²¹ Similarly, some states that allow multiple school districts or charter schools to provide online education fund online learning through appropriations, fees, and grants.²² Many states with multiple online schools, however, use an approach similar to Minnesota's in that general education dollars follow the student. Minnesota is perhaps unusual in that it makes no distinction between online and traditional schools for funding full-time online students. Some states, such as Colorado and Arizona, have established per-pupil funding levels for online students that are different than funding levels for traditional students.²³

²⁰ As Table 1.3 shows, payments between consortia and member school districts are based on course enrollment rather than course completions. These payments are made by member districts rather than MDE.

²¹ Evergreen Education Group, *Keeping Pace with K-12 Online Learning* (Evergreen, CO, 2010), 23-24. According to this report, 30 states operated their own state-run online schools in 2010. In addition, 9 states had state-run initiatives that offered online tools and resources to schools and teachers statewide. See pp. 13, 16, and 21.

²² *Ibid.*, 29.

²³ *Ibid.*, 29, 60, and 67.

The Online Learning Experience

Online instructional approaches differ from traditional classroom approaches in many ways. Online courses also differ dramatically from one another. Further, the students in online courses differ in their educational background, their current connections to traditional schooling, and their reasons for pursuing online learning. All of these differences mean that “online learning” is not a single, easily definable concept.

In this chapter, we describe in greater detail how online learning is experienced by students and teachers in Minnesota. We explore both commonalities and differences among Minnesota’s online learning options, and we draw upon interviews with online school administrators and several surveys we conducted to describe the opinions of students, parents, teachers, and administrators about online education. We also examine the available information about the characteristics of individual students that enroll in online courses.

Throughout this chapter, we draw upon responses to four surveys we conducted in April and May 2011. The surveyed groups were: (1) all school district superintendents and charter school directors statewide, (2) teachers in the state’s 24 online schools, (3) high school students taking at least one course from 1 of the 24 online schools, and (4) parents of students in kindergarten through grade 8 taking at least one course from 1 of the 24 online schools.¹

THE ONLINE “CLASSROOM”

Online courses use teaching approaches, curricula, and measures of attendance that differ substantially from traditional classrooms. In this section, we describe in more detail how online learning is delivered in online schools and in online courses that school districts and charter schools provide to their own students.²

Curricula

Online curricula are usually delivered through software packages called “learning management systems” that structure course content into individual lessons and units. The systems enable teachers to schedule course activities, collect and maintain data on students, assess student work, and communicate with students by multiple means. Students often “click” their way through interactive lessons

¹ We provide more details about our surveys, including response rates, in Appendix A.

² There are many different approaches to online instruction, and individual schools or courses may differ from one another. However, based on our interviews with online school administrators, the descriptions in this section are accurate for most students in Minnesota’s online schools.

using text, audio or video clips, animated graphics, or links to other Web sites. Students may be required to pass a short test or otherwise demonstrate comprehension of the material before moving on to later units.

Some online schools and school districts and charter schools that provide online courses solely to their own students use proprietary learning management systems developed by private companies and sold with or without an associated curriculum. Others use open-source products that are freely available to any educator.³ Most management systems track how frequently students are connected to the system, what they are working on when they are connected, and how long it takes students to complete each task.⁴ Teachers can see at a glance what each student is working on and if they have successfully completed lesson modules.

In some online learning courses, students are part of a virtual “class” and move through the course material at approximately the same pace as other students in the class. Students are generally expected to start a course at the beginning of a semester (or other grading period) and are required to finish the course by the end of the term. Other courses are more flexible, allowing students to start and end courses at almost any time by treating each student as an independent learner unconnected to any other students.

We found that:

- **Most online schools serving full-time online students used curricula developed by private vendors and marketed to school systems nationwide.**

As interest in online learning has grown nationally, a number of companies have developed online school models that they replicate in different states. Curricular content is adjusted as needed to meet different state standards. In the 2010-11 school year, 16 of the 24 online schools in Minnesota allowed students to take all their courses online. Of those, 13 used a private curriculum vendor for some or all of their courses.⁵ In addition, 5 of the 8 online schools that served only part-time students used a curriculum vendor for at least some of their courses; some used more than one.

Vendors exert different levels of control over how their curricula are used. Some private vendors not only provide curricula, but also set up and operate the online schools themselves, including hiring the administrators or teachers. Other vendors merely provide the learning management systems and curricular content and leave all operations in the hands of local school officials. Sometimes, the company-produced curriculum is entirely pre-packaged and teachers play no role

³ One example of an open-source system is Moodle (<http://www.moodle.org>).

⁴ Most learning management systems also detect when a student is connected to the system but no activity is taking place and automatically close the connection after a certain period of inactivity.

⁵ Ten schools used curricula from private vendors for all courses; four used a mix of purchased curricula and in-house curricula. We list the curriculum providers used by each online school in Appendix B.

Private curriculum vendors provide varying levels of support to online schools.

in developing course content. In others, teachers are able to supplement the purchased curriculum to suit their needs.

We found many different arrangements between curriculum vendors and online schools in place in Minnesota during the 2010-11 school year. For example, Insight School of Minnesota provided the online curricula, hired all online teachers and nearly all administrative staff, and managed the online school under contract with the Brooklyn Center School District. At iQ Academy, on the other hand, the local school district (Fergus Falls) employed all of the online teachers, while K12 Inc. (K¹²) employed the online school's administrative staff. A third arrangement was used by the Minnesota Service Cooperatives (MSC) Online Learning Project—a consortium of mostly northeastern Minnesota school districts. The consortium purchased curriculum from Aventa Learning but hired all teachers and administrators itself.⁶

Unlike most online schools, many school districts and charter schools offering online courses solely to their own students used sources other than private vendors for their online curricula. We found that:

- **School districts and charter schools providing online courses solely to their own students were more likely than online schools to develop curricula and lesson plans in-house.**

According to our survey of school district superintendents and charter school directors, 47 percent of respondents that provided online courses solely to their own students said that individual teachers were the primary developers of online courses. Thirty-six percent reported that they used curricula and lesson plans provided by commercial vendors, and 11 percent drew their course materials from nonprofit outside sources, such as a public university. About one-third of school districts and charter schools that reported using an outside vendor said that they used at least some teachers hired by that vendor instead of by the district or charter school.

Use of Hybrid Models

As we described in Chapter 1, some courses are taught entirely online, and teachers and students are rarely or never in the same room with one another. Other courses, called “hybrid” courses, are conducted partially online and partially in a traditional classroom. For example, Cyber Village Academy brings students into a physical classroom three days each week, but students attend class online the other two days.⁷ We found that:

- **School districts and charter schools offering online courses solely to their own students were much more likely to use hybrid online learning models than online schools.**

⁶ In fact, Insight Schools and Aventa Learning, both based in Oregon, are also owned by K¹² (based in Virginia). K¹² is also the corporate parent of the curriculum vendors for BlueSky Online Charter School and Minnesota Virtual Academy.

⁷ Cyber Village Academy also has a small number of students that attend classes entirely online.

Hybrid courses combine online with face-to-face instruction.

Because hybrid models require students to be physically in class on a regular basis, they are ill-suited for online schools that offer courses to students dispersed across a wide geographic area. Cyber Village Academy is the only online school that uses a hybrid approach as its primary method of instruction, and the map in Appendix B shows that nearly all of its students come from a small geographic area. In addition, while TRIO Wolfe Creek offers only a small number of hybrid courses, the school requires most students to work on campus one day each week. It too draws students from a small geographic area.

School districts that offer online courses to their own students can more easily implement hybrid educational models because their students are, by definition, in relatively close proximity to traditional school buildings. Among respondents to our survey, more than 70 percent of the school districts and charter schools offering online courses solely to their own students used hybrid approaches in at least some of their courses during the 2010-11 school year.

In written comments provided in response to our survey, several superintendents and charter school directors spoke of the promise of hybrid learning. One superintendent wrote:

I would say our direction for online learning is to try and move our school toward more and more of a blended/hybrid model for upper level grades of students. I foresee us having an option available for students in the future where they could receive some online services, but still be a resident of our school system.

School districts and charter schools that used hybrid teaching models were also more likely to have individual teachers design their courses (59 percent) than those offering only fully online courses (17 percent).

Attendance

Because teachers interact with students in online settings differently than they would in traditional settings, student attendance is not measured in the same way. We found that:

- **Most students in online schools were considered to be “attending” classes even if they were online for only small periods of time.**

Although individual schools differed, students enrolled in online schools generally have wide latitude to organize their course activities. At any moment, online students may be taking quizzes, reading assignments, writing essays, conducting experiments, studying for exams, participating in online discussion groups, or chatting with other students. Full-time online students may structure a day’s work much like a traditional school day by spending short amounts of time on several different subjects, or they may elect to divide their work into fewer, larger blocks of time—for example, by devoting an entire day or two to a science project. Further, most online students in Minnesota have a high degree of control over when and where they access their online instruction. Some students find it convenient to “attend” class during regular school hours, while others attend in

Online schools measure student attendance differently than traditional schools do.

the evening or late at night. Students can also access courses from anywhere, though in our survey of high school students in online schools, nearly all full-time online students reported connecting to their online schools from home. In contrast, over one-third of part-time online students reported that they connected to their online courses while at school.

As a result of these differing participation patterns, students were not expected to be “present” in a virtual setting in the same way traditional students are expected to be in a classroom. Most online school administrators we interviewed said that teachers measured attendance partly by tracking student completion of course modules. Students making satisfactory progress were considered to be attending school. Students struggling to make progress, in contrast, could also have their attendance assessed by the amount of time spent online. One online school administrator suggested that the amount of student monitoring was inversely proportional to student performance; increasing difficulties led to increasingly strict requirements for regular online contact.

Online schools have initiated truancy proceedings for full-time students that are not making progress and not making regular online contact. Several online school administrators with statewide student populations pointed out in interviews that pursuing truancy actions has been much more complicated for them than for traditional school districts and charter schools. Because their students came from many different counties, they have had to develop relationships with county attorneys who were often unfamiliar with their schools, and school staff have sometimes traveled long distances to attend legal proceedings. For example, Minnesota Virtual High School, the largest online school with over 2,500 students in the 2009-10 school year, had two and one-half staff people solely devoted to truancy issues in the 2010-11 school year.

Teacher-Student and Student-Student Interaction

In traditional schools, students and teachers are all in the same room, and each teacher interacts with many students at the same time. Students also learn by interacting with one another and by observing teacher responses to other students’ questions. Online courses, in contrast, generally rely upon a series of one-to-one interactions between teachers and individual students. Teachers may never interact with the entire group of students simultaneously or may do so only rarely. Some online school administrators told us that their classes “met” regularly by using online video conferencing technology, but students were not required to take part in these meetings in real time and could instead view them later.

As shown in Table 2.1, online teachers said they used a variety of tools to interact with students. We found that:

- **Most teachers in online schools who responded to our survey reported interacting with their students at least two to three times a week.**

Table 2.1: Teacher-Reported Frequency of Communications with Online Students, 2011

Type of Contact	Daily	2-3 Times per Week	Weekly	Less Often
E-mail	26%	31%	31%	12%
Message board	11	19	25	42
Chat room	13	11	20	53
Phone	7	7	15	71
Video conferencing	4	8	25	63
In person	1	1	3	94

NOTES: Survey question asked: "Approximately how often do you have the following types of interaction with your typical online student?" Teachers could select more than one answer. "Less Often" combines teacher responses of "Less than Weekly" and "Rarely or Never." Rows may not sum to 100 percent due to rounding and omitting "Don't Know" answers. We provide further details about how we conducted our surveys in Appendix A.

SOURCE: Office of the Legislative Auditor, survey of teachers in online schools, April 2011.

Teachers in online schools generally use e-mail to communicate with their students.

Teachers most frequently used e-mail, message boards, and chat rooms to communicate with their students. Interactions via telephone or video conferences were used less frequently. When we combined each teacher's responses together (for example, by counting a teacher reporting two different types of contact once a week as having two contacts per week), 86 percent of teachers responding to the survey reported two or more contacts per week. Thirty-four percent of teachers reported at least one form of contact daily.

Some online school administrators we interviewed said that, although students and teachers interacted less often in online schools than in traditional settings, the quality of that interaction was much better. But, as Table 2.2 shows, our survey results of teachers and students provided only partial support for that assertion. Many online teachers agreed that a distinction exists between quantity and quality of interactions. However, about one-third of the online teachers responding to our survey found no difference between the two settings in terms of student-teacher interaction. Less than a majority felt that online environments actually improved the quality of their interactions with students. Further, half of the high school students responding to our online student survey said that traditional settings were better than online settings for getting to know their teachers; only 16 percent suggested that online settings were better.

We also found that:

- **Teachers and students in online schools reported that online settings were not as good as traditional classroom settings in developing social skills and fostering student interaction.**

Table 2.2: Teachers' and Students' Opinions of Interpersonal Interactions in Online and Traditional Courses, 2011

	Online Courses Better	About the Same	Traditional Courses Better	Don't Know
Teachers				
Amount of student-teacher interaction	28%	29%	42%	2%
Quality of student-teacher interaction	45	34	18	3
Amount of student interaction with classmates	1	15	73	10
Quality of student interaction with classmates	19	31	36	13
Students' development of social skills	1	34	53	12
Students				
I get to know my teachers.	16	30	51	3
I learn by working together with other students.	8	19	64	9

NOTES: The survey question for teachers asked: "For each of the following, please indicate how, in general, you think online learning compares with traditional face-to-face learning." The survey question for students asked: "For each of the following, please tell us how online learning compares with traditional face-to-face classroom learning." Rows may not sum to 100 percent due to rounding. We provide further details on how we conducted our surveys in Appendix A.

SOURCES: Office of the Legislative Auditor, surveys of teachers and high school students in online schools, April 2011.

As shown in Table 2.2, 53 percent of online teachers responding to our survey thought that traditional classrooms were better for developing students' social skills; only 1 percent thought that online learning environments were better. Also, online teachers were almost twice as likely to say that the quality of student-to-student interaction was better in traditional classrooms than to say the quality was better in online settings. Sixty-four percent of our student respondents said that learning by working with other students was better in traditional settings; only 8 percent suggested that online courses were better in this regard.

Some teachers offered additional written comments regarding student-teacher interactions. One online teacher expressed concern that the current technology used by students on a daily basis was leading to less person-to-person interaction and fewer opportunities for public speaking. Another questioned the social implications of online learning, noting that students should be required to meet face-to-face with classmates and teachers on a somewhat regular basis. These teachers felt that communication skills, which can only be learned by speaking in public, were vital to success in life.

Student Experiences

In general, students and parents that responded to our surveys expressed satisfaction with their online learning experiences.⁸ However, our survey of online high school students indicated that full-time online students perceived online learning quite differently than students who were taking online courses on a part-time basis to supplement traditional coursework. We found that:

- **Full-time online students reported different and more positive experiences with online learning than part-time online students taking courses at online schools.**

High school students enrolled full time in online schools were much more enthusiastic about online courses than high school students from traditional settings who were taking online courses part time from online schools. As shown in Table 2.3, a majority of full-time online students felt that online settings were better than traditional settings regarding “I learn what I need to know” and “Teachers are available when I need them.” In contrast, students enrolled in online courses on a part-time basis were more likely to say that traditional schools equaled or exceeded online schools in these areas. Similarly, a majority of part-time online students thought that traditional settings were better on the item “Teachers help me learn,” while most full-time online students thought that online settings were as good as or better than traditional settings.

On other survey questions, while both groups expressed positive opinions about their online courses, full-time students had more intensely positive responses. For example, 67 percent of those taking online courses part time and 80 percent of those taking all courses online either agreed or strongly agreed with the statement “I would recommend online courses to my friends.” Even more strikingly, 51 percent of full-time online students *strongly* agreed with the statement, while only 20 percent of part-time online students *strongly* agreed.

Full-time online students were generally more positive about online learning than part-time online students were.

⁸ Results from the student and parent surveys must be interpreted cautiously because our survey population was drawn from students enrolled near the end of the 2010-11 school year, when many students were close to completing their courses. As we discuss in Chapter 3, nearly one-third of the online courses started in 2009-10 were not completed. Since dissatisfaction could be an important reason for not completing a course or for withdrawing from an online school between grading periods, we would expect the students and parents we surveyed to be disproportionately more satisfied with online courses than if we had surveyed the entire population of students and parents that had online learning experiences during the 2010-11 school year.

Table 2.3: Online Students' Opinions of Learning Environments in Online and Traditional Courses, 2011

	Online Courses Better	About the Same	Traditional Courses Better	Don't Know
I learn what I need to know				
Full-time students	56%	36%	6%	2%
Part-time students	18	55	25	2
Teachers are available when I need them				
Full-time students	60	30	8	1
Part-time students	14	40	44	2
Teachers help me learn				
Full-time students	38	44	15	3
Part-time students	6	38	53	3

NOTES: The survey question asked: "For each of the following, please tell us how online learning compares with traditional face-to-face classroom learning." Rows may not sum to 100 percent due to rounding. We provide further details about how we conducted our surveys in Appendix A.

SOURCE: Office of the Legislative Auditor, survey of high school students in online schools, April 2011.

Parents of students in kindergarten through grade 8 taking online courses full time were even more strongly supportive of online schools than full-time online high school students.⁹ For the item "My child learns what he or she needs to know," 66 percent of responding parents said that online schools outperformed traditional schools. Only 4 percent thought that traditional schools were better.

Teacher Experiences

Teachers in online schools were generally positive about the online teaching environment. For example, 69 percent of teachers responding to our survey characterized the number of students they taught as "about right," and more than 85 percent agreed or strongly agreed that the online schools they worked for provided sufficient instructional and technical support. As shown in Table 2.4, most online teachers we surveyed said that online students had similar motivation to learn and could achieve similar mastery of course content as students in traditional courses. Respondents were particularly enthusiastic about the ability of online schools to develop good study habits; 46 percent felt that online courses were better than traditional courses in this regard, while only 9 percent thought that traditional courses were better.

⁹ Very few students in the lower grades take online courses part time. In 2009-10, 93 percent of students in kindergarten through grade 8 taking online courses were full-time online students.

Table 2.4: Teachers' and Students' Opinions of Learning Environments in Online and Traditional Courses, 2011

	Online Courses Better	About the Same	Traditional Courses Better	Don't Know
Teachers				
Students' development of good study habits	46%	40%	9%	6%
Students' motivation to learn	28	56	12	4
Students' mastery of course content	23	61	14	2
Students				
I learn what I need to know	40	44	14	2
Teachers help me learn	25	42	31	3

NOTES: The survey question for teachers asked: "For each of the following, please indicate how, in general, you think online learning compares with traditional face-to-face learning." The survey question for students asked: "For each of the following, please tell us how online learning compares with traditional face-to-face classroom learning." Rows may not sum to 100 percent due to rounding. We provide further details about how we conducted our surveys in Appendix A.

SOURCES: Office of the Legislative Auditor, surveys of teachers and high school students in online schools, April 2011.

We found that:

- **A majority of teachers in online schools that responded to our survey said that online courses required more teaching time than comparable traditional courses.**

Specifically, 20 percent of respondents said that online courses needed much more time, 34 percent of respondents said that online courses needed somewhat more time, 28 percent said that there was no difference, and only 14 percent said that traditional teaching required more time.¹⁰ Though we did not ask whether teachers had ever taught in a traditional setting (to ensure that they could accurately compare the two), 35 percent of respondents said that they currently taught traditional classes in addition to online classes. Some teachers felt that the increased time requirements were intrinsic to the online environment. For example, some high school teachers noted that, because they interacted with students one-on-one rather than as a group, student contact time was much greater. They also said that online classes required close contact with parents, school counselors, and other people interested in a student's progress. More than 75 percent of our respondents reported that they had been teachers for more than five years in either online or traditional settings.

¹⁰ The remaining respondents marked "don't know" or did not answer the question.

STUDENT CHARACTERISTICS

Just as online classes differ substantially from traditional classes, the students attracted to online learning differ from other Minnesota students in important ways. We examined the backgrounds of online students using student-level data collected by MDE and found that:

- **When compared with all students statewide, full-time online students switched schools more often and were much less likely to be classified as gifted and talented, though they were similar on other demographic measures.**

About a third of full-time online students changed schools at least once during the school year.

During the 2009-10 school year, 34 percent of full-time online students changed schools at least once, including 9 percent who changed schools between two and four times. Only 66 percent of full-time online students were enrolled in the same school for the entire year. In comparison, 95 percent of students in school districts and charter schools statewide were enrolled in only one school during the 2009-10 school year. We also noted that, when compared with the general student population, far fewer students identified as “gifted and talented” enrolled full time in online schools. During the 2009-10 school year, about 1 percent of full-time online students were classified as gifted and talented compared with 9 percent of students statewide.

On many of our other demographic measures, full-time online students looked fairly similar to other students in the state. Full-time online students were more likely to be female and white than students statewide. Similar percentages of the two groups received special education services (14 and 15 percent, respectively) and were eligible for free or reduced-price lunch (36 and 37 percent, respectively) in the 2009-10 school year.

We also looked at differences in student backgrounds among students in online schools. Full-time and part-time students appear to come to online learning with different socioeconomic and educational backgrounds. Our analysis suggested that:

- **Full- and part-time online students took different paths to online learning.**

Only partial data were available for part-time online students in online schools, but those students for whom we had data appeared different from full-time online students.¹¹ Important differences existed between full- and part-time online students we could identify in some demographic measures commonly correlated

¹¹ We were only able to identify part-time online students that took courses from online schools affiliated with a school district or charter school other than the students’ enrolling district. (For example, we could identify Minneapolis school district students that took courses part-time through Minnesota Virtual High School, but we could not identify Minneapolis students that took courses part-time through Minneapolis Public Schools Online.) This limitation makes it difficult to say with confidence that our results hold true for all part-time students. However, the differences between full-time online students and the part-time online students we could identify were quite large and were also consistent with our survey findings that these groups of students came to online learning for different reasons.

Part-time online students were more likely to learn about online schools from their teachers or counselors than were full-time online students.

with student achievement.¹² In the 2009-10 school year, part-time online students we could identify were half as likely as full-time online students to be eligible for free or reduced-price lunch, less than half as likely to be receiving special education services, and less than one-third as likely to have changed schools at least once during the year.

Full-time online students also appear to have started as somewhat weaker students than the part-time online students we could identify. For example, we found that full-time online students started the 2009-10 school year with lower standardized test scores from the previous year than did part-time online students.¹³ Further, 15 percent of part-time online students we could identify were classified as gifted and talented, and 8 percent were participating in the Post-Secondary Enrollment Options program in the 2009-10 school year, compared with only 1 percent of full-time online students for both measures.

We were able to supplement the incomplete data about part-time students by looking at responses to our student and parent surveys. In our survey of high school students, full- and part-time students in online schools reported that they had heard about online learning in different ways and had different reasons for taking online courses. As shown in Table 2.5, both groups of students indicated that family and friends were a key source of information about online schooling. However, part-time online students were four times more likely than full-time online students to report that they had learned of online courses from a teacher or counselor. Full-time online students were more likely to cite Web sites, Web searches, or advertising as a source of their information about online learning.

Full- and part-time students also differed on the reasons they took online courses. Table 2.6 shows that ease of scheduling was the most frequently cited reason to take online courses for students in both groups. However, far more full-time online students said that they liked online courses better or that they had personal reasons that made it difficult for them to take traditional courses. Part-time online students, on the other hand, were more likely to cite teacher recommendations and limited course options at their local schools.

¹² The race and gender of full-time and part-time online students we could identify were similar, with one exception. Part-time online students we could identify were more likely to be female than full-time online students in the 2009-10 school year (63 percent compared to 54 percent), but the difference was much greater than in preceding years, so it is unclear if that year was unusual or the start of a new trend.

¹³ Scores from the preceding year do not necessarily represent test scores prior to entering online learning; students may also have been enrolled in online courses the previous year.

Table 2.5: Online Students' Sources of Information About Online Learning, 2011

	Full-Time Online Students	Part-Time Online Students
Teacher or guidance counselor	17%	75%
Friend or family	68	45
Advertising (such as TV, radio, Internet, billboards, mailings)	37	12
Searching online	34	9
Online school Web site or catalog	27	5
Social media (Facebook, etc.)	5	3
Other	4	5

NOTES: The survey question asked: "How did you learn that you could take school courses online? (You may mark more than one answer.)" We provide further details on how we conducted our surveys in Appendix A.

SOURCE: Office of the Legislative Auditor, survey of high school students in online schools, April 2011.

Table 2.6: Reasons for Taking Online Courses Cited by Online Students, 2011

	Full-Time Online Students	Part-Time Online Students
Online courses are better for my schedule.	57%	45%
I like online courses better than traditional face-to-face courses.	46	13
It is hard for me to go to a traditional school for personal reasons (such as having a baby, traveling a lot, illness).	42	11
I need to catch up on courses I have missed or failed.	11	15
The courses I want to take are not offered by local schools.	6	28
A teacher or counselor recommended I take an online course.	3	19
Other	27	20

NOTES: The survey question asked: "Which of the following are reasons you are taking online courses? (You may mark more than one answer.)" We provide further details on how we conducted our surveys in Appendix A.

SOURCE: Office of the Legislative Auditor, survey of high school students in online schools, April 2011.

In written comments about their reasons for choosing online courses, full-time online students and their parents were also much more likely than part-time online students to cite dissatisfaction with local schooling options, either due to poor academic quality, insufficient discipline, or incompatibility with moral or religious beliefs. In particular, parents of online students in kindergarten through

grade 8 were likely to cite dissatisfaction with local schools. Although we did not offer dissatisfaction with local school options as one of the reasons respondents could select in our survey question, about half of parents cited it in written comments as a reason for choosing online schools. For example, in response to the question “What is the most important reason your child is taking an online course?” many parents wrote that their local “brick-and-mortar” schools were inferior when compared with the online schools their children currently attended. Parents commented on the overall lack of discipline in traditional schools, which resulted in student bullying and “drama.” Some parents of students in kindergarten through grade 8 also described online learning as a valuable substitute for or complement to home schooling. For example, one parent noted that the online interface provided home schooling parents with a ready-made curriculum and simple tools to monitor their children’s progress.

OPINIONS OF SCHOOL DISTRICT AND CHARTER SCHOOL ADMINISTRATORS

We also sought the opinions of school district superintendents and charter school directors about online learning. These administrators had varied experiences with online learning; some were in school districts or charter schools that have offered their own online learning courses for years, others were in school districts that are members of online learning consortia, and some had no connection to online learning at all. Yet, even within these groups, opinions about online learning differed. Overall, we found that:

- **School administrators in Minnesota have mixed feelings about the merits of online learning.**

As shown in Table 2.7, less than one-third of respondents agreed or strongly agreed that online learning experiences were comparable in educational value to traditional face-to-face instruction. Less than one-third of respondents also agreed or strongly agreed that their school’s faculty believed online learning is legitimate and valuable. Only 38 percent of respondents agreed or strongly agreed that their schools encouraged their students to take courses from online schools when those courses would meet their needs.

Yet the low percentages expressing strong support for online learning did not mean that respondents were opposed to online learning. For each of the above questions, a plurality of respondents marked the ambivalent responses “neither agree nor disagree” or “don’t know.” At the same time, more than half of the survey respondents agreed or strongly agreed that online schools enabled students to take courses that their schools did not offer and that such schools were an important option to students who have struggled to succeed in traditional schools. Of those administrators whose school districts or charter schools offered online courses solely to their own students, 52 percent of survey respondents agreed or strongly agreed that online courses were “comparable in educational value to traditional face-to-face instruction.”

Only a third of school district administrators said online learning was comparable to face-to-face instruction.

Table 2.7: Superintendents' and Charter School Directors' Opinions of Online Learning, 2011

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know
Online learning experiences are comparable in educational value to traditional face-to-face classroom instruction.	6%	23%	28%	27%	11%	6%
Faculty in my district or charter school believe that online learning is legitimate and valuable.	3	26	38	16	2	16
We encourage our students to take courses from certified online providers when those courses will meet their needs.	3	35	37	14	3	8
Courses offered by certified online providers are less rigorous than comparable traditional courses offered by my district or charter school. ^a	8	10	43	12	3	25
Certified online providers enable our students to take courses that our district or charter school does not offer. ^a	11	52	17	5	4	11
Certified online providers offer an important option to students who have struggled to succeed in traditional schools. ^a	9	43	25	10	3	9

NOTES: Rows may not sum to 100 percent due to rounding. Missing responses are omitted. We provide further details on how we conducted our surveys in Appendix A.

^a Although the Legislature changed state law in 2009 to require that online schools be "approved" rather than "certified," online schools are still referred to as "certified online providers" in many Minnesota Department of Education documents and by administrators at online schools. For this reason, we concluded this term would be more recognizable to survey respondents. *Laws of Minnesota* 2009, chapter 96, art. 2, sec. 39.

SOURCE: Office of the Legislative Auditor, survey of school district superintendents and charter school directors, April 2011.

Written responses to our survey confirmed that school district and charter school administrators viewed online learning from many different perspectives. In Table 2.8, we provide a sampling of the written comments we received from school district and charter school administrators.

Table 2.8: Selected Written Comments from School District and Charter School Administrators, 2011

It is difficult to summarize feelings regarding “certified online providers.” I believe the consortium we belong to offers high quality courses taught by high quality teachers. I do not believe that is the case with all certified online providers.

Any changes to policies that will firm up the rigor of on-line coursework would be a great help. I still believe that, in general, online courses are often an easy option for students to gain credits.

I think online is a good option for some students. I have seen many students who do not want to do work, or have poor attendance in brick and mortar schools fail in online because they don't possess the self discipline necessary. I think it is a great option for supplemental course work and to offer varied curriculum . . .

When done right, it is as effective as any regular class setting, highly efficient from a fiscal perspective, offers individual choice not available in smaller schools . . . all HS graduates should be required to take at least one to graduate . . . many kids and adults do not have the focus/motivation to take/complete online classes, but many do . . .

We are quickly moving beyond even the idea that online or hybrid courses are somehow different than “traditional courses.” Using online materials, content, courses must be the traditional education of today, something every teacher uses as part of their delivery system.

Online learning is not well understood by many parents. They use it as a tool to threaten more traditional settings when often their child is ill prepared for the coursework. We use it as a way to offer courses we cannot otherwise offer; for this purpose it is valuable for our students. But, as an alternative means to an education when a multitude of factors may have already resulted in a student failing, online learning has rarely been a successful means to success.

Online learning is one way of offering innovative approaches to education. I am against it if the delivery is in essence a text book delivered version of a traditional lecture driven model of instruction. As technology expands, the adaptive nature of learning programs online will leverage our students' ability to customize their own learning needs.

Most of our students that have opted for online have done so to avoid truancy, discipline or school imposed regulations. They usually end up re-enrolling and being credit deficient. The only students that have been successful in our school have self-discipline, strong aptitude and intelligence, family support and future goals.

NOTE: We provide further details on how we conducted our surveys in Appendix A.

SOURCE: Office of the Legislative Auditor, survey of school district superintendents and charter school directors, April 2011.

Student Performance

Performance measures for online students should be interpreted with caution.

Evaluating student performance is never a simple matter. How students perform in school and on standardized assessments is affected by a host of factors, many of which cannot be easily evaluated. In our analysis, we were able to control for some factors, such as race, socioeconomic status, and the number of times students changed schools during the school year (mobility). We did not, however, have data on other factors in students' lives that might have affected academic performance or enrollment decisions, such as students' mental health or parents' education level.

Analysis of student performance measures should be interpreted cautiously in part because it is impossible to know what students would have done had they not enrolled in online schools. Some might have remained in traditional schools, while others might have dropped out of school completely. As we described in Chapter 2, full-time online students were much more likely to have changed schools than traditional students. Some online school administrators told us that many full-time online students turn to online learning after struggling in other types of schools, and that they may enroll mid-year.

This chapter presents our analysis of student performance, measured in terms of course completions, student drop-out rates, and standardized test results. We conclude with a discussion of other research and literature on the effectiveness of K-12 online learning nationwide.

COMPLETION

Online students may not “attend” school in the same way their traditional counterparts do, but they still must complete coursework to progress toward graduation. In this section, we analyze the rates at which online students completed their courses as well as the rates at which students dropped out of school entirely.

Course Completion

As we described in Chapter 1, the number of online students increased dramatically in the last five years. During the period we examined, course registrations for full-time students in online schools nearly quadrupled, increasing from just over 20,000 courses in the 2006-07 school year to more than 80,000 in 2009-10.¹ Using these registration numbers along with course completion data collected by the Minnesota Department of Education (MDE), we found that:

¹ Online schools have reported student headcounts to MDE annually since the 2006-07 school year, but the department does not validate these data.

- **While the number of course registrations has quadrupled over the last few years, full-time online students have become less likely to finish the courses they start.**

Course-completion rates for full-time online students dropped from 84 percent in the 2006-07 school year to 63 percent in 2009-10. During this period, several individual online schools experienced large and steady declines in course-completion rates, while only one program showed significant improvement.

Course registrations for part-time online students also increased over the four-year period, but much more modestly than full-time course registrations (from about 3,400 to 5,800 courses). Course-completion rates for students enrolled part time in online schools fluctuated over this period, with part-time course completions for all online schools fluctuating between about 65 and 78 percent.

Students registered for about 86,000 courses in online schools during the 2009-10 school year.

The course-completion data that MDE has collected with respect to online learning are atypical—the department has not required traditional schools to submit data on individual course registrations or completions. Therefore, we do not have statewide course-completion rates to use as a comparison. However, even without a point of comparison, the downward trend in course completions for full-time online students is troubling.

Drop-Out Rates

We used student enrollment records to determine the rates at which online students dropped out of school entirely, without enrolling in a new school during that school year.² We found that:

- **Full-time online students dropped out much more frequently than students in general.**

We analyzed student drop-out rates over time and by grade level, focusing on grades 9 through 12.³ Table 3.1 demonstrates that, on the whole, Minnesota high school students averaged fairly low drop-out rates over time—less than 1 percent of ninth-grade students dropped out, while twelfth-grade students had drop-out rates only as high as 3 percent.⁴ As Table 3.1 shows, drop-out rates increased as

² Students were considered drop outs if they were marked with any one of several “drop-out codes” in MDE’s student reporting system. These students either formally withdrew from school or simply stopped attending (which, for online schools, could mean logging in and completing lessons). There may be some variation among school districts in how students are coded, and some students may be inappropriately marked as drop outs if they transfer to a private school or out of state without reporting their movements to the school district they left. We classified students using their final enrollment record within a given school year; therefore, students who withdrew from school but returned later in the school year were not considered to have dropped out for the purpose of our analysis.

³ Student-level records indicate that very few students statewide drop out earlier than ninth grade.

⁴ Throughout this chapter, when we refer to the Minnesota students as a whole, online students are included in this group. The relative size of the online learning student population is so small that excluding it would have had little impact on the percentages presented in this chapter.

Table 3.1: Drop-Out Rates by Grade, School Years 2005-06 to 2009-10

	School Years				
	2005-06	2006-07	2007-08	2008-09	2009-10
Ninth-Grade Students					
All students	<1%	<1%	<1%	<1%	<1%
Part-time online students	3	2	0	0	0
Full-time online students	2	2	2	3	2
Tenth-Grade Students					
All students	1	1	<1	<1	<1
Part-time online students	2	1	<1	0	0
Full-time online students	3	11	10	4	4
Eleventh-Grade Students					
All students	2	2	2	1	<1
Part-time online students	5	0	1	<1	<1
Full-time online students	5	12	14	8	10
Twelfth-Grade Students					
All students	3	3	3	3	3
Part-time online students	3	3	3	<1	<1
Full-time online students	5	18	21	17	25

NOTES: Full-time online students are students who enrolled full time in an online school for at least part of the given school year. Part-time students are students who took some, but not all, of their courses from online schools outside of their enrolling districts. Students who took online courses through an online school offered by their own enrolling district or a consortium of which their district is a member are not identifiable as online students.

SOURCE: Office of the Legislative Auditor, analysis of Minnesota Department of Education data.

grade level increased for both traditional and online students. On the whole, twelfth-grade students drop out more frequently than ninth-grade students.

Full-time online students demonstrated dramatically higher drop-out rates than either the part-time online students or the population as a whole.⁵ Younger full-time online students had fairly low drop-out rates (about 2 percent for ninth-grade students). However, tenth- and eleventh-grade online students were much more likely to drop out, with at least 10 percent of the full-time online students dropping out during each of the 2006-07 and 2007-08 school years. Since the 2006-07 school year, large percentages of twelfth-grade online students have dropped out, culminating in the 2009-10 school year, during which a full quarter of full-time online twelfth-grade students dropped out before the end of the school year.

⁵ Our analysis of part-time online students was hampered by our inability to identify all part-time online students, and we cannot be certain that our results are generalizable to the entire population of part-time online students.

About one-fourth of full-time online twelfth-grade students dropped out of school during the 2009-10 school year.

STANDARDIZED ASSESSMENTS

The Minnesota Comprehensive Assessment, Series II (MCA-II) measures students' proficiency relative to the state's reading and math standards.⁶ Both reading and math assessments are administered annually to all public school students in grades 3 through 8; additionally, the reading assessment is administered in grade 10 and the math assessment in grade 11. Given that the assessments are required of all public school students in the tested grades, we can conclude that the results are representative of Minnesota public school students in those grades, including online students. It is worth noting, however, that during the years we analyzed, about three-fourths of the online student population was concentrated in grades 9 through 12, the period during which students take the fewest standardized assessments. To the extent possible, we used the MCA-II assessment data to evaluate the proficiency and academic growth of full-time online students in Minnesota.

Our analysis was hampered by our inability to identify all online students. Part-time students are not uniformly tracked by MDE; we were only able to identify a subgroup of the part-time online student population, and our findings may or may not generalize to the entire population.⁷ Further, we were unable to identify students taking online courses through their own school districts or charter schools. As a result, our analysis of online students included only students enrolled in state-approved online schools. These data should include all full-time online students but less than half of the part-time online students in those programs.

Proficiency

The Minnesota Department of Education considers a student "proficient" in math or reading if he or she meets or exceeds state-determined standards as demonstrated on the appropriate MCA-II.⁸ MCA-II proficiency data should be interpreted cautiously because student proficiency levels are reflective not only of the school the student attended at exam time, but also of the student's entire education to date. Part-time online students, by definition, had educational experiences in at least two settings over the course of the school year. Similarly, full-time online students as a group are more mobile than the general student population and they, too, may have had educational experiences in at least two

⁶ During the 2010-11 school year, Minnesota replaced the math MCA-II with a revised version of the assessment (MCA-III) for students in grades 3 through 8. The MCA-III reflects the most recent mathematics standards revision. Since the data we analyzed were for the 2008-09 and 2009-10 school years, our results pertain to the MCA-II assessment.

⁷ In MDE's data, part-time online students are only identifiable as online students if they generate online learning aid transfers between school districts or charter schools (see Chapter 1). Students taking courses through an online program offered by their own enrolling district or a consortium to which their district belongs do not initiate funding transfers and are not identifiable as online students. We believe that the group of identifiable part-time online students represents between one-fourth and one-half of the total part-time online student population.

⁸ Students earn numerical scores on MCA-II tests, which translate into one of the following four achievement levels: (1) does not meet the standards, (2) partially meets the standards, (3) meets the standards, and (4) exceeds the standards.

settings over the course of the school year. Proficiency rates should not necessarily be interpreted as an indication of how well online schools educate their students, but as an indication of the proficiency levels of students that tend to enroll in online learning.⁹

When we examined proficiency rates for the 2009-10 school year, we found that:

- **Compared with all students statewide, full-time online students had significantly lower proficiency rates on the math MCA-II but similar proficiency rates in reading.**

We analyzed student proficiency for two distinct groups of students: students in grades 3 through 8 and high school students. Table 3.2 shows the differences in proficiency rates between the different grade-level groupings. Fifty-two percent of full-time online students in grades 3 through 8 achieved proficiency on the math MCA-II as compared with 68 percent of all students in grades 3 through 8.¹⁰ With respect to reading, third- through eighth-grade students enrolled in full-time online schools had proficiency rates similar to the entire student population—74 percent compared with 72 percent.

The gap in math scores was even more pronounced for high school students.¹¹ Only 16 percent of tested online high school students scored proficient on the MCA-II math assessment as compared with 41 percent of all eleventh-grade students tested. The high-school level reading results were more promising. As with the younger students, full-time online students had a proficiency rate similar to the entire tenth-grade population.

Part-time online students generally performed better than students in general on state standardized tests.

In contrast, part-time students that we could identify appeared to perform better than the overall K-12 population. Part-time online high school students scored better than the general population, with 54 percent proficient in math (compared with 41 percent) and 87 percent proficient in reading (compared with 75 percent). However, as explained previously, we were only able to identify a small subset of the part-time online learning population, so our confidence in this conclusion is limited.¹² Nonetheless, it is consistent with our survey findings in Chapter 2, which indicated that part- and full-time online students had different backgrounds and took different paths to online learning. Also, various online learning stakeholders suggested that some part-time online students are looking for advanced courses not offered by their local schools.

⁹ Additional factors that make standardized test results difficult to interpret include testing location and drop-out rates. Unlike most test takers, many online students must take standardized tests in unfamiliar locations, sometimes after considerable travel. As described earlier in this chapter, many online students dropped out of school entirely before the end of the year and were not tested. It is unclear what impact these factors may have on online student achievement.

¹⁰ We defined a full-time online student as any student who spent at least half of the school year enrolled full time in an approved online school.

¹¹ As noted previously, high school students are tested much less frequently than younger students, with a single math assessment occurring in eleventh grade and a single reading assessment in tenth grade. MDE does not currently collect data on specific courses. Therefore, we do not know whether the online students in our analysis actually received math instruction from their online schools.

¹² There were too few part-time online students in grades 3 through 8 to draw meaningful conclusions.

Table 3.2: Proficiency Levels of Minnesota Students on the MCA-II, 2010

	Percentage of Students Proficient in Math and Reading on the MCA-II Tests, Spring 2010			
	Math		Reading	
	Number of Students	Percentage Proficient	Number of Students	Percentage Proficient
Grades 3-8				
All 3-8 grade students	365,619	68%*	365,086	72%
Full-time online students	1,237	52	1,233	74
Grades 10-11^a				
All 10-11 grade students	66,725	41*	65,764	75
Full-time online students	385	16	407	72

NOTES: The Minnesota Department of Education defines proficient as meeting or exceeding state-determined standards for math or reading on the MCA-II exams. Full-time online students are students who enrolled in a full-time online school for at least half of the 2009-10 school year.

^a Students are tested in math in grade 11 and reading in grade 10. The entries in the number of students columns reflect only the students that were tested in the given subject.

* The difference between the percentage of online students and all students (of the same test and school year) is statistically significant at the 5-percent level. This means that if the percentage of proficient online students was actually the same as the percentage of all proficient students, there is less than a 5-percent likelihood that a difference as large as or larger than the one observed would have occurred by chance alone.

SOURCE: Office of the Legislative Auditor, analysis of Minnesota Department of Education data.

Growth

Proficiency rates alone provide a limited view of student performance. To add another dimension to our analysis, we measured student growth for full-time online students on the MCA-II by tracking the change over time in each student's test scores. We found that:

- **Students enrolled full time in online schools made less progress on the math MCA-II than public school students overall; for the reading MCA-II assessment, these online students generally kept pace with traditional students in one of the two years analyzed and not the other.**

We used a vertical scale developed by MDE to compare test scores across grade levels for students in grades 3 through 8.¹³ This tool allowed us to quantify online students' progress relative to the progress made by other Minnesota students in the same grade. Table 3.3 shows the progress made by online students during the 2008-09 and 2009-10 school years. During both years, full-time online students enrolled in grades 4 through 8 made about half as much

¹³ Due to the gap between standardized assessments in high school (two years between reading assessments and three years between math assessments), MDE could not align these tests scores for scale analysis.

progress in math, on average, as other students in the same grade.¹⁴ Results for reading varied for the different years examined. During the 2008-09 school year, full-time online students in grades 4 through 8, on average, increased their reading scores about two-thirds as much as traditional students. In the following year, however, online students in grades 4 through 8 at least kept pace with traditional students.

Table 3.3: Full-Time Online Students' (Grades 4-8) Gain on MCA-II Assessments Relative to Overall Population, School Years 2008-09 and 2009-10

	Number of Online Students	Online Student Gain as a Percentage of Overall Student Growth on MCA-II Assessments	
		Average	Median
Math			
2008-09	695	40%*	51%
2009-10	814	44*	53
Reading			
2008-09	701	64*	58
2009-10	812	118	104

NOTES: The average growth percentage can be interpreted as the percentage of growth the online students achieved on the MCA-II tests relative to the overall population average. During the 2009-10 school year, for instance, full-time online students in grades 4 through 8 achieved, on average, about 44 percent as much growth on the math MCA-II as the average student of the same grade in the overall student population. Full-time online students are students who enrolled in a full-time online school for at least half of the 2009-10 school year.

* The difference between the average gain of online students and all students of the same grade is statistically significant at the 5-percent level. This means that if the average growth of online students was actually the same as the average growth of all students, there is less than a 5-percent likelihood that a difference as large as or larger than the one observed would have occurred by chance alone. While the results for the 2009-10 reading test were not statistically significant, they suggest that online students either kept pace with or experienced more growth than all students in reading in 2009-10.

SOURCE: Office of the Legislative Auditor, analysis of Minnesota Department of Education data.

We also calculated “z-scores” to group online students’ growth on the math MCA-II assessment relative to their peers.¹⁵ We say that a student experienced low growth if his or her position relative to all other students in the same grade was worse than his relative position in the previous year. Medium growth means the student kept pace with other students in the same grade. High growth indicates that the student’s relative position compared to all other students in the

¹⁴ Students take their first standardized assessments in grade 3, which is used as the first baseline score. Therefore the earliest growth results available are for students in grade 4.

¹⁵ “Z-scores” are an expression of the number of standard deviations above or below the mean. Students who kept pace with other students (medium growth) would be at roughly the same number of standard deviations below or above the mean for two consecutive tests. We classified growth as low if the z-score declined by more than one-third of a standard deviation from one test to the next and as high if the z-score increased by more than one-third of a standard deviation.

Full-time online students generally lost ground in standardized math tests.

same grade was better than in the previous year. We included students in this analysis if they were enrolled full time in an online school for at least half of the relevant school year and had two consecutive valid assessment scores in the same subject area. Table 3.4 shows that during the 2009-10 school year, most full-time online students in grades 4 through 8 experienced either low (39 percent) or medium (42 percent) growth between math assessments. The percentage of online students experiencing low growth was significantly higher than the corresponding percentage for all students.¹⁶ The remaining online students in those grades experienced high growth on the MCA-II math assessment.¹⁷

For reading, the results for online students in grades 4 through 8 changed considerably between the two school years. In the 2008-09 school year, full-time online students' reading results were better than they were on the math assessments, but still fairly negative—more than one-third of the students experienced low growth and only 23 percent experienced high growth. In 2009-10, however, full-time online students performed better, with reading gains on par with those of traditional students.

Evaluating the performance of online high school students is more challenging. As mentioned previously, the gaps between tests made it impossible to use scale scores to characterize online student growth relative to the entire student population. The gap between tests also makes it more difficult to interpret a z-score analysis. While we could report percentages of students who achieved low, medium, and high growth, it is not clear that we can attribute that growth (or lack thereof) to online schools. Very few students are enrolled in online learning for the entire three years between their eighth-grade and eleventh-grade math assessments. We chose instead to evaluate the students who spent at least half of the time between tests enrolled in online learning (at least 1.5 years between math assessments and 1 year between reading assessments).

¹⁶ This result was statistically significant, as shown in Table 3.4.

¹⁷ We performed a similar analysis of test scores from the 2008-09 school year. The results, which were similar, are presented in Table 3.4.

Table 3.4: Growth on MCA-II Assessments for Full-Time Online Students (Grades 4-8), School Years 2008-09 and 2009-10

		Number of Full-Time Online Students	Test Score Growth		
			Low	Medium	High
Math					
2008-09					
	Full-time online students	695	38%*	45%	17%
	All students	282,373	26	47	26
2009-10					
	Full-time online students	814	39*	42	19
	All students	286,581	26	47	27
Reading					
2008-09					
	Full-time online students	701	35*	42	23
	All students	281,760	29	43	28
2009-10					
	Full-time online students	812	27	41	32
	All students	286,011	29	43	28

NOTES: Percentages may not sum to 100 due to rounding. "Full-time online students" includes those who enrolled in an online school on a full-time basis for at least half the school year. Low growth means the student's position relative to all other students in the same grade was worse than in the previous year; medium growth means the student made about the same amount of progress as other students; and high growth means the student's position relative to other students in the same grade was better than in the previous year. To classify students into these categories, we considered the test in question (spring 2009 for the 2008-09 school year and spring 2010 for the 2009-10 school year) as well as the prior year's test. We determined how many standard deviations each student's score was above or below the statewide mean for students in the same grade. Students who kept pace with other students would be at the same number of standard deviations above or below the mean for both tests. We classified growth between two MCA-II tests as medium if test scores (expressed as standard deviations above or below the mean, known as "z-scores") did not change by more than one-third of a standard deviation. We classified growth as low if the scores declined by more than one-third of a standard deviation and as high if the score increased by more than one-third of a standard deviation.

* The difference between the percentage of online students and all students (of the same test and school year) is statistically significant at the 5-percent level. This means that if the percentage of online students with low growth was actually the same as the percentage of all students with low growth, there is less than a 5-percent likelihood that a difference as large as or larger than the one observed would have occurred by chance alone.

SOURCE: Office of the Legislative Auditor, analysis of Minnesota Department of Education data.

The z-score analysis for full-time online high school students generally mirrors the results for students in grades 4 through 8. Full-time online high school students taking the MCA-II math test (grade 11 only), on average, did not make as much progress as other eleventh-grade students. Table 3.5 shows that 40 percent of full-time online high school students lost ground in math relative to other students during the 2009-10 school year. Forty percent kept pace with their peers with medium growth and only 20 percent experienced high growth. Full-time online high school students performed better on the reading assessment than on the math assessment, but the rates of growth varied notably from one year to the next. Among the tenth-grade online students taking the MCA-II reading test

in spring of 2009, a greater proportion had low growth than high growth, but in the 2009-10 school year the reverse occurred; 36 percent of full-time online students experienced high growth in reading and only 24 percent experienced low growth.

Table 3.5: Growth on MCA-II Assessment for Full-Time Online Students (Grades 10 and 11), School Years 2008-09 and 2009-10

	Number of Full-Time Online Students	Test Score Growth		
		Low	Medium	High
Math (Grade 11)				
2008-09				
Full-time online students	104	39%*	48%	13%
All students	55,410	29	48	23
2009-10				
Full-time online students	143	40*	40	20
All students	58,009	28	48	24
Reading (Grade 10)				
2008-09				
Full-time online students	165	34	39	27
All students	57,834	29	43	28
2009-10				
Full-time online students	217	24*	40	36
All students	58,151	30	42	28

NOTES: Percentages may not sum to 100 due to rounding. "Full-time online students" include those who enrolled in an approved online school on a full-time basis for at least half the time period between tests. Since each MCA-II exam is given only once during the high school grades—grade 10 for reading and grade 11 for math—growth for these students can only be measured over a multi-year period. Specifically, we measured MCA-II math test score growth between grades 8 and 11 and reading test score growth between grades 8 and 10. Low growth means the student's position relative to all other students in the same grade was worse than in the previous test year; medium growth means the student made about the same amount of progress as other students; and high growth means the student's position relative to other students in the same grade was better than in the previous test year. To classify students into these categories, we considered the test in question (spring 2009 for the 2008-09 school year and spring 2010 for the 2009-10 school year) as well as the relevant test taken before it. We determined how many standard deviations each student's score was above or below the statewide mean for students in the same grade. Students who kept pace with other students would be at the same number of standard deviations above or below the mean for both tests. We classified growth between two MCA-II tests as medium if test scores (expressed as standard deviations above or below the mean, known as "z-scores") did not change by more than one-third of a standard deviation. We classified growth as low if the scores declined by more than one-third of a standard deviation and as high if the score increased by more than one-third of a standard deviation.

* The difference between the percentage of online students and all students (of the same test and school year) is statistically significant at the 5-percent level. This means that if the percentage of online students with low growth was actually the same as the percentage of all students with low growth, there is less than a 5-percent likelihood that a difference as large as or larger than the one observed would have occurred by chance alone

SOURCE: Office of the Legislative Auditor, analysis of Minnesota Department of Education data.

Full-time online students had much less success in math than in reading.

Discussion

The slower rate of progress in math among full-time online students held across demographic groups. Average gains in math were smaller for online students regardless of race, gender, eligibility for free or reduced-price lunch, special education status, mobility, or area of the state in which they lived.¹⁸ While there was some variation in math performance between the different groups on the demographic variables we tested, all groups of online students fell behind relative to the overall student population. For example, online students who changed schools one or more times fell further behind than online students who did not change schools during the school year. Both groups of online students, however, fell behind relative to traditional students.

Our proficiency and growth analyses show that full-time online learning students experienced much less success in math than in reading. Full-time online students had somewhat lower than average proficiency rates in math in grades 3 through 8 and dramatically lower math proficiency rates in grade 11. Growth analysis indicates that, on average, full-time online students fell further behind their peers between math tests. In contrast, full-time online students kept pace with other students with respect to reading proficiency and growth during the 2009-10 school year. The differences between reading and math performance for full-time online learning students raise questions about why online students make less progress in math. It is worth considering whether math curriculum requires additional modifications in order to be suitable for online instruction. In addition, online schools and MDE may wish to increase their monitoring of student progress in online math courses in order to identify areas of difficulty and better assist students who need additional attention.

NATIONAL EFFECTIVENESS STUDIES

Learning Outcomes

We reviewed the national literature in search of studies related to the learning outcomes associated with online learning. We found that:

- **While a number of studies have found that online learning is effective at the *post-secondary* level, the effectiveness of online education for K-12 students has not been studied extensively.**

Multiple sources we consulted noted the lack of rigorous studies of K-12 online learning. While there is a much larger body of research on post-secondary online learning, it is unclear whether the results of post-secondary online learning can be extrapolated to K-12 online students and schools. A 2010 U.S. Department of Education report described a meta-analysis in which researchers synthesized the

¹⁸ The race variable we examined was a binary variable in which students were categorized as white or nonwhite. Special education status reflects whether a student received special education services. For mobility, we categorized students based on the number of times they changed schools during the school year. The location variable categorized students as residing in Minneapolis/St. Paul, the seven-county metropolitan area, or greater Minnesota.

**Little is known
about the
effectiveness of
online learning
for K-12 students.**

results of all of the experimental and quasi-experimental online learning studies meeting their criteria between 1996 and 2008. The report concluded that online college students performed modestly better, on average, than students learning the same material through face-to-face instruction. The report noted, however, that researchers found only five rigorous studies of K-12 online learning conducted during the time frame, and none prior to 2006, leading to the conclusion that “the number of K-12 studies is too small to warrant much confidence in the [estimated effect of online learning] for this learner group.”¹⁹

Social Skills

For most students, school is where many social skills are modeled and learned, and it is often the primary venue for socialization. Socialization is the process through which “people acquire the rules of behavior and systems of beliefs and attitudes that equip a person to function effectively as a member of a particular society.”²⁰ Because online learning may diminish a student’s face-to-face contact with teachers and other students, some question its impact on socialization. Similarly, some people have suggested that online students might feel more socially isolated than traditional students. We found that:

- **Although little research has addressed the effects of online schooling on student socialization, available research on both home schooling and online learning suggests no difference in social skills between students in traditional schools and those learning at home.**

While research is currently lacking on socialization in the online learning environment, literature regarding home schooling suggests that students can gain adequate social skills even if they are educated outside the traditional classroom environment. As in online learning, home schooling does not take place in a traditional classroom setting, and students learn largely in the absence of face-to-face interaction with other students. Also like online learning, critics of home schooling have voiced concerns about student isolation and the lack of opportunities for socialization. Research suggests, however, that the socialization experienced by home-schooled children is “equal, and in some cases superior, to that of children who attend conventional schools.”²¹

Among the few studies directly addressing these aspects of online learning is a 2009 study that examined the socialization of 176 students in grades 2 through 6 who were enrolled in full-time online academies in four states.²² Using a tool called the Social Skills Rating System, this study compared parent, teacher, and student self ratings to national norms. Online learning students scored either

¹⁹ U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies* (Washington, DC: 2010), xv.

²⁰ Jay Sivin-Kachala and Ellen Bialo, *IESD Comprehensive Technical Report, Evaluation of the Social Skills of Full-Time, Online Public School Students* (New York, NY: Interactive Educational Systems Design, Inc., 2009), 4.

²¹ *Ibid.*, 6.

²² *Ibid.*, 7-9.

significantly higher or not significantly different from the national norms on most of the measured social skills. The researchers also compared students who had been enrolled in online learning for one year or less to those who had been enrolled for more than one year and found “no cumulative long-term decrease in social skills based on enrollment in full-time, online public schools.”²³

²³ *Ibid.*, 2.

Minnesota Department of Education's Role

Online schools must meet requirements beyond those pertaining to all schools.

Since 2003, online schools for public school students in kindergarten through grade 12 have been subject to Minnesota Department of Education (MDE) regulation beyond that required of the more traditional brick-and-mortar schools. This chapter looks at how well the department has carried out its oversight responsibilities relative to online schools and discusses how school district, charter school, and online school administrators view the department's role. The chapter ends with our overall conclusions and recommendations.

STATUTORY REQUIREMENTS

As noted earlier in Chapter 1, some K-12 students have had access to online learning opportunities through their local school districts or charter schools since the mid-1990s. When the Legislature passed the Online Learning Option Act in 2003, online opportunities became more readily available to students statewide, and the act further “legitimized” online learning in Minnesota.¹

Table 4.1 lists major state laws enforced by MDE that pertain to all public schools—online or not—and the additional requirements that online schools must meet. Online charter schools must also comply with other requirements specific to charter schools.² Overall, online schools must meet the same state requirements related to academic standards, special education, teacher licensure, graduation, and standardized testing that are applicable to traditional brick-and-mortar schools.

The Online Learning Option Act sets forth four additional duties for the department relative to online learning for K-12 students.³ First, MDE must review and approve certain types of online providers. Second, it must investigate challenges to online schools' curricula brought by school districts or the department itself. Third, the department is responsible for collecting and publishing data on online schools, courses, and enrollment. Finally, it must transfer online learning aid when students take online courses part time from online schools outside their enrolling school district or charter school.

¹ *Laws of Minnesota* First Special Session 2003, chapter 9, art. 2, sec. 20.

² *Minnesota Statutes* 2010, 124D.10. For example, each online charter school must enter into a contract with an “authorizer” that sets forth certain expectations—a requirement not applicable to other types of online schools or traditional schools operated by school districts.

³ *Minnesota Statutes* 2010, 124D.095. Statutes also require that the department develop various forms and appoint an Online Learning Advisory Council, which it has done.

Table 4.1: Major Education Laws for Traditional and Online Schools, 2011

All schools must:

- adhere to compulsory attendance laws,
- administer statewide standardized tests,
- comply with educational data requirements,
- comply with special education requirements,
- conform to required academic standards,
- meet teacher licensure requirements, and
- comply with the Pupil Fair Dismissal Act.

In addition, online schools must:

- obtain Minnesota Department of Education (MDE) approval,
- develop a syllabus for each course offered to part-time online students,
- submit course-level data to MDE,
- notify MDE that it is delivering online courses,
- submit data on course completions,
- limit the number of students online teachers can instruct in a course or program to 40 students or less,
- provide written assurance to MDE that courses meet state standards, and
- adhere to nationally recognized professional standards regarding academic support services.

In addition, approved online charter schools must:

- comply with all charter school laws, including developing an annual report, and
- have their performance formally evaluated by their respective authorizer every five years.

SOURCES: *Minnesota Statutes* 2010, 13.32; 120A.22-120A.26; 120B.019-120B.024; 120B.30-120B.36; 121A.40-121A.56; 122A.15-122A.25; 124D.095; and 124D.10.

Review and Approval

State law requires MDE to specifically “review and approve” those online learning providers that (a) enroll public school students on a full-time basis or (b) enroll public school students from other school districts or charter schools on a part-time basis.⁴ The law uses the term “online learning provider” to mean a school district, charter school, intermediate school district, or group of school districts working under a joint-powers agreement that offers online courses to public school students at the state’s expense.⁵ Statutes specifically exempt

⁴ *Minnesota Statutes* 124D.095, subd. 7.

⁵ *Minnesota Statutes* 2010, 124D.095, subd. 2(b). The term does not refer to vendors that sell online curricula, education management systems, or administrative services to public schools, nor does it refer to private online schools. For example, although Minnesota Virtual Academy (MNVA) contracts with a private vendor, K¹², for most of its curriculum, MNVA, which is operated by Houston Public Schools, is the approved online learning provider, not K¹². To avoid confusion with online learning curriculum providers, we refer to state-approved online providers as online schools throughout this report.

State law gives the Minnesota Department of Education flexibility in approving online schools.

school districts and charter schools offering online courses solely to their own students on a part-time basis from MDE's review-and-approval process.⁶

While statutes provide MDE with the necessary tools to review and approve online schools, they also give the department a fair amount of flexibility in doing so. For example, the law does not require the department to act on applications within a specified period of time, nor does it require MDE to conduct site visits as part of the review-and-approval process. Also, the law does not establish separate review processes for initial applications versus subsequent reapprovals.⁷ Finally, statutes require that applicants give "written assurance" that their courses meet state standards and their academic support, curricula, instruction, assessment, and expectations for student-teacher interaction meet "nationally recognized professional standards," but MDE is not required to verify these assurances.⁸

To carry out its statutory responsibilities, MDE has developed a rigorous approval process required of all first-time applicants and a yearly reapproval process required of all online schools. Initial applicants and approved online schools must submit detailed information on various items, including goals and objectives, curriculum alignment, student-teacher contact and instructional assistance, assessment processes, methods for documenting student engagement or attendance, and enrollment policies and procedures.

To gain initial approval, interested school districts, charter schools, intermediate school districts, and school district consortia must submit letters of intent at least 12 months prior to their proposed starting dates and completed applications at least 6 months beforehand.⁹ We looked at how many applications for new online schools were submitted to MDE over the last several years along with how many the department approved or denied. We found that:

- **Although the number of online schools has increased by about two-thirds since the 2003-04 school year, the Minnesota Department of Education has not reviewed new applications in a timely manner since mid-2009.**

⁶ *Minnesota Statutes* 2010, 124D.095, subd. 4(d).

⁷ From 2003 through July 2009, Minnesota law required the department to "review and certify" online learning providers. In 2009 the Legislature changed this language to "review and approve." The department has continued to refer to its responsibilities in various printed documents as certification. *Laws of Minnesota* 2009, chapter 96, art. 2, sec. 39.

⁸ *Minnesota Statutes* 2010, 124D.095, subd. 7(a). In 2007 the Legislature amended state law to require online schools to "demonstrate" (rather than "affirm") that their curricula met state academic requirements. In response, MDE required online schools to submit documentation showing how select courses were aligned with state standards. The department set up a number of curriculum-alignment committees consisting of staff and interested parties to review each course. In 2009, the Legislature amended state law again to require that online schools "give the commissioner written assurance" that their courses were aligned with state standards. See: *Laws of Minnesota* 2007, chapter 146, art. 2, sec. 22; and *Laws of Minnesota* 2009, chapter 96, art. 2, sec. 39.

⁹ Minnesota Department of Education, *2011-12 Online Learning (OLL) Certification Application Guidelines* (St. Paul, November 2010), 3.

The department's approval process for new online schools is rigorous but has been hindered by a lack of staff and resources.

Since passage of the Online Learning Option Act in 2003, the number of online schools approved to operate in Minnesota has increased from 15 in the 2003-04 school year to 24 in 2010-11. During this time frame, MDE approved about 38 first-time applications and did not specifically approve at least 5 others.¹⁰ Over the last several years, about 14 online schools once approved by MDE have come and gone. Some merged with other online schools; in other instances, the school districts that administered the online schools became members of consortia or chose to limit enrollment to their own students. Of the 24 online schools enrolling students in the 2010-11 school year, 7 were operating prior to the 2003-04 school year.

Recently, though, MDE's review-and-approval process has struggled, due largely to reduced staffing and resources, and the department has a backlog of new applications that it has not addressed. For example, from January 1, 2010, through June 30, 2011, 14 interested parties submitted letters of intent to MDE.¹¹ Department guidelines state that MDE staff will schedule site visits with applicants after receiving their letters of intent.¹² Although all but two of the letters of intent were sent in 2010, MDE had completed only three site visits (in August and October of 2010 and June 2011) by the end of June 2011.¹³

Department guidelines also require that MDE notify an applicant about the outcome of its review process within 60 days of receiving its application.¹⁴ Eight of the 14 entities submitting letters of intent followed up by submitting formal applications to become online schools. However, MDE only reviewed and commented on three of the eight applications. The department submitted written comments to one of the applicants immediately, but did not comment on the other two applications until three to four months after receiving them.

In June 2011, MDE approved two of the eight online school applications—the first approvals issued by the department since mid-2009.¹⁵ The Madelia School District's August 6, 2010, application for eMinnesota Online Academy was

¹⁰ In other instances, online school applicants simply stopped pursuing MDE approval after being asked by MDE to amend their applications.

¹¹ In addition, an existing online school (Learn at My Pace) submitted a letter of intent to expand its program to include kindergarten through grade 6.

¹² Minnesota Department of Education, *2011-12 Online Learning (OLL) Certification Application Guidelines* (St. Paul, November 2010), 3. Recently, MDE has determined that a site visit should occur after department staff have received and reviewed the full application. The department plans to update its guidelines accordingly. We think that such a change is reasonable as long as MDE staff review online schools' applications in a timely manner.

¹³ The department scheduled and then cancelled a fourth site visit with another applicant after the department determined the application was incomplete. As noted earlier, the law does not specifically require MDE to conduct site visits as part of its review-and-approval process. Department guidelines call for a site visit at some point in the application process. However, the department has no record of having conducted a site visit for 11 currently approved schools.

¹⁴ Department of Education, *Application Guidelines*, 3.

¹⁵ In June 2011, MDE also approved another online school, Southeast Minnesota Virtual Academy (SEMVA), which had submitted its application in March 2009. However, MDE had no record of formally approving or disapproving the application in 2009. When SEMVA submitted updated information for its file in January 2011, MDE began reviewing its status because SEMVA did not appear on either MDE's list of approved online schools or its list of pending applicants.

Over the last two years, MDE has formally acted on only a few of the online school applications that have been submitted.

approved on June 9, 2011, about ten months after being submitted.¹⁶ In contrast, MDE approved the June 21, 2011 application from West St. Paul-Mendota Heights-Eagan School District in less than a week, conducting a site visit on June 23, 2011, and issuing a letter of approval on June 24, 2011. According to the West St. Paul-Mendota Heights-Eagan application, the school district is planning to take over BlueSky Online Charter School, retaining most of BlueSky's basic structure for the 2011-12 school year and fully incorporating all BlueSky program operations into the school district's organizational framework by the 2012-13 school year.¹⁷ In issuing the latter approval, however, MDE ignored some of its own rigorous guidelines that it has in place for approving new online schools. For example, although new applications must be submitted at least six months prior to enrolling students, the new online school (which had yet to be named) was approved to start in September 2011—slightly more than two months after its application. Further, MDE approved the new online school before obtaining all of the curriculum materials it generally requires of applicants.¹⁸ As we discuss in the following section, MDE is currently embroiled in a lawsuit with BlueSky regarding the adequacy of its curriculum.

Once approved, online schools are responsible for submitting three types of data annually. First, online schools must submit reapproval applications to MDE each July, updating their data with any changes they have made to their school or program. This application mirrors the initial application, including, for example, information on goals and objectives, curriculum-alignment processes, and methods for student-teacher contact and instructional assistance. Second, online schools must also transmit enrollment data for the prior school year to MDE. Finally, they must transmit a list of upcoming course offerings to ISEEK.¹⁹

As of late March 2011, all but one online school had filed reapproval forms for the 2010-11 school year, which were due July 15, 2010. All but two had also submitted their annual data reports. However, we found that:

- **The Minnesota Department of Education has yet to systematically review the information that online schools submitted in July 2010.**

While most online schools submitted the forms and data that MDE required of them, department staff simply filed online schools' reapproval documents without thoroughly reviewing them. Thus, MDE cannot say whether the reapproval applications and data were complete, accurate, or met department expectations. The department did not send the online schools letters in 2010 regarding their reapproval, as the department had in previous years.

¹⁶ Over the last 10 months, officials from the Madelia School District called MDE frequently to determine the status of its application. School district staff told us that MDE finally acted upon its application shortly after the school district called the Governor's office to complain.

¹⁷ When the application was submitted, the school district and BlueSky had not reached a formal agreement. As of September 7, 2011, the two parties still had not reached an agreement to merge, and the school district was exploring its options regarding online learning. Although it has MDE's approval to operate an online school, the school district is currently not doing so.

¹⁸ For example, MDE's approval letter asked the school district to submit additional documentation regarding course alignment with state standards by August 1, 2011.

¹⁹ ISEEK's Web site provides current information on careers, education, and jobs in Minnesota.

We also noted that both the initial application and the annual reapproval application forms that MDE uses have not been totally updated to reflect statutory language adopted in 2009. For example, both forms state that “Online learning providers must give the commissioner written assurance that online learning courses have equivalent standards or instruction, curriculum, and assessment requirements as other courses offered to students.”²⁰ Statutes actually state that online schools “must give the commissioner written assurance that (1) all courses meet state academic standards; and (2) the online learning curriculum, instruction, and assessment, expectations for actual teacher-contact time or other student-to-teacher communication, and academic support meet nationally recognized professional standards.”²¹ The department’s internal documents make no mention of acceptable national standards, nor does it ask schools what set of national standards they use. In addition, department guidelines and reapproval documents continue to refer to MDE’s activities as “review and certify” even though the 2009 Legislature amended statutory language to simply read “review and approve.”²²

A large part of the department’s oversight problems are due to the fact that:

- **The Minnesota Department of Education has not assigned sufficient staff to fulfill its online learning responsibilities since mid-2009.**

The department had a full-time staff person devoted to online learning until mid-2009. About one year after that staff person’s resignation, MDE divided its online learning oversight responsibilities among two existing staff members who had to add online school responsibilities to their other duties.²³ In late 2010, MDE drafted a plan and schedule for reviewing and approving online schools and took steps to fill its vacant online learning position. Department management approved the plan in early 2011 and began interviewing candidates to fill the online learning position. However, hiring problems and budget uncertainty have delayed hiring and plan implementation indefinitely.

Curriculum Challenges

State law allows school districts to challenge the validity of any course offered by online schools, which the department must then review. The department can also initiate its own review of an online school’s courses. We found that:

- **In the last several years, no school district has formally challenged the validity of an online course, and the Minnesota Department of Education has challenged the curricula of one online school.**

²⁰ Minnesota Department of Education, “Online Learning (OLL) Option Act Provider Application 2011-2012,” 3, and Minnesota Department of Education, “Online Learning (OLL) Option Act Provider Re-certification 2011-2012,” 3.

²¹ *Minnesota Statutes* 2010, 124D.095, subd. 7(a).

²² *Ibid.*

²³ Over the last several years, MDE has experienced significant staff and budget cuts—as have most state agencies. At the same time, department staff responsibilities have increased.

According to our survey of school district superintendents and charter school directors, only 6 percent of respondents indicated that they had *considered* formally challenging an online course offered by an online school in the last three years.²⁴

Part of the reason why school districts have not formally challenged online school curricula may be due to statutory provisions that help school districts determine whether online courses meet district requirements. Since 2007, state law has required that online schools prepare a syllabus for each of their courses.²⁵ Among other items, the syllabus must show how the course aligns with state academic standards and the content covered. Online schools must notify school districts that course syllabi are available for districts' review whenever one of their students enroll part time in an online course. The law also requires that an online school notify the enrolling school district within ten days of accepting a student's application for part-time enrollment.²⁶ In turn, the enrolling school district must notify online schools within 15 days as to whether a course meets or does not meet district graduation requirements.²⁷

The Department of Education has challenged the curriculum of one online school, BlueSky Online Charter School, after receiving complaints from former teachers at the school.²⁸ The department conducted a formal review of the online school, focusing on whether students were graduating without completing state graduation requirements. Although the Online Learning Option Act does not specifically give MDE the authority to close or "de-approve" an online school, other provisions of state law allow it to withhold state aid for noncompliance with state requirements.²⁹ Using its charter school authority, MDE moved to close the school by requesting the school's "authorizer" to terminate its contract with the online school. If the authorizer did not comply, MDE indicated that it would terminate the contract itself.³⁰ The authorizer refused to comply with MDE's decision, and the online school filed an appeal with the Minnesota Court of Appeals. An administrative hearing was scheduled for late June 2011. However, the administrative law judge in charge of the case postponed the scheduled hearing at MDE's request, partially because MDE and BlueSky Online Charter School had begun discussing a settlement. However, as of September 1, 2011, the case remained unresolved.

**The department
has challenged the
curriculum of one
online school
since 2003.**

²⁴ In October 2003, Education Minnesota, along with the Burnsville and Hopkins school districts, filed suit against MDE, seeking a court order to rescind the department's approval of one online school, Minnesota Virtual Academy. The suit focused on the use of licensed teachers to deliver courses. The court ruled in favor of the department. *Minnesota v. Yecke*, (2d Jud Dist, Ramsey County, File No. C0-03-10879, May 19, 2004).

²⁵ *Laws of Minnesota* 2007, chapter 146, art. 2, sec. 21.

²⁶ *Minnesota Statutes* 2010, 124D.095, subd. 3(a).

²⁷ *Minnesota Statutes* 2010, 124D.095, subd. 3(b).

²⁸ BlueSky Online Charter School enrolls full-time online students in grades 7 through 12.

²⁹ *Minnesota Statutes* 2010, 127A.42.

³⁰ State law requires that charter schools be administered and overseen by MDE-approved entities referred to as "authorizers," which are generally school districts, public or private postsecondary institutions, or nonprofit boards or foundations. See *Minnesota Statutes* 2010, 124D.10.

Data Collection and Reporting

State law regarding data collection for online learning is somewhat ambiguous and confusing in several ways. Consequently:

- **Minnesota Department of Education data regarding online learning do not present a complete and accurate picture of online learning in Minnesota.**

Some data reporting requirements in state law are unclear.

First, reporting requirements for school districts and charter schools that provide online courses solely to their own students are unclear. One part of the law (subdivision 3) requires all school districts, charter schools, and groups of school districts to notify MDE if they are providing online learning to students and report the number of students enrolled in online courses and the courses and programs they provide.³¹ Another part of the law (subdivision 4) says that school districts and charter schools that provide online courses solely to their own students are “not subject to the reporting requirements or review criteria under subdivision 7,” (subdivision 7 sets forth MDE’s review-and-approval responsibilities for online schools).³² Because the exclusion language in subdivision 4 does not specifically reference the reporting requirements set forth in subdivision 3, it is not entirely clear to us that school districts and charter schools offering online courses solely to their own students on a part-time basis are exempt from all reporting requirements.

The department has never attempted to collect data related to online learning from school districts and charter schools that provide online courses solely to their own students. Aside from anecdotal information, MDE does not know the extent to which school districts are offering online courses to their own students, the number and type of courses being offered, or the number of students enrolled. Results from our survey of school districts and charter schools found that at least 80 school districts and 5 charter schools were offering online courses to their own students, and substantial numbers of students were enrolling in them—about 8,000 students in the 2010-11 school year. Based on our survey, we estimated that the total number of public school students taking one or more online courses (either from their own school district or an online school) was about 20,000 students during the 2010-11 school year—about two-thirds more than MDE figures suggest. As noted previously, the department does not collect data on the number of students enrolled in online courses that school districts and charter schools offer solely to their own students.

If MDE wants to have an accurate and complete picture of online learning in Minnesota, it will need to collect additional data from school districts and charter schools regarding students taking online courses part time. The department could consider having school districts and charter schools simply “flag” or identify students that took one or more online courses during the year when reporting annual MARSS (Minnesota Automated Reporting Student System) data to MDE. According to MDE, while the department currently cannot collect accurate data

³¹ *Minnesota Statutes* 2010, 124D.095, subd. 3(c).

³² *Minnesota Statutes* 2010, 124D.095, subd. 4(d).

on all students taking online courses, MDE's common course catalog, which is being developed, will have the capacity to do so.

Second, while MDE applies the statutory reporting requirements to all approved online schools, the data it collects consistently across these schools are limited to enrollment headcounts and course completion rates. Student-level demographic and enrollment data are currently available only through the MARSS reporting system, and the way in which the department collects these data makes it difficult to compare full-time online students with students enrolled in online schools on a part-time basis. Online schools must report MARSS data for their full-time students just as school districts and charter schools would report data for their own students. However, student-level data for part-time online students are reported by students' enrolling school districts and charter schools, not their online schools. The department does not require school districts to identify whether their students are also enrolled in online schools part time.

Another data reporting problem may stem from ambiguous state law. As noted previously, online schools must submit a list of courses and programs they deliver to MDE.³³ State law further requires the department to develop and publish a list of online schools and the "online learning courses that it has reviewed and certified."³⁴ Although MDE publishes a list of online schools on its Web site, it does not develop or publish a list of certified courses and programs, and it is doubtful the department has the capacity to do so.³⁵ The department does not directly review and approve individual courses or programs. Instead, the law requires the department to approve online schools, which in turn give the department "written assurance" that their courses and programs are aligned with state and local standards. The department only approves individual courses and programs indirectly in that, once MDE approves an online school, all of that school's course offerings are automatically eligible for state funding.

The department does require that online schools submit a list of course offerings as part of their annual reapproval process. As noted previously, however, the department does not review these lists nor does it publish a master list on its Web site. Although MDE requires that online schools also submit this information to ISEEK, it does not review these data or check whether these data have been properly posted. Online schools reported offering 1,873 courses during the 2010-11 school year, with the number of courses offered at individual schools ranging from 2 to 239 courses. We took a cursory look at these data and found some problems. For example, "Sign Language" and "Emotional Intelligence" were listed as Advanced Placement classes in two online schools. When we checked with the College Board, which administers the Advanced Placement program, we

³³ *Minnesota Statutes* 2010, 124D.095, subd. 3(c).

³⁴ *Minnesota Statutes* 2010, 124D.095, subd. 7(d). Until 2009, statutes required MDE to "certify" rather than "approve" online learning providers. However, subd. 7(d) still erroneously uses the word "certified" when referring to the department's activities. As mentioned previously, the department still refers to the process as one of certification. *Laws of Minnesota* 2009, chapter 96, art. 2, sec. 39.

³⁵ The Minnesota Department of Education provides a link to ISEEK on its Web site. As noted previously, MDE requires that online schools submit a list of their course offerings to ISEEK each year.

found that Sign Language and Emotional Intelligence were not approved Advanced Placement courses.

PERCEPTIONS OF ONLINE SCHOOL ADMINISTRATORS

As part of our evaluation, we conducted formal interviews with half of the state's online schools to learn about their views of online learning and the role played by MDE. Overall, we found that:

- **Administrators of online schools generally want the Minnesota Department of Education to monitor student outcomes in all types of schools, but they want the department to recognize that online schools may use different tools to achieve those outcomes.**

For the most part, the online school administrators that we talked with did not object to MDE's oversight but wanted that oversight to focus on student outcomes rather than policies and procedures. Some statutory language and department policies based on traditional face-to-face models of learning do not translate well to the online learning environment. For example, unless specifically waived by MDE, statutes prohibit online teachers from instructing more than 40 students in any one online course or program.³⁶ Statutes do not, however, define a "program" or "course," nor do they limit the number of courses or course "sections" a teacher can instruct.³⁷ Although some online administrators told us that a ratio of 40 students per teacher was too high when viewed as a "per section" limit, others told us it was too low. Some online school administrators told us that they generally create another course section when more than 40 students enroll in a given class, although they may or may not hire another teacher. Thus, teachers that teach two sections of American History may be responsible for 80 students. In our survey of online teachers, most respondents told us that their daily teaching load was 240 students or less in total (6 classes of 40 students each), although a few teachers cited caseloads approaching 500 students. Vague statutes make it difficult for MDE to provide a meaningful check on how online schools comply with this requirement.

Some state requirements based on traditional models of learning may not translate well to the online environment.

Several online administrators also pointed out that state law and MDE policies regarding administration of statewide tests are especially onerous for online schools. Test materials are shipped to each online school, and it is each school's responsibility to ensure that the materials are kept secure before, during, and after test administration. Each online school must test their students and return their students' answer documents to MDE or submit them online.³⁸ However, unlike traditional school students, full-time online students often live far from their online schools' administrative offices. Some online schools have difficulty

³⁶ *Minnesota Statutes* 2010, 124D.095, subd. 4(e).

³⁷ In a traditional school, course sections refer to identical courses offered to different groups of students, generally at different times of the day. The same teacher may teach all sections of a course, or the sections may be taught by different teachers.

³⁸ Minnesota Department of Education, *Procedures Manual for the Minnesota Assessments 2010-2011* (St. Paul, November 30, 2010), 79.

finding appropriate testing sites near their students, and online teachers must often drive considerable distances to administer the exams. Because of security concerns, students cannot use their own computers for those tests that are administered electronically. Although MDE expects local school districts to collaborate with online schools in administering the tests, some online schools end up renting hotel conference rooms or other spaces. In one extreme situation, an online school told us that it had to administer an exam in the backseat of an automobile. While the online school administrators that we talked with recognized the importance of test security, their comments suggested that MDE could explore more options to make the testing process less onerous for online schools without jeopardizing test security.

Besides the ways in which state law and department policy are ill-suited to online learning, online school administrators feel unsupported by MDE. Those we interviewed told us that it is difficult to get definitive answers from MDE when school administrators have questions about statutory requirements or department expectations. They noted that, for the last two years, MDE has not designated a staff person to have primary responsibility for all aspects of online learning. Consequently, we detected some degree of distrust with MDE among some online providers. Many online school administrators as well as program advocates want MDE to play a more visible and active role in presenting online education as a viable option for students and families and aiding in its development.

CONCLUSIONS AND RECOMMENDATIONS

Although traditional face-to-face instruction is the most prevalent method for teaching K-12 students today, online learning is an important and growing component of Minnesota's array of school choice options. Over the last several years, there has been significant growth in online learning opportunities and participation. But of late, this has occurred with little oversight or coordination from MDE, Minnesota's lead education agency for K-12 students. Overall, we found problems with MDE's review-and-approval process for online schools. Contrary to the desires of many online school administrators and other online advocates, MDE has displayed little leadership when it comes to online learning.

We have some concerns about online learning. Little research—either in Minnesota or nationwide—has been conducted regarding the efficacy of online learning for K-12 students. Minnesota's online schools generally have low course-completion rates, and we found that full-time online students tend to lose ground on standardized state math assessments. Online learning may not be appropriate for every type of student or course, and students may not always be well-advised about online possibilities.

Despite our concerns, we think that student—and school district—interest in online learning will continue to grow. However, changes are needed both to state law and department policy to better define MDE's role. In short, the department must provide more leadership and guidance to help ensure that efficient and effective online learning opportunities are readily available for all students.

Student and school district interest in online learning options will continue to grow.

The current backlog of applications for new online schools needs to be addressed.

RECOMMENDATION

The Legislature should adopt specific time frames related to the review-and-approval process for becoming an online school.

The Department of Education needs to address the current backlog of online school applications. As noted earlier, MDE has ignored its own guidelines and has not reviewed and approved online learning applications in a timely manner. As a result, it currently has a backlog of new applicants waiting for department action. We recommend that the Legislature require that MDE abide by time frames similar to those for charter school approvals. When MDE receives an incomplete application, the department should immediately notify the applicant that its application will not be considered until all necessary components are addressed. The department should have 60 days after receipt of a complete application to submit its written comments to the applicant. In turn, an applicant should have 20 days after receiving MDE's review to address any deficiencies in writing, with final written decisions from MDE 14 days later. Overall, we think that the entire process should be completed at least 60 to 90 days prior to online schools offering online courses. This schedule would give online schools ample time to prepare for the upcoming school year. It would also give students and parents sufficient time to plan schedules.

Recently MDE has proposed setting a specific deadline for submitting applications for new online schools and limiting the number of times applicants can amend their applications. Given the department's limited staff resources though, it may be difficult for MDE to review all new applications in a timely and thorough manner if all applications were submitted at the same time. We think a staggered submission process might be best when staff resources are tight. Regardless of the schedule MDE ultimately chooses, it is important to have realistic timelines that all parties—MDE and applicants—meet.

RECOMMENDATION

The Minnesota Department of Education should redesign its reapproval process for online schools to focus more attention on performance.

We think that the process for obtaining initial approval is appropriately rigorous—and should remain so. However, we think the department's reapproval process for online schools should incorporate more performance-related elements, including some MDE currently uses to reapprove charter schools. For example, MDE should approve new online schools for longer periods of time—three to five years. Instead of simply having online schools resubmit (with updates) their initial applications each year, MDE should require the school districts or charter schools with online schools to submit formal evaluations assessing their students' performance and the online schools' progress in meeting their goals and objectives. This is similar to what is currently required of charter schools. State law requires charter school authorizers to evaluate their schools'

performance before renewing the schools' contracts, which may be written for a maximum of three to five years.³⁹

Redesigning its reapproval process would free MDE of the self-imposed task of reapproving online schools each year (which it is currently not doing in any meaningful way), while placing greater responsibility on the public entities that have established the online schools. Furthermore, it would make the reapproval process more meaningful and could provide MDE with insights into the effectiveness of online learning.⁴⁰

RECOMMENDATION

The Minnesota Department of Education should dedicate sufficient staff to carry out its online learning responsibilities.

A timely and streamlined review-and-approval process still requires that MDE dedicate sufficient staff to carry out its online learning responsibilities. As with many other state agencies, MDE has had to deal with a series of budget and staffing cuts over the last several years, without a subsequent contraction of responsibilities. Nevertheless, MDE must assign enough staff to fulfill its statutory responsibilities, including online school approval, reapproval, and support. Further, MDE should identify a staff person knowledgeable enough about online learning to serve as the major contact point for anyone, including school administrators, online school applicants, students, and parents, seeking information about online learning, state laws, or department policy. Our previous two recommendations that help streamline the review-and-approval process for online schools should help.

To further prioritize its limited resources, MDE could ask the Legislature to limit the department's review-and-approval authority to online schools that enroll students on a full-time basis and require online schools that only enroll part-time online students from anywhere in the state to simply register with MDE. In the 2010-11 school year, 8 of the state's 24 online schools enrolled students on a part-time basis only.

There are three major reasons why such a request might be reasonable. First, state law already contains provisions (which would need to be retained) that safeguard students enrolling in online courses on a part-time basis. For example, online schools must notify school districts whenever one of the districts' students registers for an online course on a part-time basis. In these cases, online schools must make certain course-specific information available to students' enrolling districts, including how a course incorporates state academic standards, testing requirements, and expectations for teacher-student contact time. School districts

³⁹ *Minnesota Statutes* 2010, 124D.10, subds. 6(9) and 15(a). Initial contracts between authorizers and charter schools can be written for a maximum of three years (plus an additional preoperational planning year) and renewed contracts for up to five years.

⁴⁰ In 2011, MDE proposed various changes to its reapproval process for online schools. Although the changes have yet to be implemented, they still do not focus the review process on student or school performance.

The Department of Education could ask the Legislature to limit the department's approval authority to online schools that enroll students full time.

have time to determine whether specific courses meet their graduation requirements before students actually complete courses. Enrolling school districts must also designate staff to help facilitate and monitor their students' academic progress when they enroll part time in courses at online schools.⁴¹ Such a mechanism provides another check to help ensure that online students are accumulating the appropriate number and type of credits necessary for graduation.

Second, online schools that enroll students on a part-time basis are generally administered by school district consortia. Participating in an online learning consortium gives member school districts and charter schools a direct role in determining the online courses offered to students on a part-time basis, course content, and, to some extent, course delivery. Furthermore, teachers from participating school districts often teach online courses for the online learning consortia.

Finally, it is unclear that part-time online students in online schools experience online learning any differently than students taking online courses from their own school districts, where no MDE approval is required. In both cases, part-time online students remain connected to and supported by their enrolling school districts.

RECOMMENDATION

The Legislature should define “course” and “program” as they relate to online instruction and clarify other confusing statutory language regarding data collection and reporting.

Statutory language regarding online learning is confusing in several respects. First, while statutes prohibit online teachers from instructing more than 40 students in any one online course or program, statutes do not define a program or course, nor do they limit the number of courses or course “sections” a teacher can instruct.⁴² Most online schools that we talked with interpreted this requirement as referring to a class section. We think the Legislature should clarify this language by specifying the maximum student load for an online teacher.

Another area of confusion is the statutory language that requires MDE to “develop, publish, and maintain a list of approved online learning providers and online courses and programs that it has reviewed and certified.”⁴³ We agree that the department should maintain a list of online schools—and it does maintain and publish such a list on its Web site. However, MDE is not required to—nor does it—review and certify the individual courses offered by each online school; rather, it reviews and approves each online school. Course information is available elsewhere in that MDE requires approved schools to annually submit a listing of their courses to ISEEK and maintain a list of all courses offered on their

⁴¹ *Minnesota Statutes* 2010, 124D.095, subd. 3(f).

⁴² *Minnesota Statutes* 2010, 124D.095, subd. 4(e).

⁴³ *Minnesota Statutes* 2010, 124D.095, subd. 7(d).

Web sites. The Legislature should remove statutory references to courses that MDE has certified.

Finally, we think that the law is somewhat ambiguous regarding reporting requirements for school districts and charter schools that provide online courses solely to their own students. One part of the law suggests that these school districts and charter schools must report certain information, and another part of the law suggests that they do not. The department has never attempted to collect these types of data from school districts and charter schools that provide online courses solely to their own students. Although collecting such information would be useful from a research perspective, we think that MDE's interpretation of law is reasonable. However, the Legislature should clarify statutory language so that MDE's practices clearly align with state law.

RECOMMENDATION

The Minnesota Department of Education should encourage the development of online learning consortia throughout the state to help ensure that all school districts and charter schools can offer online learning opportunities to their students in a cost-efficient manner.

Participating in online learning consortia can benefit school district staff and students.

School district participation in online learning consortia can be beneficial to students, parents, teachers, and district administrators. First, consortia can expand the course options available to students—especially in smaller school districts and charter schools. As we reported in Chapter 1, nearly one-third of school districts enrolling fewer than 500 students and three-fourths of charter schools reported that they do not currently offer online courses to their students and had no plans to do so in the future.⁴⁴ Second, school districts that participate in online consortia generally pay less when their students enroll in consortia courses than they would if students were taking those courses from another online school. Third, participating districts help determine the courses consortia offer, how they are delivered, and the extent to which they tie into district-level requirements. Fourth, consortia often rely on teachers from participating school districts to plan and deliver their online courses, and some consortia offer teacher training in online methods as well as various online tools such as learning management systems that could be useful to all teachers. Fifth, enrolling in consortia courses increases the likelihood that teachers and students are in geographic proximity, which in turn may increase opportunities for hybrid learning (where students and teachers meet in a traditional face-to-face setting). As discussed in Chapter 1, many schools nationwide have recently begun offering more hybrid as opposed to fully online courses to incorporate the positive aspects of both instructional models.

We noted in Chapter 1 that about two-thirds of school districts were not members of online learning consortia, and school districts in northeastern, south central, and southeastern Minnesota have not formed consortia to the same extent as

⁴⁴ As we noted in Chapter 2, many of the charter schools only serve elementary school students, who may have less interest in online learning.

districts in other parts of the state. Rather than these school districts trying to develop their own online courses (which may be cost-prohibitive), we think that MDE should work toward a statewide network of online learning consortia. For example, MDE could develop best practices for online learning in Minnesota that might include having consortia deliver online courses, provide assistance to school districts interested in pursuing consortia, or sponsor workshops for teachers and school districts interested in online learning.

List of Recommendations

- The Legislature should adopt specific time frames related to the review-and-approval process for becoming an online school. (p. 56)
- The Minnesota Department of Education should redesign its reapproval process for online schools to focus more attention on performance. (p. 56)
- The Minnesota Department of Education should dedicate sufficient staff to carry out its online learning responsibilities. (p. 57)
- The Legislature should define “course” and “program” as they relate to online instruction and clarify other confusing statutory language regarding data collection and reporting. (p. 58)
- The Minnesota Department of Education should encourage the development of online learning consortia throughout the state to help ensure that all school districts and charter schools can offer online learning opportunities to their students in a cost-efficient manner. (p. 59)

Survey Methodology

Appendix A

To better understand how online learning is delivered in Minnesota, we conducted four surveys. In this appendix, we detail how each survey was administered and how its results were calculated.

Due to time constraints, all surveys were conducted entirely online. Survey recipients were sent e-mails containing instructions for accessing the online survey and a brief description of our evaluation. Nonrespondents received reminder e-mails one to two weeks following the initial request for participation. To include as many school districts and charter school responses as possible, we also telephoned some school districts and charter schools near the end of the survey period to remind them to complete the survey.

School District Superintendents and Charter School Directors

In April 2011, using lists from the Minnesota Department of Education (MDE), we contacted all school district superintendents and charter school directors in the state. We received responses from 303 out of 335 school districts (90 percent) and 120 out of 149 charter schools (81 percent).

In our e-mailed letter, we stated that superintendents or directors could have other staff fill out the survey on their behalf. Sixty-nine percent of survey responses from school districts were completed by superintendents, and 81 percent of survey responses from charter schools were completed by directors. In other districts, the surveys were generally completed by deans, principals, program directors, or other administrators.

Although we sent surveys to every school district and charter school, our reported results exclude those school districts and charter schools that operated online schools in the 2010-11 school year. However, we did use the answers those school districts and charter schools provided to supplement our in-depth interviews with online school administrators.

Teachers in Online Schools

In April 2011, we contacted all online schools operating with MDE approval in the 2010-11 school year and asked them to provide lists of all staff currently teaching online courses. We then e-mailed each teacher to ask them to fill out our survey. From this population of 468 teachers, we received 294 completed survey responses, for a response rate of 63 percent.

The survey asked about teacher experiences that may differ systematically from school to school. For example, we wanted to know how often teachers interacted with their students, which could be directly affected by the teaching model an online school uses.

To ensure that differing response rates from school to school did not show a misleading picture of the total, we used a statistical procedure called “weighting” to adjust the survey numbers that appear in the report. For example, if a particular school’s teachers comprised 15 percent of all online teachers, but more of its teachers responded than at other schools, 25 percent of the teachers in our final groups of respondents could come from that single school. By weighting the responses, we ensure that the responses from that school—when all combined—account for 15 percent of the total responses. In most instances, the weighting procedure did not change the reported results by more than a few percentage points.

We only surveyed teachers at online schools approved by MDE to offer online courses full time or to students from other school districts or charter schools. We did not survey teachers who teach online courses for school districts or charter schools that do not require MDE approval because we had no way of easily identifying such teachers.

High School Students in Online Schools

In April 2011, we contacted all online schools operating with MDE approval in the 2010-11 school year and asked them to provide lists of all students in grades 9 through 12 currently enrolled in online courses. We then e-mailed each student to ask them to fill out our survey.¹ From this population of 6,208 students, we received 891 completed survey responses, for a response rate of 14 percent. Unfortunately, we inadvertently omitted students from Lakeville Careers Online (15 total); no students from that online school were surveyed.

The survey asked about student experiences that may differ systematically from school to school. For example, we wanted to know whether students learned by working together with one another, which could be directly affected by the teaching model an online school uses.

To ensure that differing response rates from school to school did not show a misleading picture of the total, we used a statistical procedure called “weighting” to adjust the survey numbers which appear in the report. For example, if a particular online school’s students comprised 15 percent of all online students, but more of its students responded than at other schools, 25 percent of the students in our final groups of respondents could come from that single online school. By weighting the responses, we ensure that the responses from that school—when all combined—account for 15 percent of the total responses. In

¹ Two of the online schools were unable to provide us with student e-mail addresses because all electronic messages between school staff and students are sent within each school’s learning management system and not through standard e-mail. For these schools, we provided school administrators with a copy of our request for survey participation, and they forwarded it to their students.

most instances, the weighting procedure did not change the reported results by more than a few percentage points.

We only surveyed students at online schools approved by MDE to offer online courses full time or to students from other school districts or charter schools. We did not survey students who took online courses from school districts or charter schools that do not require MDE approval because we had no way of easily identifying those students.

Parents of Elementary and Middle School Students in Online Schools

In April 2011, we contacted all online schools operating with MDE approval in the 2010-11 school year and asked them to provide parent contact information for all students in kindergarten through grade 8 currently enrolled in online courses.² We then e-mailed the parents and guardians of all students to ask them to fill out our survey. We used all e-mail addresses we received (some schools provided more than one e-mail address for some families), but we directed parents that we only required one response from each family. From this population of 1,616 families, we received 507 completed survey responses, for a response rate of 31 percent.

Many families had more than one child enrolled online. We asked parents to consider the experience of their youngest child taking online courses when answering our questions so that the survey answers would reflect the experiences of elementary and middle school students and not any older siblings in high school.

The survey asked about student experiences that may differ systematically from school to school. For example, we wanted to know whether students learned by working together with one another, which could be directly affected by the teaching model an online school uses.

To ensure that differing response rates from school to school did not show a misleading picture of the total, we used a statistical procedure called “weighting” to adjust the survey numbers which appear in the report. For example, if parents whose students attended a particular online school comprised 15 percent of all parents of online school students, but more of those parents responded than at other online schools, 25 percent of the parents in our final groups of respondents could have students at that single online school. By weighting the responses, we ensure that the responses from parents at that online school—when all combined—account for 15 percent of the total responses. In most instances, the weighting procedure did not change the reported results by more than a few percentage points.

² Our survey was sent only to parents of students taking fully online courses at Cyber Village; students in its larger hybrid program were omitted.

We only surveyed parents of students at online schools approved by MDE to offer online courses full time or to students from other school districts or charter schools. We did not survey parents whose children took online courses from school districts or charter schools that do not require MDE approval because we had no way of easily identifying those parents or students.





Approved Online Schools, 2010-11 School Year

Appendix B

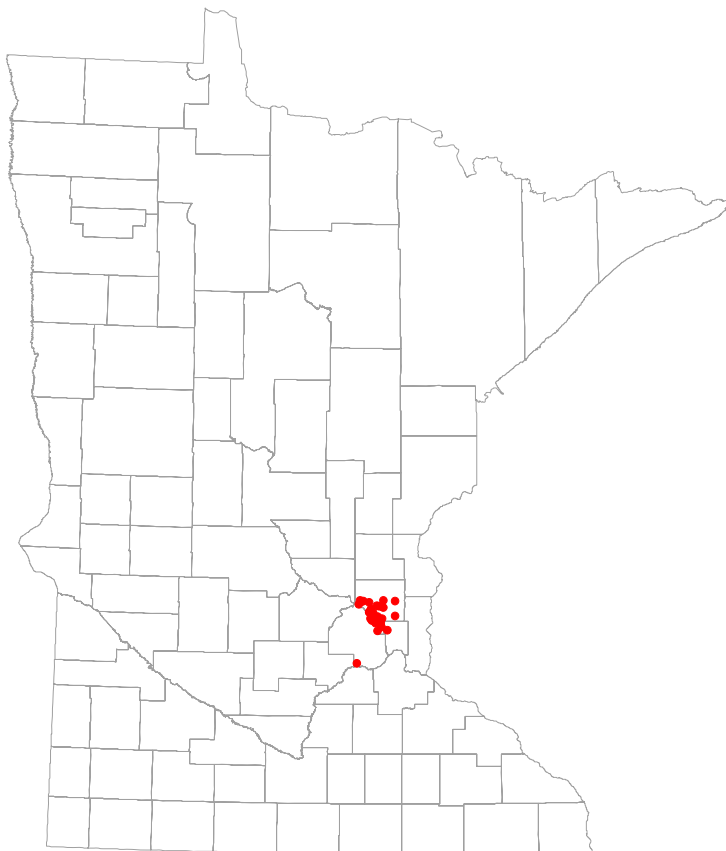
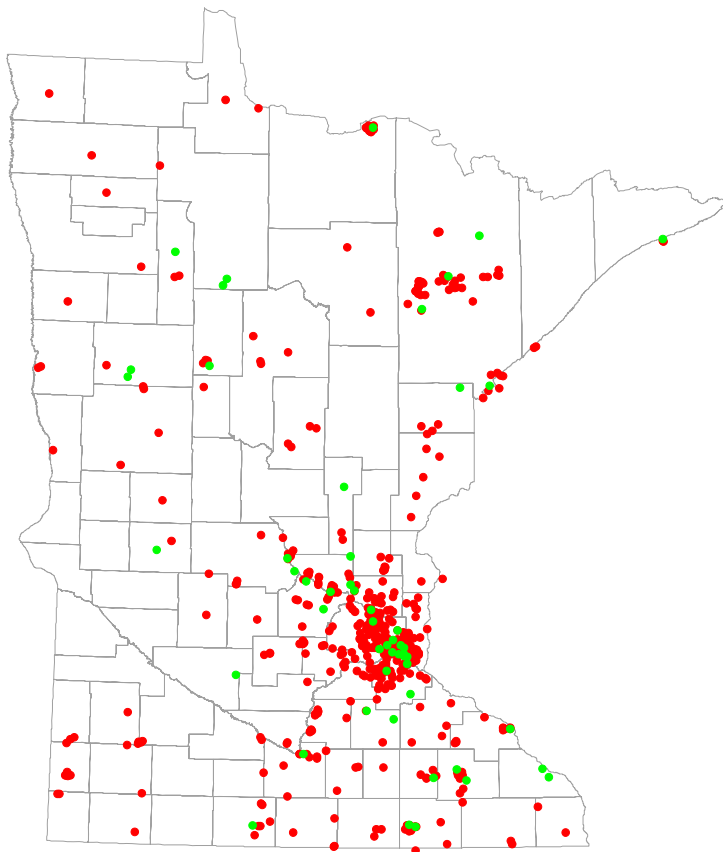
We present below selected information about each of the 24 online schools that operated in the 2010-11 school year with approval from the Minnesota Department of Education (MDE). The maps associated with each school show the approximate location of each student taking at least one class as of April 4, 2011, the date on which we gathered student information to conduct the surveys described in Appendix A.¹ The dot representing each student is placed at random within the boundaries the student's home city. Thus, a single address with two or three students is represented by multiple dots.

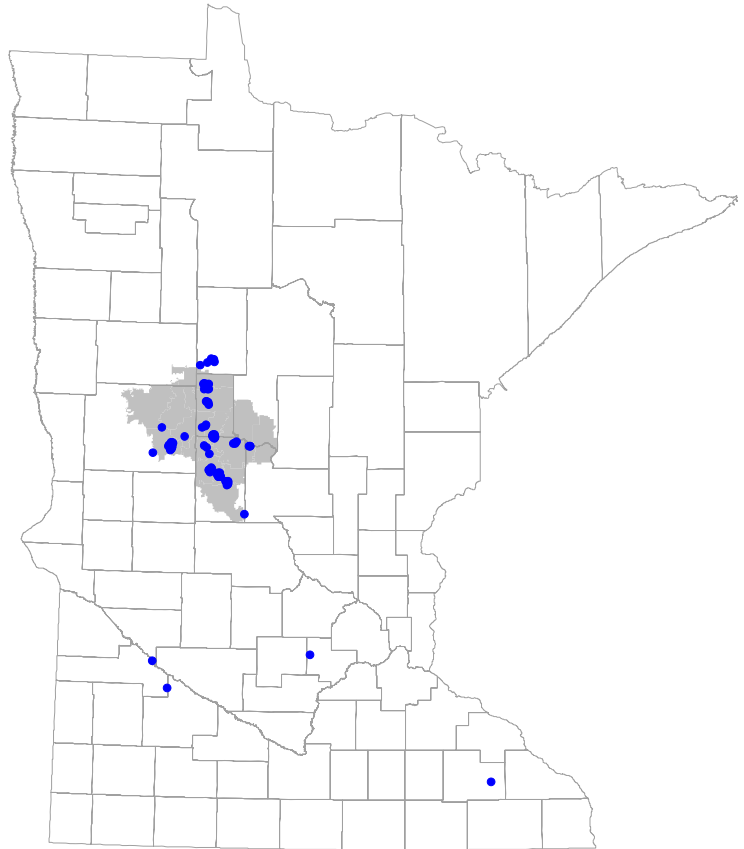
Several online schools were operating before the passage of the 2003 Online Learning Option Act. The date below represents the year the school started operating and not the year it was approved by MDE. We based the number of courses offered on the ISEEK Web site, which each online school is supposed to update each school year. The numbers of teachers shown include both full- and part-time online teachers. Teachers who taught at more than one online school (as well as students who attended more than one online school) contribute to the counts for all relevant schools.

Common symbols for all maps:

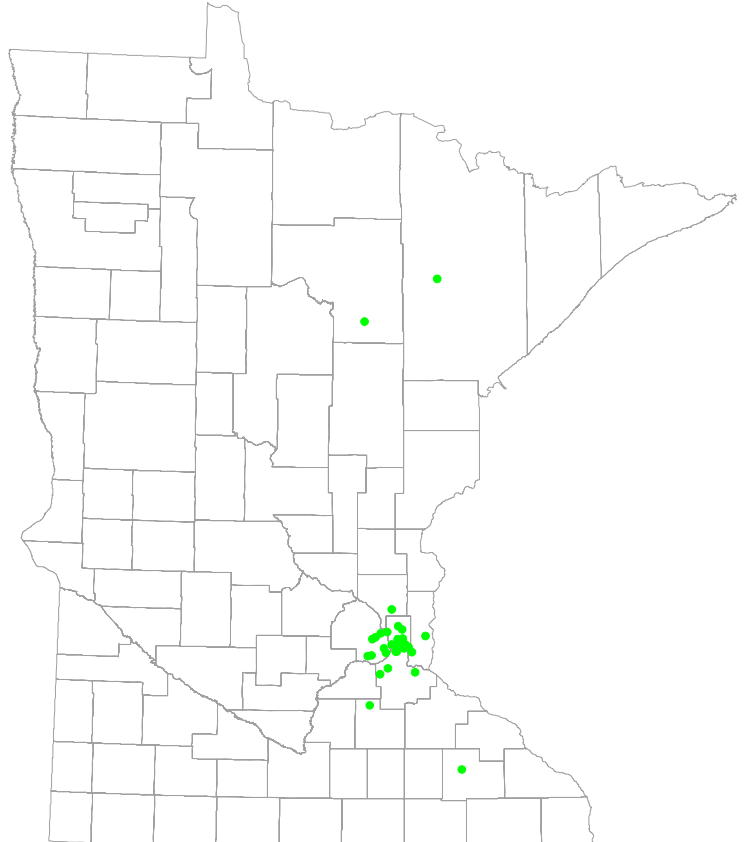
-  Full-time online students, grades 9-12
-  Full-time online students, grades K-8
-  Part-time online students, all grades
-  School districts in consortium

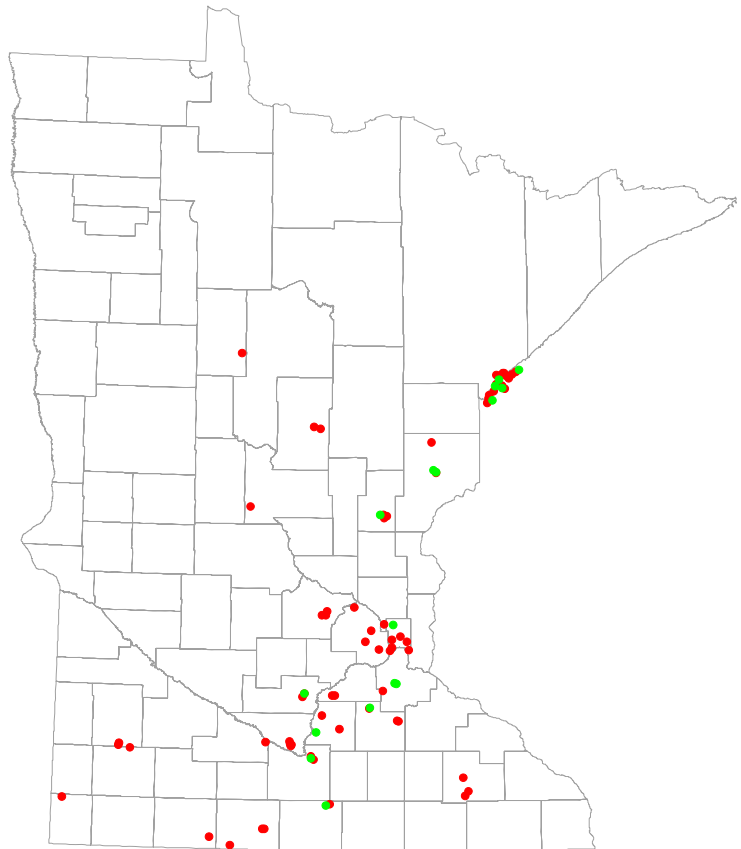
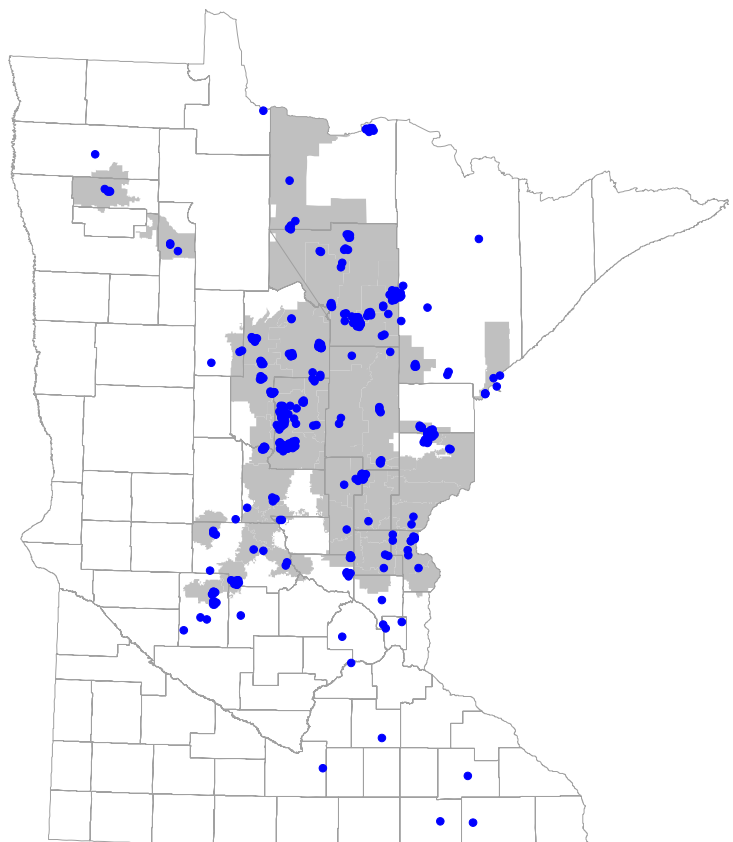
¹ Cyber Village Academy and Lakeville Careers Online provided us with incomplete lists of students for our surveys, but reported their full enrollment numbers later. In these cases, the enrollment numbers listed are greater than the number of dots appearing on the maps.

ANOKA-HENNEPIN COMPASS ON-LINE**Location:** Coon Rapids**Approved provider:** Anoka-Hennepin School District**Provider type:** School district**Operating since:** 2006**Grades offered:** 10-12**Students enrolled as of April 4, 2011****Full-time:** 33**Part-time:** 0**Number of courses offered:** 20**Curriculum vendor:** Education 2020 Virtual Classroom (Arizona) and teacher-developed curricula**Staff hired by:** School district**Number of teachers as of April 4, 2011:** 2**Note:** Currently, Compass is used only to instruct students who have been expelled from the district. The district is considering expanding the program to serve other students.**BLUESKY ONLINE CHARTER SCHOOL****Location:** West St. Paul**Approved provider:** BlueSky Online Charter School**Provider type:** Charter school**Operating since:** 2001**Grades offered:** 7-12**Students enrolled as of April 4, 2011****Full-time:** 541**Part-time:** 0**Number of courses offered:** 163**Curriculum vendor:** Aventa Learning (Portland, Oregon), owned by K¹²**Staff hired by:** Charter school**Number of teachers as of April 4, 2011:** 58

CENTRAL MINNESOTA ONLINE LEARNING**Location:** Staples**Approved provider:** Freshwater Education District**Provider type:** Consortium**Operating since:** 2008**Grades offered:** 9-12**Students enrolled as of April 4, 2011****Full-time:** 0**Part-time:** 113**Number of courses offered:** 29**Curriculum vendor:** Teacher developed**Staff hired by:** Consortium and member school districts**Number of teachers as of April 4, 2011:** 10**CYBER VILLAGE ACADEMY****Location:** St. Paul**Approved provider:** Cyber Village Academy (charter school)**Provider type:** Charter school**Operating since:** 1997**Grades offered:** 3-12**Students enrolled as of April 4, 2011****Full-time:** 30 (online-only courses), 100 (hybrid)**Part-time:** 0**Number of courses offered:** 54**Curriculum vendor:** Teacher developed and vendor**Staff hired by:** Charter school**Number of teachers as of April 4, 2011:** 10

Note: In addition to its hybrid program that requires students to take their courses on campus three days a week and online the other two, Cyber Village Academy has a small, entirely online program.



EDVISIONS OFF-CAMPUS HIGH SCHOOL**Location:** Henderson**Approved provider:** EdVisions Off-Campus High School (charter school)**Provider type:** Charter school**Operating since:** 2005**Grades offered:** 7-12**Students enrolled as of April 4, 2011****Full-time:** 86**Part-time:** 0**Number of courses offered:** 8**Curriculum vendor:** There are no pre-set curricula. Curricula are project based and designed collaboratively by teachers and individual students.**Staff hired by:** Charter school**Number of teachers as of April 4, 2011:** 8**INFINITY ONLINE: MINNESOTA'S DIGITAL ACADEMY****Location:** Grand Rapids**Approved provider:** INFINITY Online (consortium formed specifically to provide online learning)**Provider type:** Consortium**Operating since:** Has operated as INFINITY Online since 2008. INFINITY is the merger of two former collaboratives, VITAL and MnCOLA, which began in 2004 and 2005, respectively.**Grades offered:** 8-12**Students enrolled as of April 4, 2011****Full-time:** 0**Part-time:** 405**Number of courses offered:** 56**Curriculum vendor:** Various vendors, as well as teacher-developed curricula**Staff hired by:** Consortium**Number of teachers as of April 4, 2011:** 39

INSIGHT SCHOOL OF MINNESOTA

Location: Brooklyn Center

Approved provider: Brooklyn Center School District

Provider type: School district

Operating since: 2008

Grades offered: 9-12

Students enrolled as of April 4, 2011

Full-time: 398

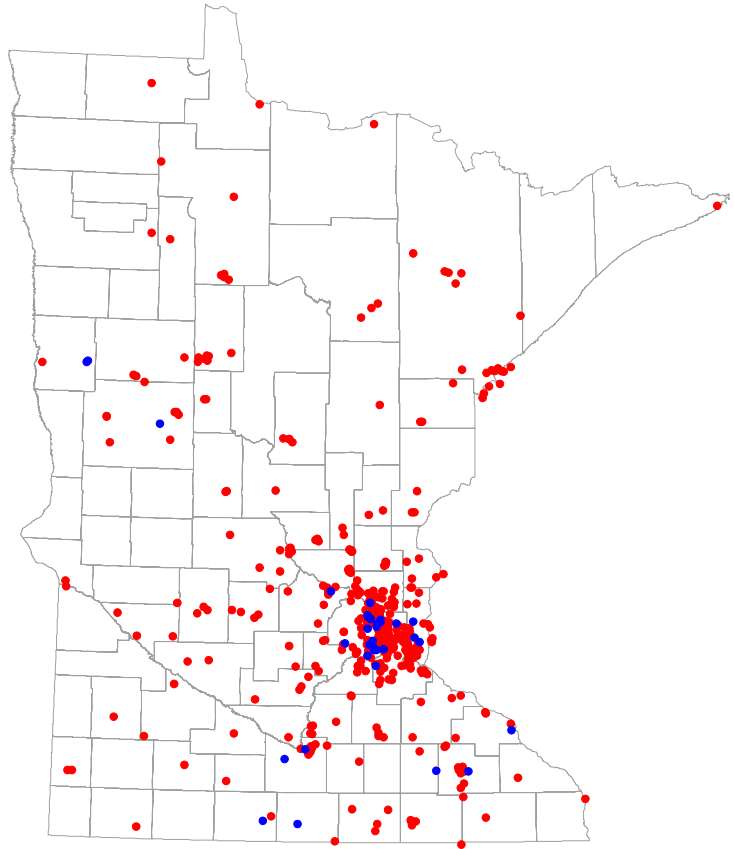
Part-time: 34

Number of courses offered: 91

Curriculum vendor: Insight Schools, Inc.,
(Portland, Oregon), now owned by K¹²

Staff hired by: Curriculum vendor

Number of teachers as of April 4, 2011: 26

**IQ ACADEMY**

Location: Fergus Falls

Approved provider: Fergus Falls Public School District

Provider type: School district

Operating since: 2006

Grades offered: 6-12

Students enrolled as of April 4, 2011

Full-time: 252

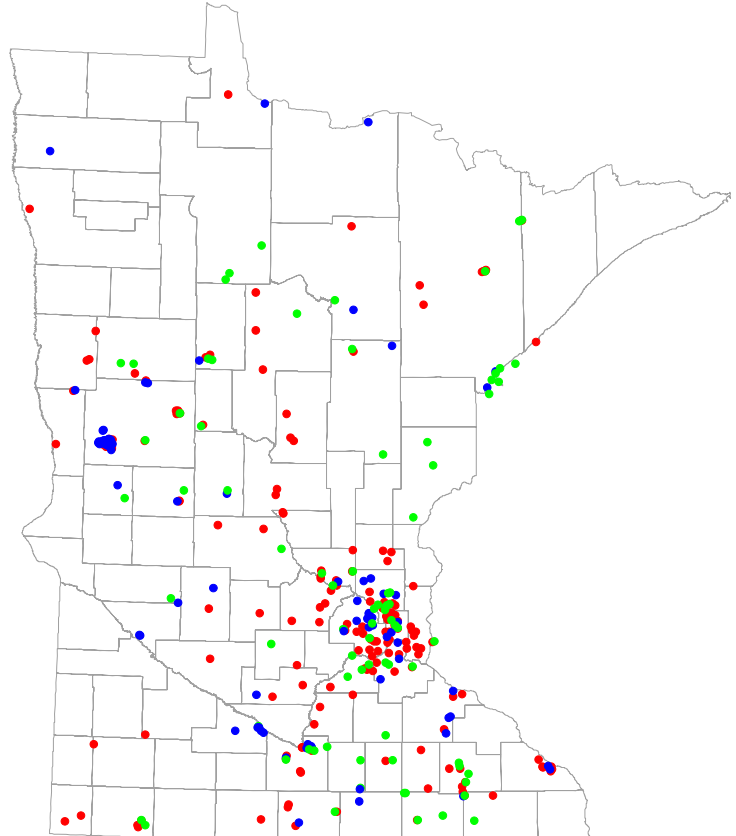
Part-time: 85

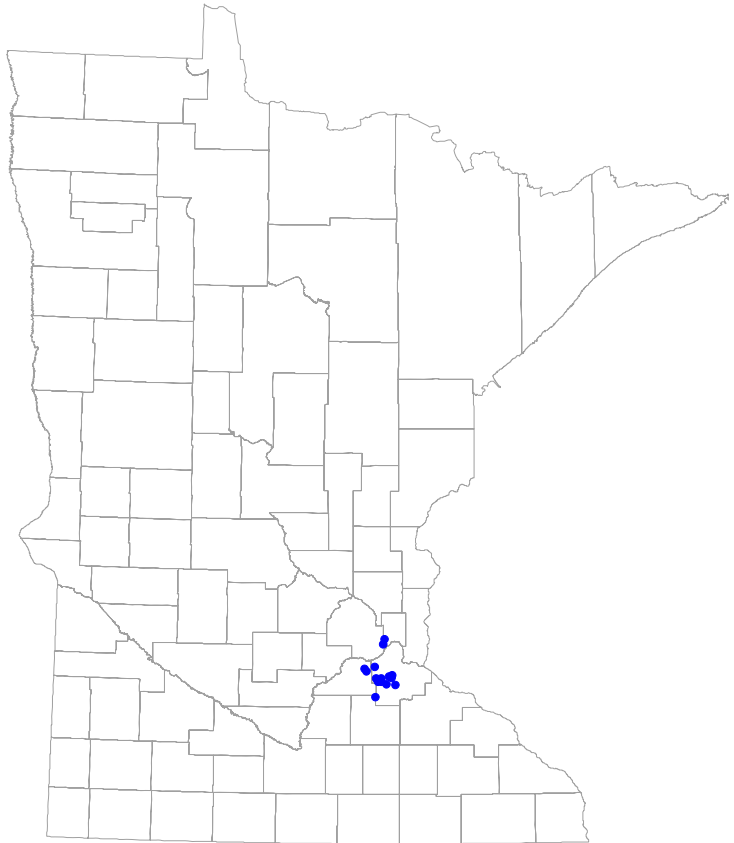
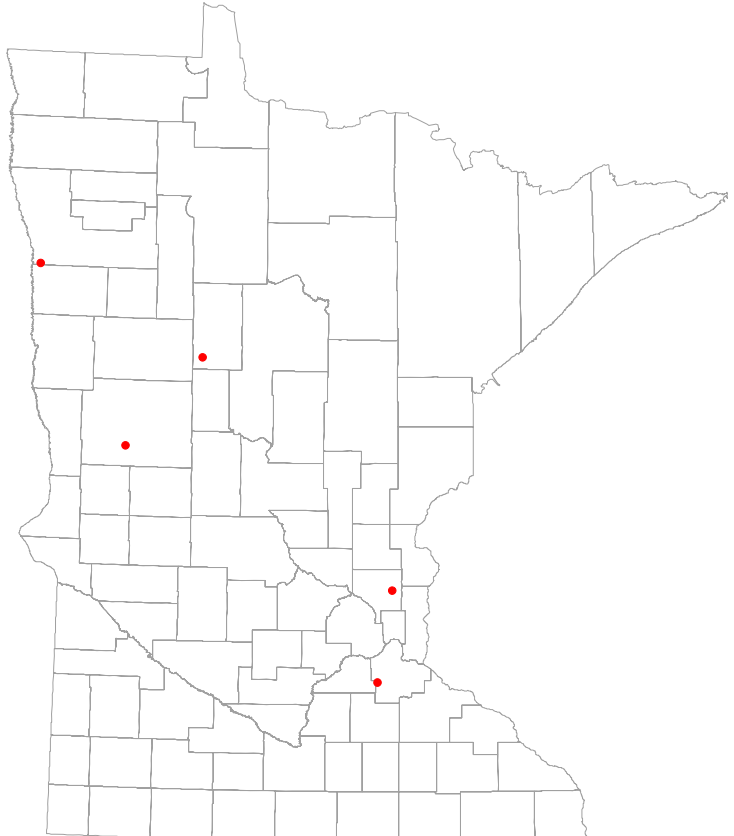
Number of courses offered: 126

Curriculum vendor: KC Distance Learning
(Portland, Oregon), owned by K¹²

Staff hired by: School district; administrators hired
by curriculum vendor

Number of teachers as of April 4, 2011: 27



LAKEVILLE CAREERS ONLINE**Location:** Lakeville**Approved provider:** Lakeville Area Public School District**Provider type:** School district**Operating since:** 2009**Grades offered:** 10-12**Students enrolled as of April 4, 2011****Full-time:** 0**Part-time:** 23**Number of courses offered:** 2**Curriculum vendor:** Teacher developed**Staff hired by:** School district**Number of teachers as of April 4, 2011:** 1**LEARN AT MY PACE (LAMP) ONLINE HIGH SCHOOL****Location:** Rothsay**Approved provider:** Rothsay Public School District**Provider type:** School district**Operating since:** 2009**Grades offered:** 9-12**Students enrolled as of April 4, 2011****Full-time:** 6**Part-time:** 0**Number of courses offered:** 101**Curriculum vendor:** Teacher developed and Apex Learning (Seattle, Washington)**Staff hired by:** School district**Number of teachers as of April 4, 2011:** 7**Note:** The Rothsay School Board voted to close LAMP, effective for the 2011-12 school year.

MINNEAPOLIS PUBLIC SCHOOLS ONLINE

Location: Minneapolis

Approved provider: Minneapolis Public Schools

Provider type: School district

Operating since: 2003

Grades offered: 8-12

Students enrolled as of April 4, 2011

Full-time: 38

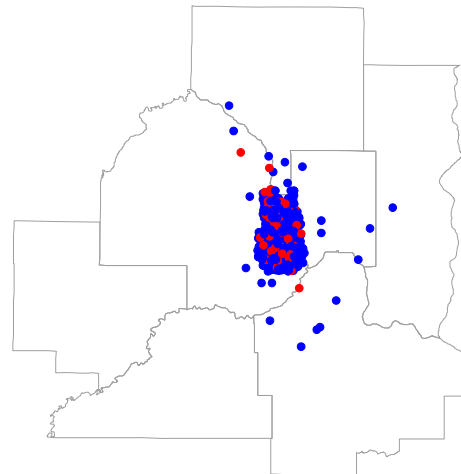
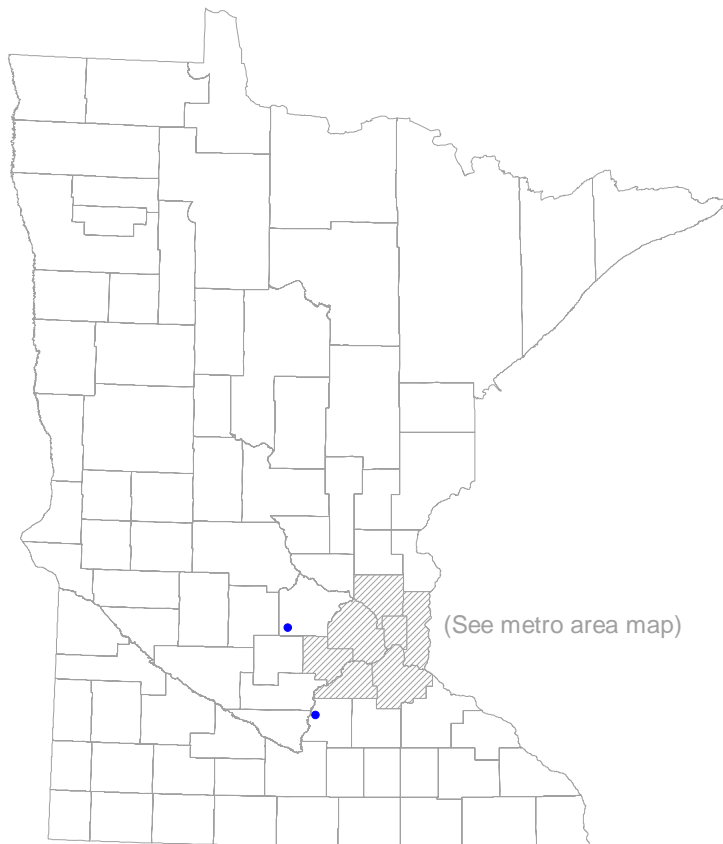
Part-time: 415

Number of courses offered: 23

Curriculum vendor: Teacher developed, with limited use of purchased curricula

Staff hired by: School district

Number of teachers as of April 4, 2011: 11



MINNESOTA CENTER OF ONLINE LEARNING (MCOOL)

Location: Houston

Approved provider: Houston Public School District

Provider type: School district

Operating since: 2003

Grades offered: K-6

Students enrolled as of April 4, 2011

Full-time: 42

Part-time: 0

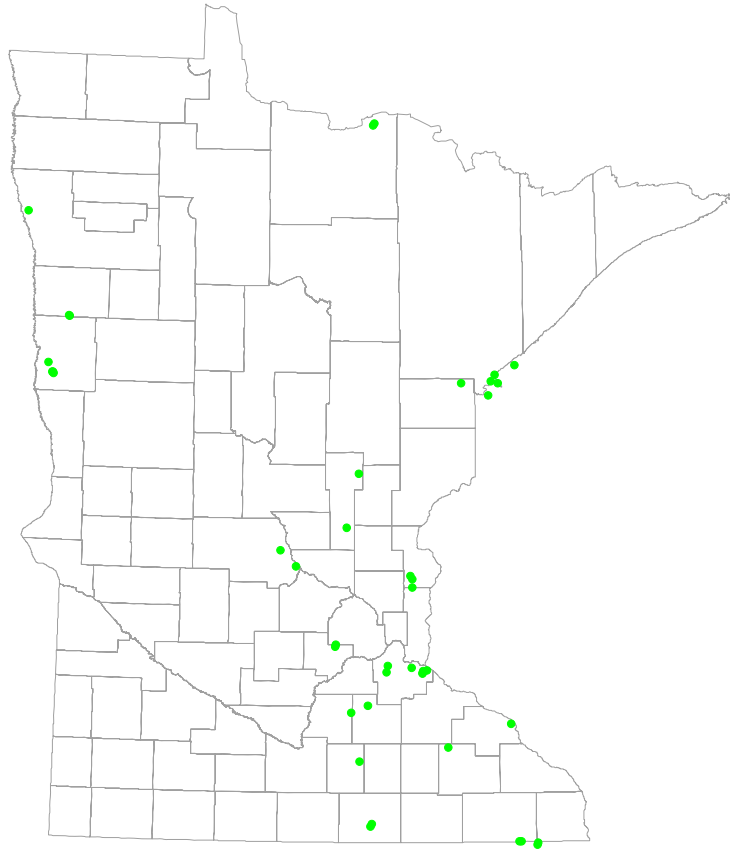
Number of courses offered: 56

Curriculum vendor: Calvert School (Hunt Valley, Maryland)

Staff hired by: School district

Number of teachers as of April 4, 2011: 3

Note: The Houston School Board has decided to close MCoOL and focus its online activities on the Minnesota Virtual Academy. MCoOL will not reopen in the 2011-12 school year.



MINNESOTA ONLINE HIGH SCHOOL (MNOHS)

Location: Minneapolis

Approved provider: Minnesota Online High School (charter school)

Provider type: Charter school

Operating since: 2005

Grades offered: 9-12

Students enrolled as of April 4, 2011

Full-time: 91

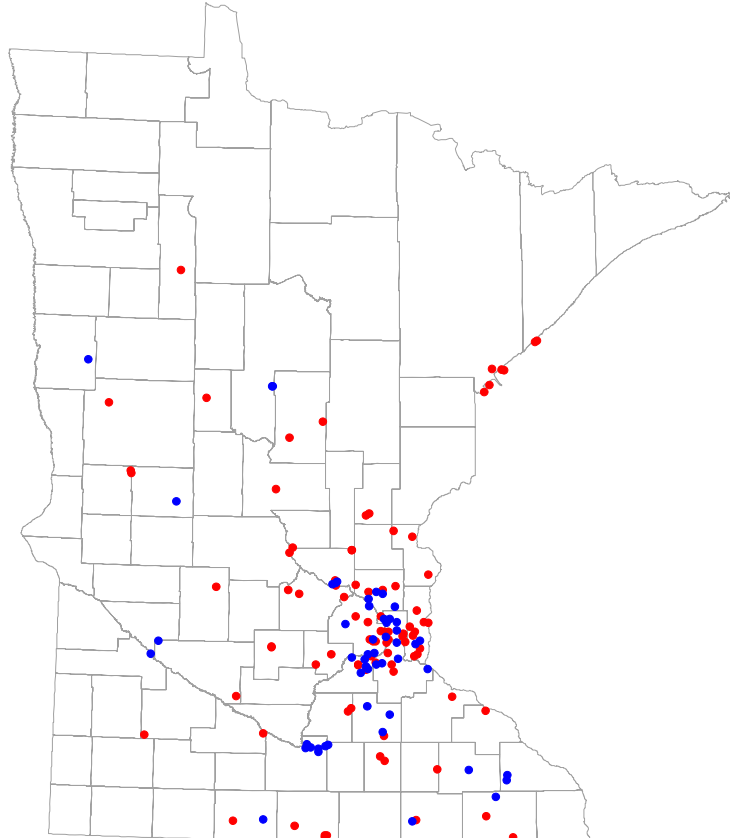
Part-time: 52

Number of courses offered: 49

Curriculum vendor: Teacher developed and some supplemental courseware (Study Island)

Staff hired by: Charter school

Number of teachers as of April 4, 2011: 18



MINNESOTA CONNECTIONS ACADEMY

Location: Minneapolis

Approved provider: Minnesota Transitions Schools (charter school)

Provider type: Charter school

Operating since: 2005

Grades offered: K-12

Students enrolled as of April 4, 2011

Full-time: 1,267

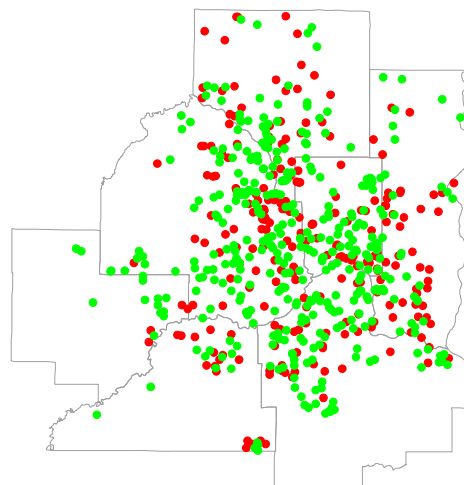
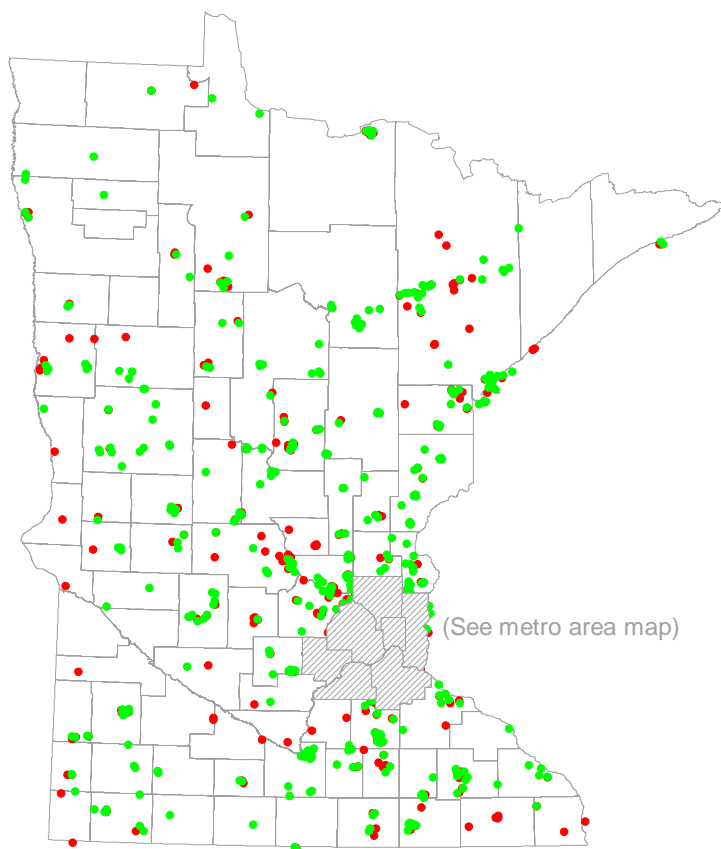
Part-time: 0

Number of courses offered: 208

Curriculum vendor: Connections Academy (Baltimore, Maryland)

Staff hired by: Online school

Number of teachers as of April 4, 2011: 45



**MINNESOTA SERVICE COOPERATIVES (MSC)
ONLINE LEARNING PROJECT**

Location: Mt. Iron

Approved provider: MSC, which is a collaboration of various service cooperatives

Provider type: Consortium

Operating since: Began operating as Northeast Online Learning Project in 2005. Became MSC Online Learning Project in 2008 when additional cooperatives became involved.

Grades offered: 7-12

Students enrolled as of April 4, 2011

Full-time: 0

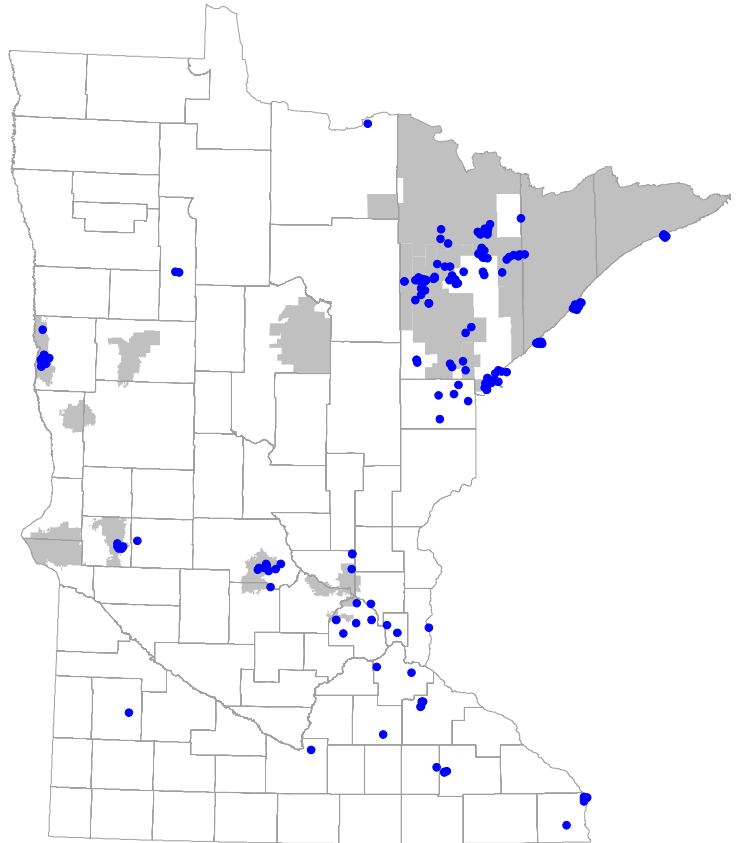
Part-time: 216

Number of courses offered: 143

Curriculum vendor: Aventa Learning (Portland, Oregon), owned by K¹²

Staff hired by: Consortium

Number of teachers as of April 4, 2011: 32



MINNESOTA VIRTUAL ACADEMY

Location: Houston

Approved provider: Houston Public School District

Provider type: School district

Operating since: 2002

Grades offered: K-12

Students enrolled as of April 4, 2011

Full-time: 1,347

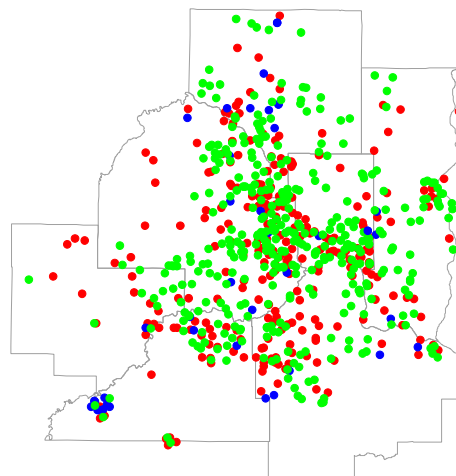
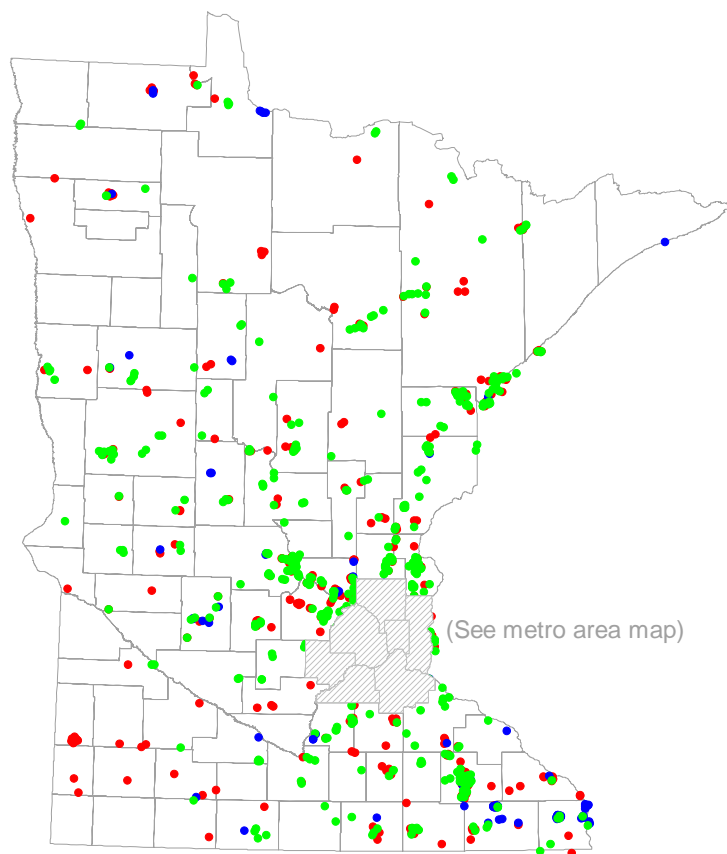
Part-time: 174

Number of courses offered: 169

Curriculum vendor: K¹² (Herndon, Virginia)

Staff hired by: School district

Number of teachers as of April 4, 2011: 57



MINNESOTA VIRTUAL HIGH SCHOOL

Location: Minneapolis

Approved provider: Minnesota Transitions Schools (charter school)

Provider type: Charter school

Operating since: 2002

Grades offered: 6-12

Students enrolled as of April 4, 2011

Full-time: 1,261

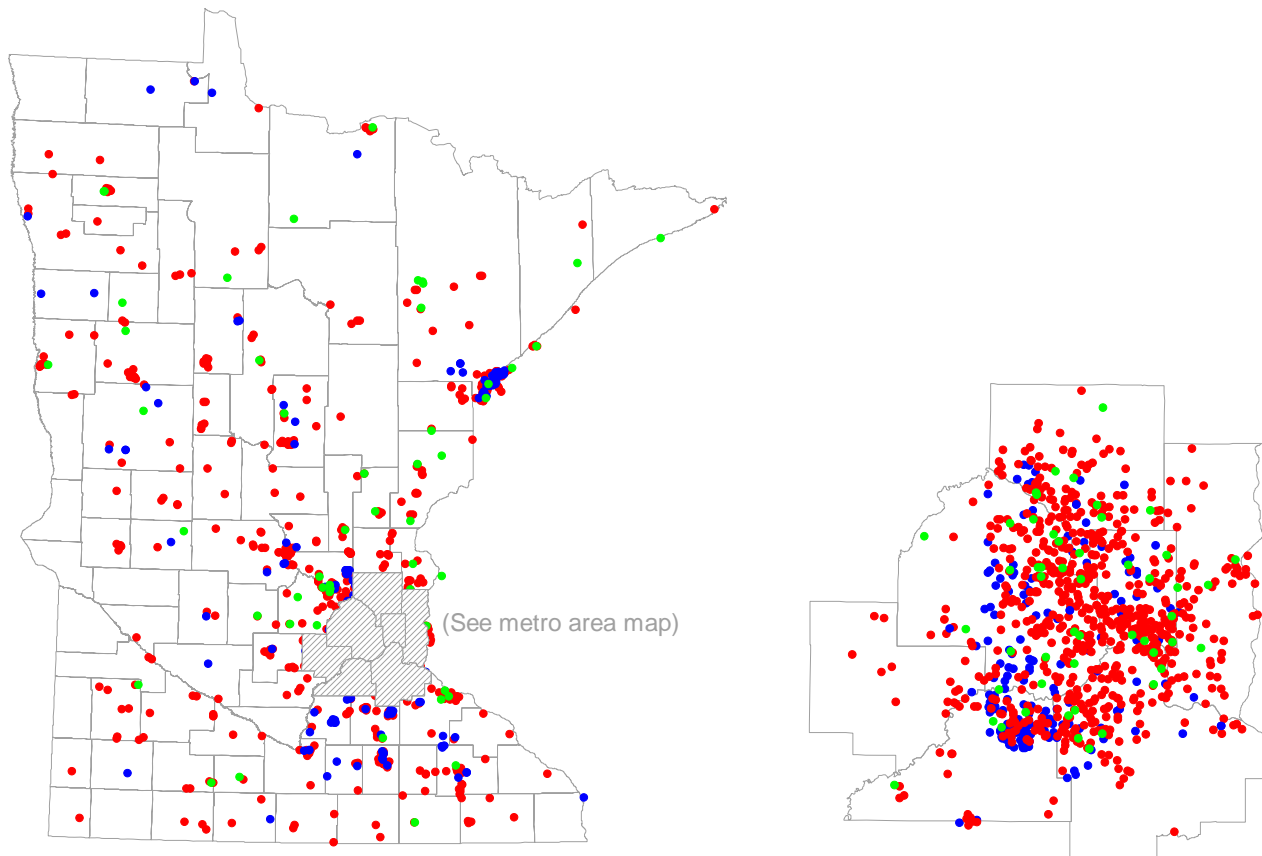
Part-time: 307

Number of courses offered: 109

Curriculum vendor: Advanced Academics (Oklahoma City, Oklahoma)

Staff hired by: Vendor; except principal and special education staff hired by charter school

Number of teachers as of April 4, 2011: 53



NORTH BRANCH DISTANCE LEARNING PROGRAM

Location: North Branch

Approved provider: North Branch Area Public School District

Provider type: School district

Operating since: 1996

Grades offered: K-12

Students enrolled as of April 4, 2011

Full-time: 82

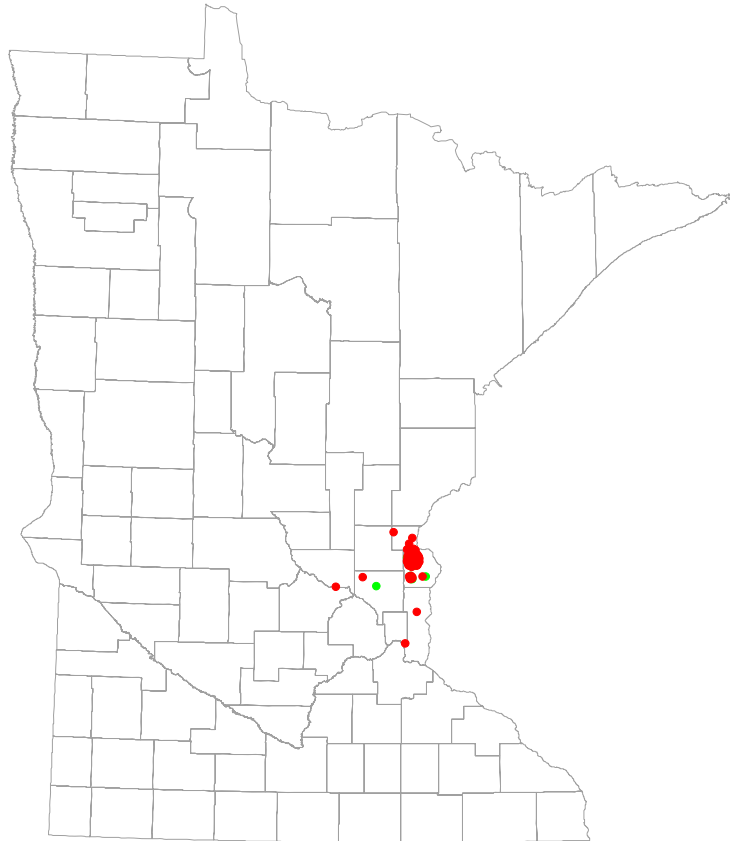
Part-time: 0

Number of courses offered: 239

Curriculum vendor: Teacher developed

Staff hired by: School district

Number of teachers as of April 4, 2011: 5

**ONLINE DEVELOPMENT AND INSTRUCTIONAL NETWORK (ODIN)**

Location: Chaska

Approved provider: Carver-Scott Educational Cooperative

Provider type: Consortium

Operating since: 2008

Grades offered: 9-12

Students enrolled as of April 4, 2011

Full-time: 0

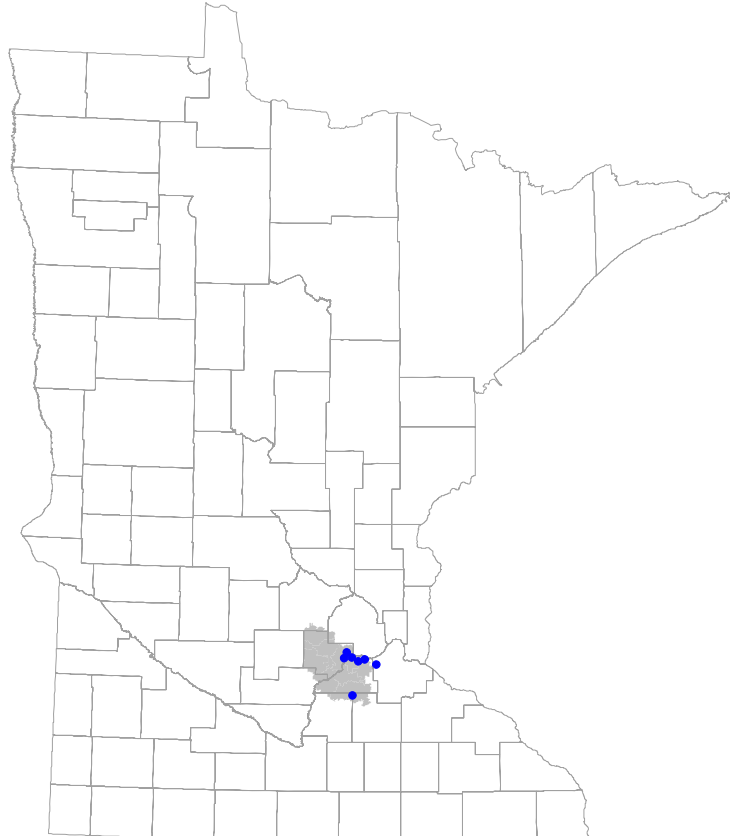
Part-time: 7

Number of courses offered: 30

Curriculum vendor: PLATO Learning, Inc. (Bloomington, Minnesota) and teacher-developed curricula

Staff hired by: Consortium

Number of teachers as of April 4, 2011: 1



NORTHERN STAR ONLINE

Location: Plymouth

Approved provider: Intermediate District 287

Provider type: Intermediate school district

Operating since: 2004

Grades offered: 7-12

Students enrolled as of April 4, 2011

Full-time: 0

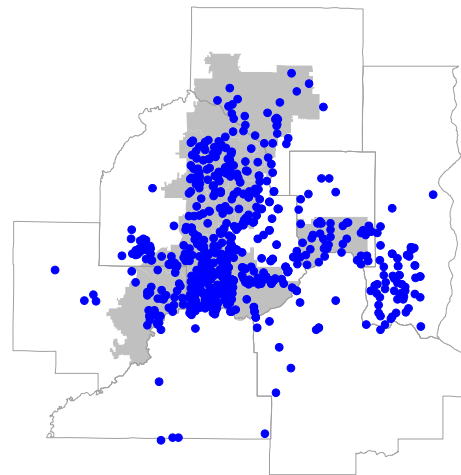
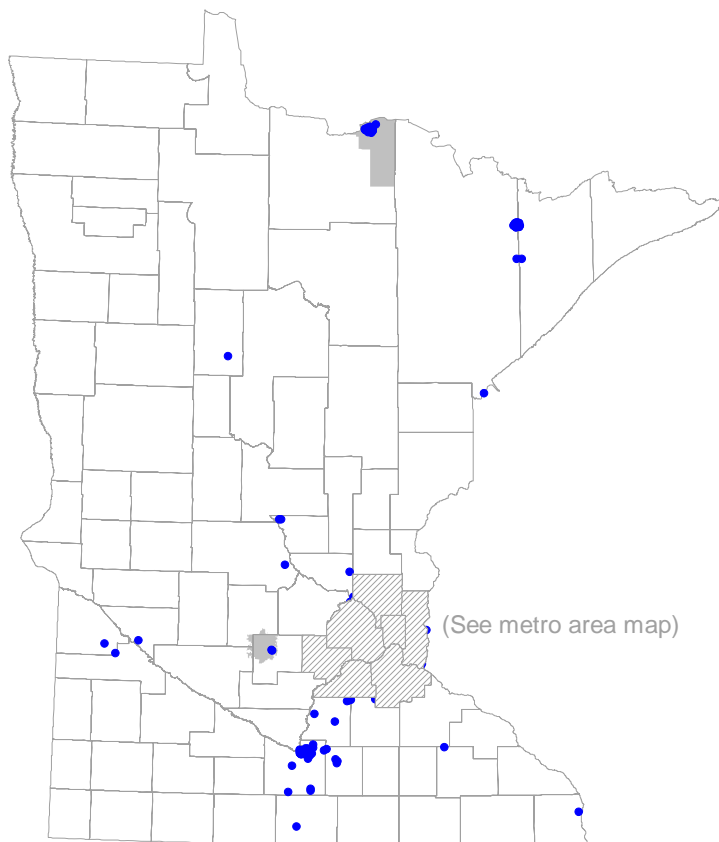
Part-time: 746

Number of courses offered: 50

Curriculum vendor: Various vendors, as well as teacher-developed curricula

Staff hired by: Consortium (most teachers were previously employed by member districts)

Number of teachers as of April 4, 2011: 36



SOCRATES ONLINE

Location: Mankato

Approved provider: South Central Regional Area
Telecommunications System—Online

Provider type: Consortium

Operating since: 2009

Grades offered: K-12

Students enrolled as of April 4, 2011

Full-time: 0

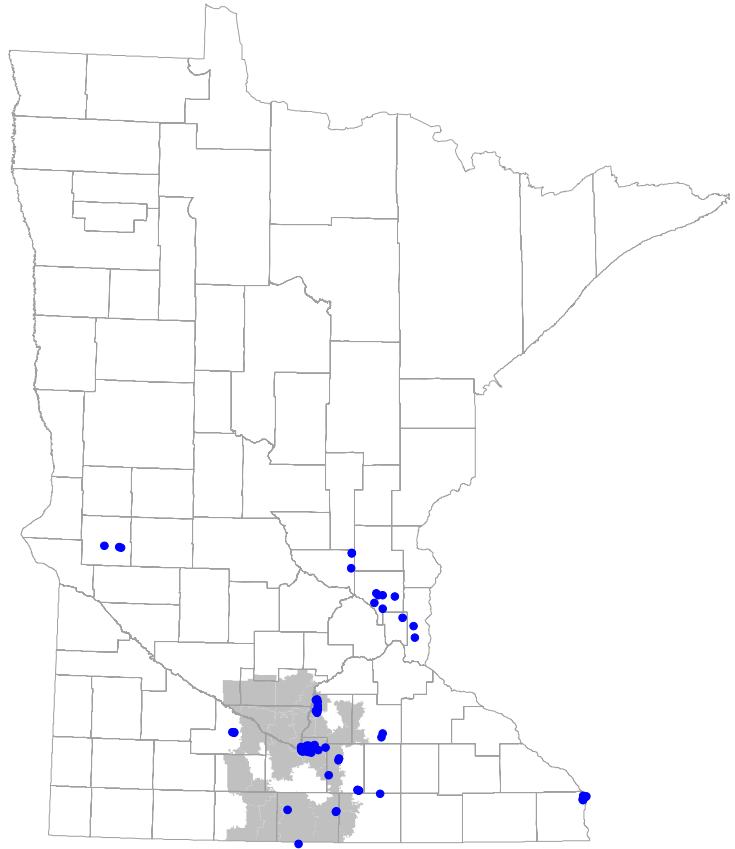
Part-time: 77

Number of courses offered: 40

Curriculum vendor: Various vendors, as well as
teacher-developed curricula

Staff hired by: Consortium

Number of teachers as of April 4, 2011: 14

**SPRING LAKE PARK ONLINE**

Location: Spring Lake Park

Approved provider: Spring Lake Park School
District

Provider type: School district

Operating since: 1999

Grades offered: 9-12

Students enrolled as of April 4, 2011

Full-time: 10

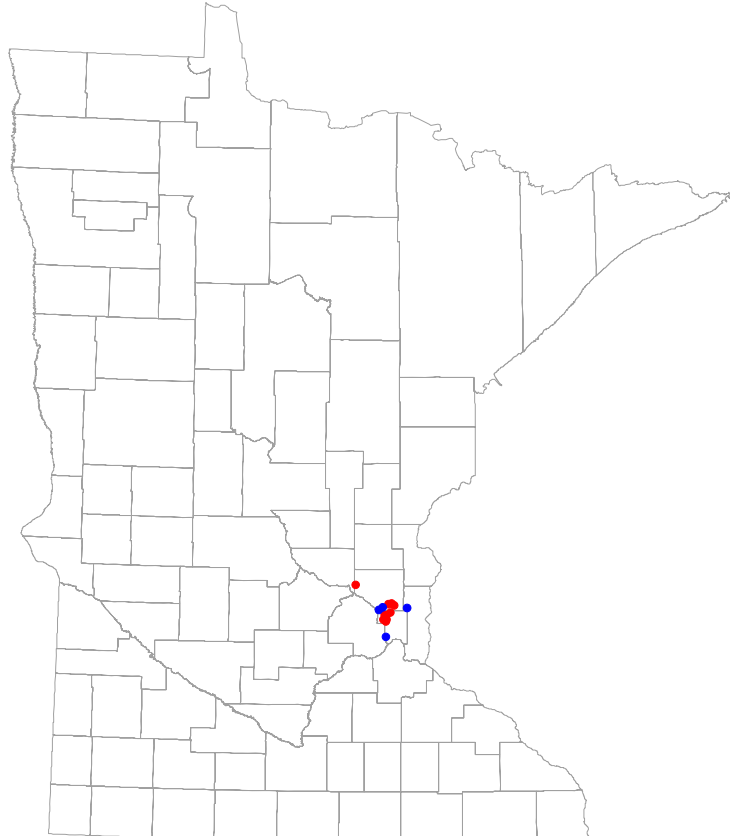
Part-time: 5

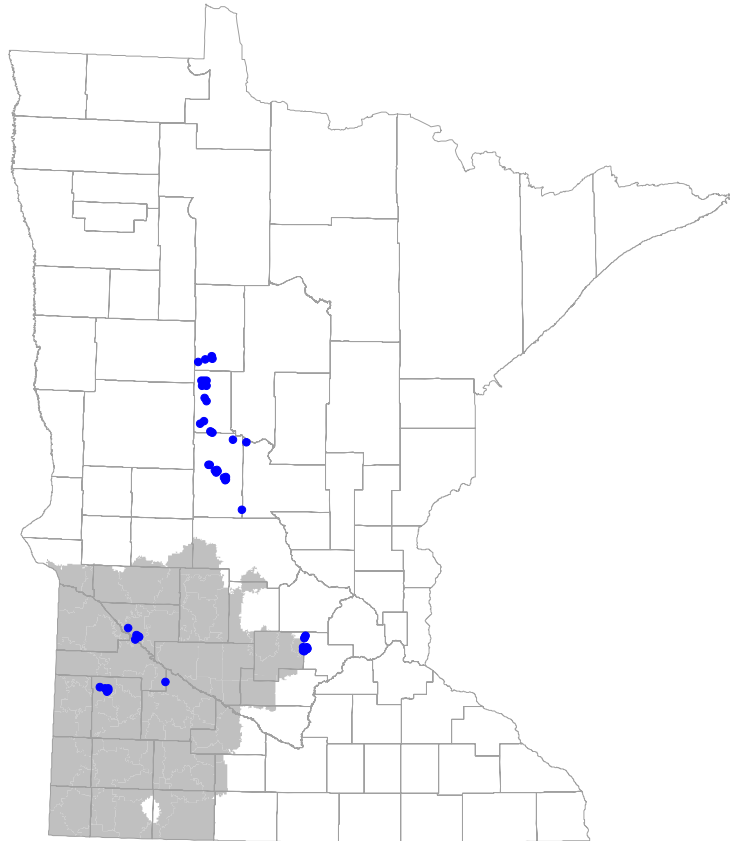
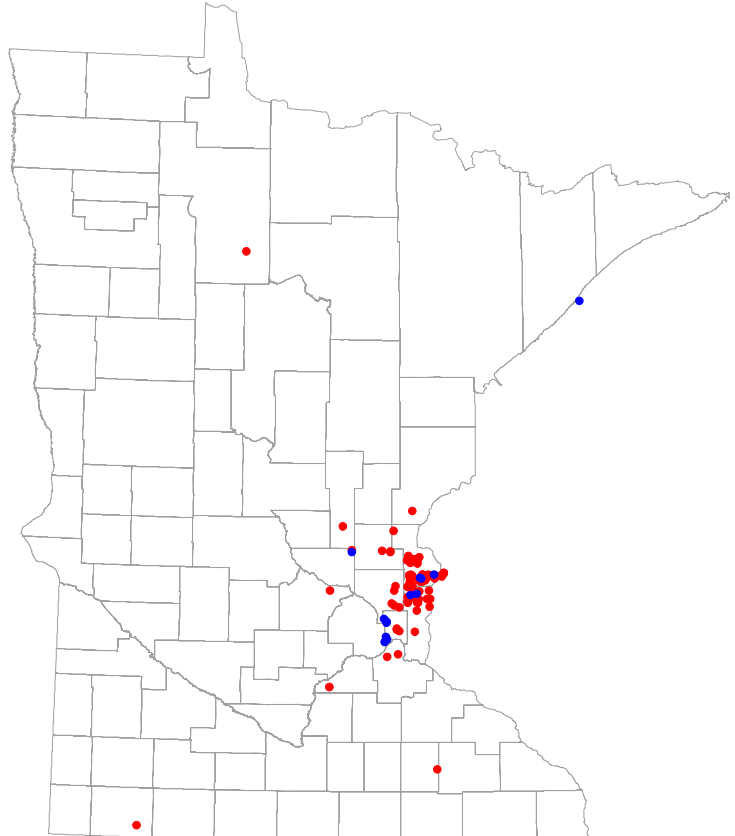
Number of courses offered: 2

Curriculum vendor: NovaNET, owned by Pearson
(Lebanon, Indiana) and Desire2Learn (Baltimore,
Maryland)

Staff hired by: School district

Number of teachers as of April 4, 2011: 2



SW/WC ONLINE LEARNING COMMUNITY**Location:** Marshall**Approved provider:** SW/WC**Provider type:** Consortium**Operating since:** 2008**Grades offered:** 9-12**Students enrolled as of April 4, 2011****Full-time:** 0**Part-time:** 60**Number of courses offered:** 25**Curriculum vendor:** Teacher developed**Staff hired by:** Consortium**Number of teachers as of April 4, 2011:** 4**TRIO WOLF CREEK DISTANCE LEARNING CHARTER SCHOOL****Location:** Chisago City**Approved provider:** TRIO Wolf Creek Distance Learning Charter School**Provider type:** Charter school**Operating since:** 2002**Grades offered:** 9-12**Students enrolled as of April 4, 2011****Full-time:** 137**Part-time:** 13**Number of courses offered:** 80**Curriculum vendor:** Teacher developed and NovaNET, owned by Pearson (Lebanon, Indiana)**Staff hired by:** Charter school**Number of teachers as of April 4, 2011:** 9



September 12, 2011

James Nobles, Legislative Auditor
Office of the Legislative Auditor
Room 140 Centennial Building
658 Cedar Street
Saint Paul, MN 55155

Dear Legislative Auditor Nobles:

The Minnesota Department of Education (MDE) is committed to high quality public education for every Minnesota public school student. MDE has reviewed the final draft of the Office of the Legislative Auditor's (OLA) evaluation of K-12 online learning. The final report does not contain most, if not all, of the Department's edits and concerns outlined in our August 9, 2011 letter and our subsequent meeting to review the findings. Please note that our concerns are primarily with the content of Chapter 4.

The final OLA report places greater importance on the approval timeline for online provider applications rather than the assurance that online schools are held to rigorous standards. The report's suggested changes for approvals could compromise the quality of education for students and place us at risk of defaulting on both our obligation to oversee the delivery of instruction that meets state standards and our constitutional mandate to provide a "uniform system of public schools." The Department's current online learning approval processes reflect those obligations and are designed to ensure Minnesota students receive a uniform, high quality, standards-based education in the online setting. The OLA's recommendations as written without our suggested changes weaken the Department's ability to achieve that goal.

The OLA report also suggests that the Department failed to meaningfully oversee online learning due to insufficient staffing and a lack of clear oversight processes. However, the proposed recommendations in the report would significantly weaken the Department's ability to provide oversight in this arena.

Please consider this letter as the Department's formal response to the OLA report. Our concerns are below:

- The report encourages the Legislature to adopt specific timeframes for review and approval of online learning. Mandatory timelines will not ease the Department's regulatory burden, but may create the possibility that schools will be approved or denied in order to achieve compliance with a legislatively-mandated timeframe. Further, it places a higher premium on mere *approval* of online schools over the assurance that students will be well-served by that school.
- The report asserts that stripping the Department of our obligation to oversee part-time providers will result in a lessening of our regulatory burden. However, considering that under current law Minnesota students may take up to 50% of their coursework online via supplemental providers, it is therefore essential that the Department retain its monitoring authority with supplemental

providers in order to ensure state funding supports only standards-based curriculum delivered by licensed Minnesota teachers.

- We do not agree with the recommendation that the Department should move toward the development of more online learning consortia. Increasing the Department's regulatory burden by increasing the number of entities that the Department must oversee at a time in which agency resources are already depleted is not a sound way to ensure Minnesota children receive high quality online education.
- The Department believes that the charter process is not the appropriate model to follow in monitoring online schools. The report encourages the Department to approve online schools for longer periods and to allow those schools to "self-evaluate" each year. As we noted in August, Minnesota's charter model requires an independent authorizer, approved by the Department, to provide oversight over each charter school. The report states that the Department should abdicate its authority to oversee online schools and allow them to assess their own performance. Such a process was not successful in the charter school arena and should therefore not be used with online learning. All public schools should be held accountable regardless of delivery model.

Finally, the Department presented evidence in our earlier letter and meetings that we routinely receive incomplete applications and/or must spend substantial time, post-application, providing technical assistance to applicants prior to approval, causing delays in the approval process. This is because not all applications are of the same quality and some need much more time and consideration than others. The OLA report suggests that the Department move to a more expeditious approach in the approval of applications, regardless of quality.

Again, the Minnesota Department of Education is committed to high quality education for every Minnesota student. The Department's online provider approval process is designed to certify high quality online providers who will deliver high quality standards-based instruction and ensure our constitutional mandate of a uniform system of public schools. This process is quite complex and often defies timelines. The ultimate goal of the process should be to ensure every student enrolled in an online school receives a high quality education and it is the Department's responsibility to ensure that happens. We cannot agree to many of the recommendations of the OLA report as currently written, as they put at risk the greater goal we all share: to ensure the best education for all Minnesota children.

Sincerely,

A handwritten signature in cursive script that reads "Dr. Brenda Cassellius". The ink is dark and the signature is fluid, with a large initial "D" and a long, sweeping "C" for "Cassellius".

Dr. Brenda Cassellius
Commissioner

Forthcoming Evaluations

Accountability for Legacy Funds, October 2011
Fiscal Note Process, January 2012
Child Protection Screening, February 2012
Consolidation of Local Governments, February 2012
Helping Communities Recover from Disasters,
February 2012
University of Minnesota Building Maintenance, Spring 2012
Enforcement of Vehicle Size and Weight Restrictions,
Summer 2012

Recent Evaluations

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*"Green Acres" and Agricultural Land Preservation
Programs*, February 2008
Pesticide Regulation, March 2006

Criminal Justice

Public Defender System, February 2010
MINNCOR Industries, February 2009
Substance Abuse Treatment, February 2006
Community Supervision of Sex Offenders, January 2005
CriMNet, March 2004

Education, K-12, and Preschool

K-12 Online Learning, September 2011
Alternative Education Programs, February 2010
Q Comp: Quality Compensation for Teachers,
February 2009
Charter Schools, June 2008
School District Student Transportation, January 2008
School District Integration Revenue, November 2005
No Child Left Behind, February/March 2004

Education, Postsecondary

MnSCU System Office, February 2010
MnSCU Occupational Programs, March 2009
Compensation at the University of Minnesota, February 2004
Higher Education Tuition Reciprocity, September 2003

Energy

Renewable Energy Development Fund, October 2010
Biofuel Policies and Programs, April 2009
Energy Conservation Improvement Program, January 2005

Environment and Natural Resources

Environmental Review and Permitting, March 2011
Natural Resource Land, March 2010
Watershed Management, January 2007
State-Funded Trails for Motorized Recreation, January 2003

Financial Institutions, Insurance, and Regulated Industries

Liquor Regulation, March 2006
Directory of Regulated Occupations in Minnesota,
February 1999
Occupational Regulation, February 1999

Government Operations

Capitol Complex Security, May 2009
County Veterans Service Offices, January 2008
Pensions for Volunteer Firefighters, January 2007
Postemployment Benefits for Public Employees,
January 2007
State Grants to Nonprofit Organizations, January 2007
Tax Compliance, March 2006

Health

Financial Management of Health Care Programs,
February 2008
Nursing Home Inspections, February 2005
MinnesotaCare, January 2003

Human Services

Civil Commitment of Sex Offenders, March 2011
Medical Nonemergency Transportation, February 2011
Personal Care Assistance, January 2009
Human Services Administration, January 2007
*Public Health Care Eligibility Determination for
Noncitizens*, April 2006
Substance Abuse Treatment, February 2006
Child Support Enforcement, February 2006
Child Care Reimbursement Rates, January 2005

Housing and Local Government

Preserving Housing: A Best Practices Review, April 2003
*Managing Local Government Computer Systems: A Best
Practices Review*, April 2002
Local E-Government: A Best Practices Review, April 2002
Affordable Housing, January 2001

Jobs, Training, and Labor

Workforce Programs, February 2010
E-Verify, June 2009
Oversight of Workers' Compensation, February 2009
JOBZ Program, February 2008
Misclassification of Employees as Independent Contractors,
November 2007
Prevailing Wages, February 2007
Workforce Development Services, February 2005

Miscellaneous

Public Libraries, March 2010
Economic Impact of Immigrants, May 2006
Gambling Regulation and Oversight, January 2005
Minnesota State Lottery, February 2004

Transportation

Governance of Transit in the Twin Cities Region,
January 2011
State Highways and Bridges, February 2008
Metropolitan Airports Commission, January 2003