Stated Briefly

Online course use in Iowa and Wisconsin public schools: The results of two statewide surveys

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This study examined survey data collected from Iowa and Wisconsin public high schools about their use of online courses for students during the 2012/13 school year. The survey asked about how and why schools enrolled students in online courses, what challenges they experienced, and their practices for monitoring and supporting students taking online courses.

Why this study?

Schools across the country are increasing their use of online courses (Picciano & Seaman, 2009; Watson, Murin, Vashaw, Gemin, & Rapp, 2013). Schools obtain online courses from a multitude of sources to achieve a variety of education goals, and they use diverse policies and practices to monitor student progress and success in online courses (Queen & Lewis, 2011). However, few states formally track or report student participation in online learning (Watson et al., 2013). Iowa and Wisconsin are among the states that do not currently track this information.

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The development of online learning opportunities has been accompanied by changes in legislation related to online learning. States, U.S. territories, and the District of Columbia enacted 157 bills related to online learning between 2008 and 2012 (Molnar et al., 2013). Iowa and Wisconsin are among the states that have passed legislation to expand the online learning opportunities available to students. Iowa's 2013 legislation initiated the development of a statewide online learning program model, Iowa Learning Online (2013 Iowa Acts, Chapter 121). In 2012 Wisconsin Virtual School and Wisconsin eSchool Network signed a memorandum of understanding with the Wisconsin Department of Public Instruction to meet the requirements of legislation requiring the state to provide equitable access to high-quality online education to schools throughout the state (2007 Wisconsin Act 222).

The Regional Educational Laboratory (REL) Midwest's Virtual Education Research Alliance identified the need for reliable information about the kinds of online courses in which schools are enrolling students and their reasons for doing so and collaborated with the study team to develop a survey of schools' online course use. The state education agencies in Iowa and Wisconsin administered the survey to a representative sample of 168 brick-and-mortar public high schools in each state. In Iowa responses were received from 117 schools (response rate = 70 percent), and in Wisconsin responses were received from 96 schools (response rate = 57 percent). Respondents included superintendents, principals, assistant principals, guidance counselors, teachers, online learning coordinators, and paraprofessionals.

This report summarizes a subset of results from Iowa and Wisconsin that alliance members believe will be the most valuable to policymakers as they consider legislation related to online learning (see Clements, Stafford, Pazzaglia, & Jacobs, 2015, for a copy of the survey, results for all survey questions, information about how the Iowa Department of Education and the Wisconsin Department of Public Instruction administered the survey, and details about how the study team analyzed the data to produce statewide estimates for each of the survey items). To facilitate review by legislators and other state- or district-level policymakers, the results are presented separately for each state. While this report focuses on two REL Midwest states, the results are likely to be of interest to states and districts across the country by providing a potentially valuable framework for considering online learning options and the types of monitoring and support they may want to provide for students enrolled in online courses. The full report includes a copy of the survey that other groups may use to collect this information.
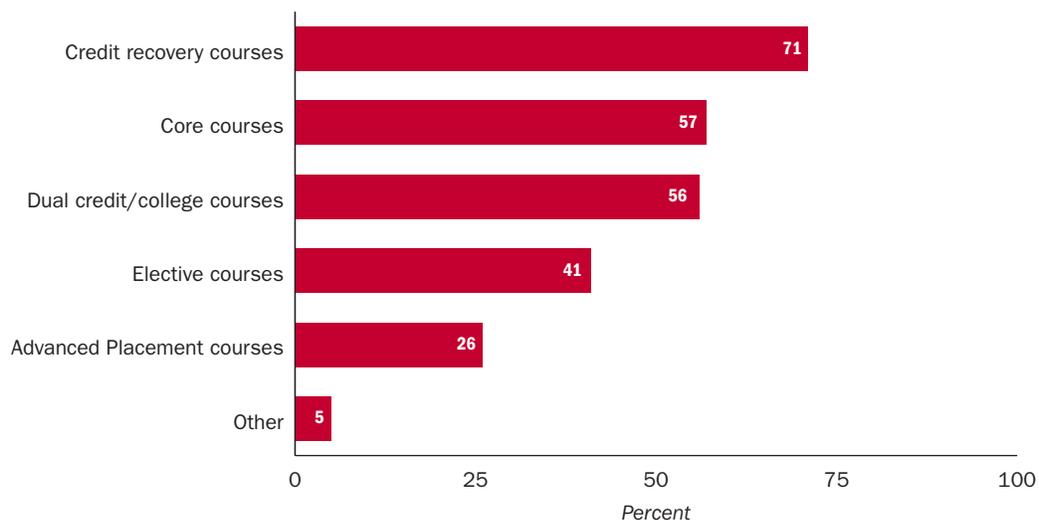
Key findings in Iowa

This section discusses key findings for Iowa.

Public high schools in Iowa enrolled students in online courses in a range of academic subjects to accomplish multiple academic objectives

Among Iowa public high schools that reported using online learning in 2012/13, the most common academic objective was to offer credit recovery courses: 71 percent enrolled students in online credit recovery courses during the 2012/13 school year. The next most common academic objectives were to complete core requirements (57 percent) and to obtain dual credit for a course (56 percent; figure 1). More than 70 percent of the schools that reported using online learning enrolled students in online courses for the four primary academic subjects: history/social studies (92 percent), English language arts (81 percent), science (78 percent), and math (73 percent). Fifty-five percent enrolled students in online health or physical education courses. Schools enrolled students in online courses provided by multiple sources, including postsecondary institutions (61 percent), local school districts (57 percent), and Iowa Learning Online, the state's virtual education program (33 percent).

Figure 1. In Iowa 71 percent of public high schools that reported using online learning enrolled students in online credit recovery courses in 2012/13

Note: The percentages are for the 87 Iowa public high schools that reported at least one online course enrollment for an academic objective in 2012/13. Percentages sum to more than 100 because schools could report enrolling students in online courses to meet more than one academic objective.

Source: Authors' analysis of Iowa Department of Education data (2013).

Iowa public high schools used online courses for their students for multiple education-related reasons

Among Iowa public high schools that reported using online learning in 2012/13, the reasons most frequently cited as either very important or somewhat important for enrolling students in online courses were to provide opportunities for students to recover course credits from classes they missed or failed (89 percent), to provide an alternative learning environment (86 percent), to provide a course not otherwise available (81 percent), to personalize student learning (80 percent), and to reduce scheduling conflicts (75 percent; figure 2).
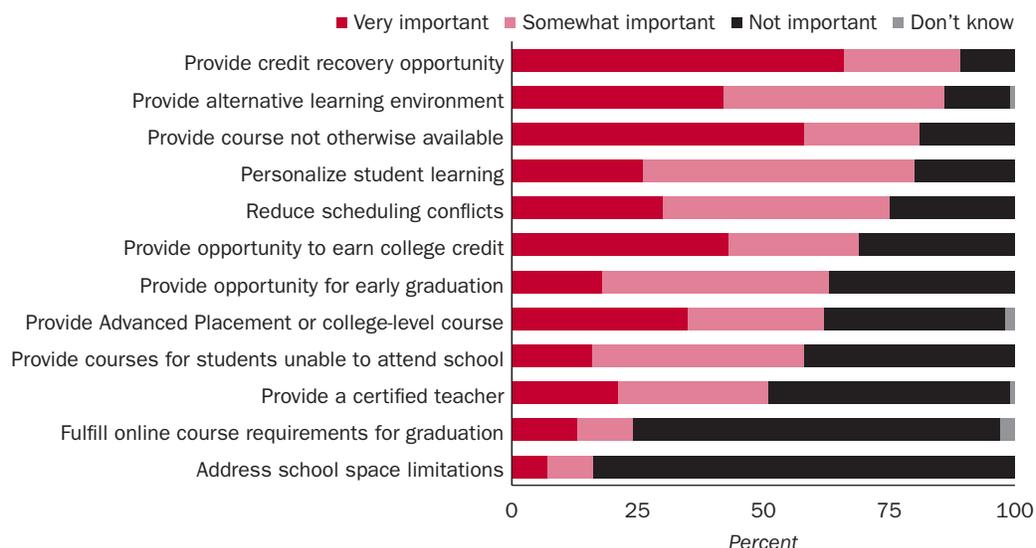
The challenge Iowa public high schools most frequently encountered in implementing online learning was the lack of teacher training

Among Iowa public high schools that reported using online learning, the lack of teacher training was the most frequently cited challenge (61 percent), followed by concern over course quality (32 percent).

The majority of Iowa public high schools that enrolled students in online courses assigned a staff member to monitor students' progress

An onsite monitor is a staff member at a brick-and-mortar school who is responsible for monitoring and supporting students enrolled in online courses. Although the monitors' specific responsibilities vary, they can include monitoring student activity in the online course and supporting students when they encounter nonacademic problems, such as technical difficulties or falling behind as the academic term progresses. Among Iowa public high schools that reported using online learning, 52 percent always assigned an onsite monitor to students enrolled in online courses, and 35 percent did so sometimes. Some 34 percent of schools that assigned monitors reported that the monitors always received training, and 46 percent reported that the monitors sometimes received training.

Figure 2. In Iowa the two most frequently cited reasons for offering online learning in 2012/13 were to provide credit recovery opportunities and alternative learning environments

Note: The percentages are for the 92 Iowa public high schools that answered the following question: "How important were the following reasons for having online courses in your school in 2012/13?"

Source: Authors' analysis of Iowa Department of Education data (2013).

Key findings in Wisconsin

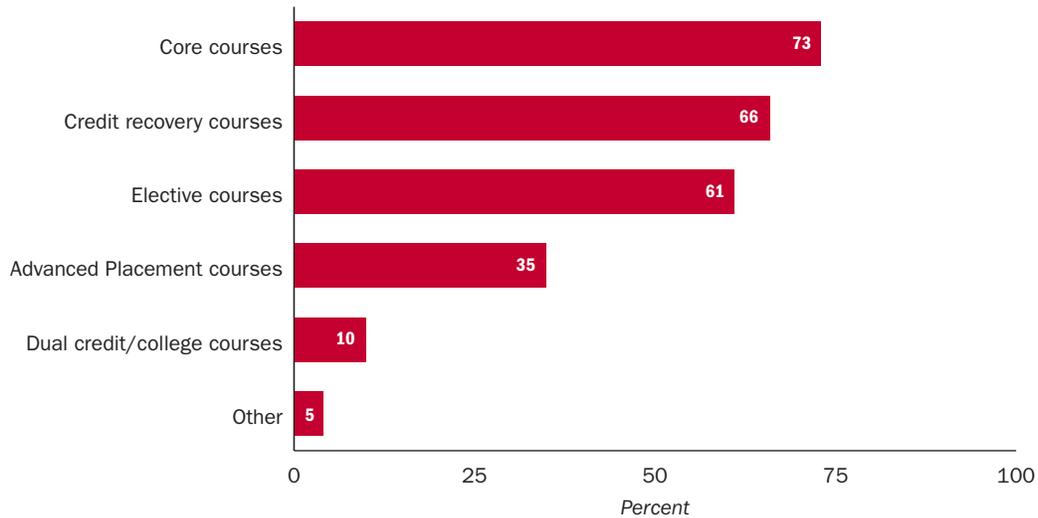This section discusses key findings for Wisconsin.

Public high schools in Wisconsin enrolled students in online courses in a range of academic subjects to accomplish multiple academic objectives

Among Wisconsin public high schools that reported using online learning in 2012/13, 73 percent enrolled students in core courses, 66 percent enrolled students in credit recovery courses, and 61 percent enrolled students in elective courses (figure 3). Schools enrolled students in online courses for the four primary academic subjects: math (81 percent), English language arts (76 percent), history/social studies (73 percent), and science (64 percent). Fifty-three percent enrolled students in a world language course. Schools enrolled students in online courses provided by multiple sources, including local school districts (44 percent) and the Wisconsin Virtual School (44 percent), a state-level virtual education program.

Wisconsin public high schools used online courses for their students for multiple education-related reasons

Among Wisconsin public high schools that reported using online learning in 2012/13, the reasons most frequently cited as very important or somewhat important for enrolling students in online courses were to provide opportunities for students to recover course credits from classes they missed or failed (89 percent), to provide a course not otherwise available (88 percent), to reduce scheduling conflicts for students (86 percent), to provide an alternative learning environment (79 percent), and to personalize student learning (76 percent; figure 4).
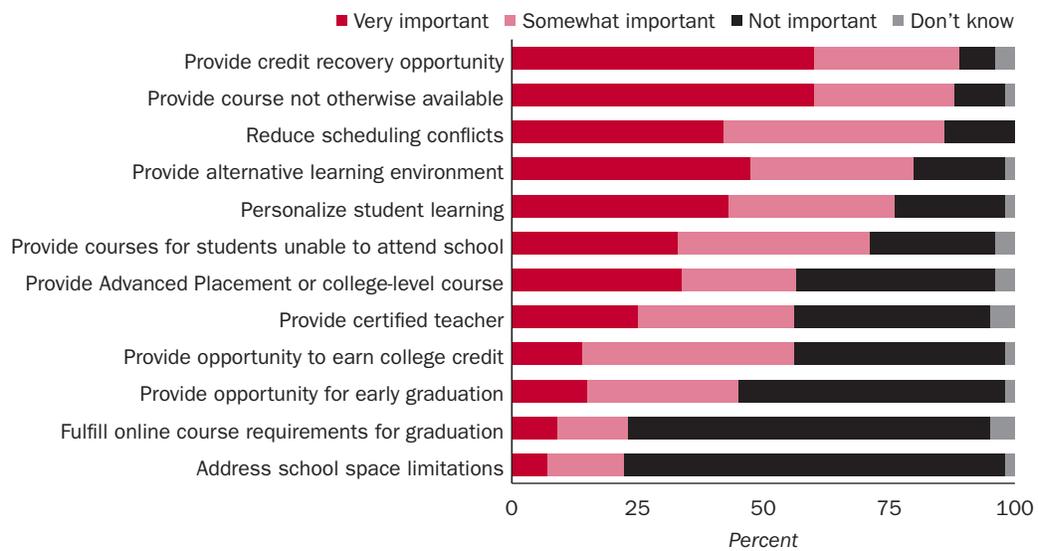
Figure 3. In Wisconsin 73 percent of public high schools that reported using online learning enrolled students in online core courses in 2012/13, and 66 percent enrolled them in credit recovery courses

Note: The percentages are for the 74 Wisconsin public high schools that reported at least one online course enrollment for an academic objective in 2012/13. Percentages sum to more than 100 because schools could report enrolling students in online courses to meet more than one academic objective.

Source: Authors' analysis of Wisconsin Department of Public Instruction data (2013).

Figure 4. In Wisconsin the two most frequently cited reasons for offering online learning in 2012/13 were to provide credit recovery opportunities and courses not otherwise available

Note: The percentages are for the 75 Wisconsin public high schools that answered the following question: "How important were the following reasons for having online courses in your school in 2012/13?"

Source: Authors' analysis of Wisconsin Department of Public Instruction data (2013).

The challenge Wisconsin public high schools most frequently encountered in implementing online learning was concern about online course quality

Among schools in Wisconsin that reported using online courses, concern about course quality was the most frequently cited challenge (37 percent), followed by the lack of funding (26 percent).

The majority of Wisconsin public high schools that enrolled students in online courses assigned a staff member to monitor students' progress

An onsite monitor is a staff member at a brick-and-mortar school who is responsible for monitoring and supporting students enrolled in online courses. Although the monitors' specific responsibilities vary, they can include monitoring student activity in the online course and supporting students when they encounter nonacademic problems, such as technical-related problems or falling behind as the academic term progresses. Among Wisconsin public high schools that reported using online learning, 75 percent always assigned an onsite monitor to students enrolled in online courses, and 21 percent did so sometimes. Some 41 percent of schools that assigned onsite monitors reported that the monitors always received training, and 32 percent reported that the monitors sometimes received training.

Implications of the study findings

As is the case for most states across the country, prior to conducting this survey, neither Iowa nor Wisconsin had access to information about why schools enroll students in online courses, what kinds of courses students typically take online, or how schools monitor or support students when they are taking an online course. Members of REL Midwest's Virtual Education Research Alliance recognized the potential value of this kind of information for state education agencies as they plan programs related to online learning. The alliance also anticipates that the information will be useful to state legislators as they consider policies designed to increase students' access to virtual education opportunities that will prepare them for college and careers.

The predominant use of online learning in both states was for credit recovery courses. Given recent research showing that online credit recovery courses have low completion rates (Ferdig, 2010), states and districts may want to examine the short- and long-term academic outcomes for students who take these classes in order to determine whether the investments are resulting in the intended education outcomes for students. For example, existing data could be used to investigate the rate at which students successfully complete online credit recovery courses and whether they go on to successfully complete the next course in the relevant course sequence. Research on the cost-effectiveness of online credit recovery courses could also prove valuable. U.S. Department of Education, Office of Educational Technology (2012) provides guidance that state or local education agencies can use to conduct cost-effectiveness studies.

Concerns about the lack of online teacher training in Iowa and about online course quality in Wisconsin suggest a need for research examining the short- and longer term outcomes of students who enroll in online courses. As states and districts implement policies and programs to expand student access to online courses, they may want to gather data that will allow them to track the education outcomes of students in these courses. Furthermore, researchers and practitioners could collaborate to conduct research that can answer important questions about the use of online courses, such as:

- How are brick-and-mortar schools implementing online learning?
- Are particular methods of implementation associated with better education outcomes?
- Are particular instructional elements of online courses or instructional activities implemented by online teachers associated with student outcomes?

- How are virtual education programs training online teachers and brick-and-mortar school staff to support students enrolled in online courses? What additional training is needed?
- What are students' academic and personal objectives for taking online courses? Do they perceive that this experience helped them achieve these objectives?

The REL Midwest Virtual Education Research Alliance is currently investigating a number of these questions.

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