

Online Learning in Illinois High Schools: Has the Time Come?

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Has The Time Come?

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EXECUTIVE SUMMARY

Using data collected from a state sample of principals in Illinois this study examines the role of online and blended instruction in addressing concerns and issues facing the American high school.

Comparison between Illinois and National Samples

In comparing the results in this study with those of a national sample of principals, most of the findings are comparable even though the present study was conducted two years later (2010-2011 academic year vs. 2008-2009 academic year). Areas of similarity include:

- Online credit recovery courses are proliferating across the country as well as in Illinois.
- Concerns about costs and course quality continue to dominate the opinions of the principals in both Illinois and across the country.
- Quality concerns are not preventing the expansion of online learning.
- High schools in Illinois and nationally use a number of external providers rather than develop courses in house.

Credit Recovery Leads the Way

Credit recovery courses are becoming the major type of application for online and blended learning in American high schools. This is equally true in Illinois where the picture shows an acceleration of the use of credit recovery as a means to give students a second chance to complete necessary coursework. The need for these courses varies but relates to students having not completed required coursework earlier in their high school careers due to illness, being homebound, scheduling conflicts, academic failure, etc. Students needing such courses make up a significant portion of the high school student population that subsequently drops out or is late in graduating.

Online Learning Providers

In earlier national studies of online learning in K-12 school districts, postsecondary institutions and state virtual schools were the major providers of online and blended learning. Both this study of Illinois high school principals and the national study indicate that this has begun to change. While postsecondary institutions and state virtual schools continue to be major providers, independent vendors riding the credit recovery wave are evolving into the number one provider of online learning to high school students. In the future, it is likely that private companies will be providing other online courses beyond credit recovery.

The Pedagogy of Online Learning v. Graduation Rates

Principals in Illinois expressed concerns about the quality of online instruction and at the same time have chosen to use it more. Some see online learning as beneficial only for "higher-level students" while others see it as "superficial". Regardless, the data show that online learning, especially for lower-performing students via credit recovery, has evolved into a popular type of course offering.

The data collected from the Illinois principals also indicate that the pedagogy of online learning is evolving differently in the high schools than in higher education where it has been used for many years. High schools are making greater use of adults (teachers, tutors, other supervisors) to assist students physically in their schools as they participate in online course activities. Students are more likely to be working on their online courses in their school's computer lab or library. This is desirable especially if many of the students enrolled in these courses need extra assistance as might be typical of those in credit recovery courses. The adult in the room can assist both for technical as well as for content or learning issues. This might also be desirable if many of the online courses are not teacher-led, student-to-student interactive environments but are self-contained, programmed instruction type courses where most of the interaction is computer moderated and controlled. Much of the literature on online learning in higher and adult education documents the benefits of student interactions with each other as an important aspect of the benefits of their learning experiences. In the Illinois high schools, it appears that students are not relying on interactions in the online course so much as face-to-face contact in school facilities.

Barriers to Online Learning

In addition to pedagogical value, the Illinois principals in this study also expressed concerns about cost, the need for teacher training and attendance-based funding. Their concerns are similar to those expressed in the national sample. However, their concern about attendance-based funding policies is considerably lower than principals in the national sample. The fact that Illinois high schools make significant use of teachers and other adults for supervising online learning students in school facilities, might minimize or reduce their concern regarding attendance-based funding.

Sample

Two-hundred and ten (N=210) high school administrators participated in this study. Their high schools come from all regions of the state and represent over one-quarter of all Illinois high school enrollments. Of all schools in this sample, 62 percent had at least one student enrolled in a fully online course and 23 percent had at least one student enrolled in a blended or hybrid course.

FOREWORD

When we first began our work examining the extent and nature of online learning in K-12 schools in 2006 there was little other research being done in this area. No more than a handful of other studies existed that attempted to establish basic information such as how many students were enrolled in online courses. In the past five years, with the strong support of the Alfred P. Sloan Foundation, we have conducted three national studies on online and blended learning in K-12 schools.

In February, 2011, the University of Illinois at Springfield (UIS), held a celebration of the 10th anniversary of its online program in Master Teacher Leadership. One of the authors of this present study was invited to give a talk before an assemblage of university faculty, students, and public school educators. The talk, *American High School Reform: The Role of Online Learning*, was based on a recent national study of high school principals on the state of online learning in their schools (Picciano & Seaman, 2010). The study sought to examine their views, hopes and concerns about the role that online learning was playing in their academic programs.

The discussion was extensive and included numerous queries and comments, including one that asked if a study of Illinois high school principals similar to the national study would be beneficial. This led to subsequent discussions and within several weeks, Jason Leahy, the Executive Director of the Illinois Principals Association (IPA), indicated that his organization would be interested in sponsoring such a study. With his help and the sponsorship of the IPA and the IPA Foundation, a survey of both IPA members and non-members was conducted in April/May 2011

We welcome any feedback on our work and hope we have helped to serve the needs of educators considering online and blended learning environments for the benefit of their academic programs and in turn, for their students.

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INTRODUCTION

An April 24, 2011 article in the *Chicago Tribune* entitled, *Online Learning for Illinois High Schoolers Inspires Praise and Suspicion*, provided a brief overview of the state of online learning in Illinois high schools. As the title suggests, there were the positives and negatives, the yeas and the nays, that typically arise whenever the use of the latest technology is suggested for changing the way children are educated. Online learning has elicited more than its fair share of proponents and detractors. In the opening paragraphs, this article covered well the state of the debate:

"[Online learning] 'can personalize for each student and have incredible rigor,' said Michael Horn of the Innosight Institute...

'It's a data-rich environment. You can constantly see what does and doesn't work.'

Critics contend that the trend is more about saving money than improving education, and that the effectiveness of online courses remains unproven.

'We have yet to see a vendor who has made the case that students who lack the motivation to do homework, to engage in class, to manage their time efficiently ... will be more successful in online learning,' said Samantha Dolen of Palatine-based District 211..." (Keilman, 2011)

This debate is being played out throughout the country as state policymakers and school administrators try to find solutions to improve education during severe budgetary times.

The *Chicago Tribune* article goes on to describe that while the state of Illinois introduced a virtual high school initiative in 2001, enrollments and enthusiasm have been modest at best. However, as more and more other states move forward with apparently successful virtual schools (i.e., The Florida Virtual School), state and local policymakers are reconsidering this mode of learning. The data nationally is mixed with only a handful of studies (see Picciano & Seaman 2007, 2009, 2010) examining the big picture.

The purpose of this study was to examine the role that online learning was playing in addressing some of the issues and concerns facing Illinois high school principals. Data were collected from a sample of high school principals with respect to the extent, nature, and reasons for participating in online learning programs. An important aspect of this study would be to compare the findings in Illinois to those collected from a national sample of high school principals.

BACKGROUND

The Role of Online Learning in American High School Reform

In the past several years, there has been a growing interest in the role that online learning can play in American high school reform efforts. Education policymakers at the federal, state, and local levels have all begun to examine how online learning can improve academic programs, improve graduation rates, and provide more options to students. These same policymakers have expressed concerns about the viability and efficacy of online learning to make substantial improvements in the American high school. A study by Picciano & Seaman (2010) examining these issues was conducted based on a national survey of high school principals. A summary of the results of this study serves as an appropriate backdrop for the study of online learning in Illinois high schools.

Improving Graduation Rate and Credit Recovery

Improving the graduation rate is perhaps the most important aspect of high school reform initiatives. The term "credit recovery" refers to courses and other activities that students take to make up for courses that they need to graduate. The need for these courses varies but relates to students having not completed required coursework earlier in their high school careers due to illness, scheduling conflicts, academic failure, etc. Students needing such courses make up a significant portion of the high school student population that subsequently drops out or is late in graduating. The findings in the Picciano & Seaman (2010) study indicated that credit recovery has evolved into the most popular type of online course being offered at the secondary level.

A relatively new phenomenon, online credit recovery courses were practically non-existent a few years ago and have now become a dominant form of online course offerings in many high schools. What is particularly interesting is that urban high schools, which historically have the lowest graduation rates of any schools in the country, appear to be embracing online credit recovery as a basic part of their academic offerings (Balfours & Legters, 2004). This finding is corroborated by reports by several providers of online courses that are seeing significant increases in demand for credit recovery courses. Gregg Levin, vice president for sales for Aventa Learning, a for-profit provider of online services to K-12 schools, in a recent article said that demand for online credit recovery courses had increased "eight-fold between 2005 and 2008" (Zehr, 2010). Many high schools have been forced to find solutions to their high school drop-out problems due to pressure from state education departments and the federal No Child Left Behind mandates to improve student outcomes. Online credit recovery appears to be integral to the solutions for many of these schools.

While it would be easy to state that the advance of online credit recovery was a positive finding in the study, it should be taken with some caution. The data suggested that while high school administrators are providing more opportunities for students to enroll in online courses, they also have concerns about the quality of online courses and indicate that students need maturity, self-discipline, and a certain command of basic skills (reading and mathematics) in order to succeed in these courses. Many of the students who need to recover credits are those who may not have these characteristics. There

have also been concerns that some school districts might be using credit-recovery, whether online or face-to-face, as a quick, convenient way to move students through to graduation. As an example, a *New York Times* article raised concerns by teachers and others that some New York City public schools were "taking shortcuts" and "gaming the system" to move students through to graduation with questionable practices related to weak credit recovery programs (Gootman & Coutts, 2010). Nevertheless, credit recovery has become a major aspect of many high school academic programs and the online versions of these are proving to be especially popular.

Building Bridges to College Careers

An important aspect of the high school reform dialogue has centered on the importance of advising students to stay in school and move onto a college career upon graduation. Students who have set goals of attending college for themselves are more likely to do well in school and graduate. Rather than waiting for graduation, educators have been developing programs to bridge the high school and college experiences at an earlier time. Whether through advanced placement or registration in college courses as electives, there has been a growing population of high school educators seeking to expand the opportunities for their students to start their college careers while still in high school.

While many models for this exist, there have always been logistical issues with regards to transporting students to colleges, training high school teachers to teach college-level courses, articulating courses taken in high school for college credit, etc. It appears from the Picciano & Seaman (2010) study that online and blended learning courses are increasingly being used to overcome these logistical issues. By enrolling in online and blended learning courses, high school students no longer need to be transported to a college campus, can enroll in college courses taught by college professors, and can be given college credit immediately upon completing and passing their coursework. Data from this study indicated that high school administrators see online elective college-level courses as an effective way for some of the more able students to begin their college careers.

Differentiating Instruction

Christensen, Horn, and Johnson (2008) in a major book on this topic, see online learning as an integral part of high school reform specifically by allowing high schools to customize instruction and to differentiate course offerings to meet a wide variety of student needs. However, while offering a wide breadth of courses is most desirable, doing so in face-to-face mode can be quite expensive. Offering some courses online allow for greater breadth of course offerings without necessarily incurring the same costs. For example, to offer a face-to-face elective course generally requires that there be a certain level of student interest and enrollment for the course in order to make it cost effective. A student interested in taking elective coursework in chemistry might not be interested in taking an advanced foreign language course and vice versa. To meet the needs of both students, high school schedulers would have to offer both an advanced chemistry and a foreign language course and then hope that there are enough students registered to make them cost-effective. Online and blended courses, on the other hand, can be made available for just a single student and only incur the cost for that one student. The data from the Picciano & Seaman (2010) study consistently indicated that

high school administrators see online learning as meeting the diverse needs of their students whether through advanced placement, elective college courses, or credit recovery. Indeed, the data indicate that the major reason for offering online and blended courses is to offer courses that otherwise would not be available. This supports strongly the concept promulgated by Christensen, Horn, and Johnson of the role that online technology can play in differentiating instruction and providing more choices for high school administrators in developing their academic programs.

Financial and Policy Issues

Financial and policy issues continue to be major concerns for high school administrators as they consider online learning. On the one hand, offering online and blended courses makes a good deal of financial sense especially when trying to meet specific needs for small groups of students. This enables schedulers to maximize their full-time faculty resources in required and other popular courses and to minimize offering courses in face-to-face mode for small numbers of students.

On the other hand, the respondents to the survey clearly see costs and funding formulae as barriers to expanding and implementing online and blended courses. If administrators decide to develop their own online courses, substantial financial investment needs to be made in hardware and software infrastructure, teacher training and support services. The initial investment for these can be prohibitive. However, if a school contracts out for the majority of its online and blended learning courses, the cost of the provision of local support services might be offset by the savings incurred by having to offer fewer courses in face-to-face mode. With so many providers of online courses, especially those that are non-profit such as state-supported virtual schools and local colleges and universities, most schools do not find it necessary to develop an in-house online learning program.

The financial issues of more concern may have to do with state and local education policies that follow strict attendance-based funding formulae and do not easily accommodate students taking courses beyond a school district. While most states have developed policies regarding funding formula for online courses, some have not. State virtual schools have proliferated but the funding formulae for them and the schools that contract with them have not necessarily been optimized. Several reports from agencies and organizations such the Southern Regional Education Board (Thomas, 2008) and the Evergreen Consulting Group (Watson & Gemen, 2009) highlight the fact that policies need to be reviewed and refined in order to support online learning programs for their K-12 school districts.

The Pedagogy of Online Learning

For a number of years, the pedagogy of online learning has been the subject of concern at every level of education. Educators express concerns that online learning is not as effective as face-to-face instruction. Their concerns relate to the students' motivation and maturity levels, study habits and organizational skills, as well as their academic preparedness. These concerns will not likely disappear and exist as a given among many educators. Regardless of the concerns, the decision to embrace online learning has been made and the vast majority of schools are moving forward with their programs and looking to expand them in the future. The Picciano & Seaman (2010) study concluded that many schools and school districts see benefits to online learning programs that overshadow concerns about pedagogical value. Online learning is seen as a means to broaden and expand student experiences. It allows students looking for more advanced work to test and challenge their skills by taking more demanding instructional material. It also allows students who might be at risk to make up coursework that they have missed in order to graduate. These policy decisions are based on the rationale that providing broader access to a secondary education outweighs the concerns and perceptions regarding the pedagogical value of online learning.

Rural Schools in the Vanguard

While online and blended learning is increasingly being seen as an important component of high school reform for all schools, rural schools have been in the vanguard in offering these programs to their students. The Picciano & Seaman (2010) study as well as their earlier work have consistently provided insights into the issues that rural schools have faced and the role that online technology plays in addressing them. These schools have had to overcome significant problems related to funding, teacher certification, and small enrollments that forced them to creatively address the needs of their students. While high schools in all locales (cities, towns, and suburbs) are facing serious challenges, the rural schools probably have the most difficult time. With limited tax bases, low enrollments, and difficulty in attracting and keeping certified teachers, their issues are fundamental and can jeopardize their very existence. The data suggest that they are making valiant efforts to overcome these issues and online and blended learning are among the strategies for providing quality educational programs for their students.

METHODOLOGY

This study of Illinois high schools used descriptive analysis relying extensively on a modified survey instrument designed specifically for our original studies (Picciano & Seaman 2007, 2009, 2010). This survey was conducted for the 2010-2011 academic year.

For purposes of this study the following definitions were used:

- **Fully online course** – A course where most or all of the content is delivered online, and typically has no face-to-face meetings.
- **Blended/hybrid course** – A course that blends online and face-to-face delivery, and where a substantial proportion of the content is delivered online, sometimes uses online discussions and typically has few face-to-face meetings.

The "universe of interest" for this study included all public high schools in Illinois. Information on these schools was taken from the Common Core of Data (CCD) from the U.S. Department of Education's National Center for Education Statistics (<http://nces.ed.gov/ccd/ccdata.asp>).

In the first phase of data collection email survey invitations were sent to 506 high school principals who were members of the Illinois Principal's Association (IPA). Principals who had not responded were sent two email reminders. A second stage of data collection was then undertaken sending invitations to all non-IPA member public high schools in Illinois as well as those IPA members that had not yet responded. These invitations allowed the high principal to respond by completing a paper version of the survey and return it in a postage-paid mailer, or by responding online. Both the paper and web-based version of the survey contained a unique survey identification number.

All potential respondents were informed that the Illinois Principal's Association was sponsoring the survey, that "all participants will have access to a free copy of the survey report, comparing Illinois results to the earlier national studies" and that "All individual survey responses remain anonymous, only aggregated data are reported." The survey was composed of two portions, one that applied to all respondents and a second section to be completed only by those schools with online or blended course offerings. The invitation letter and the survey form itself were carefully worded to encourage responses from all school representatives, regardless of their view towards online instruction or whether or not they were involved with online learning.

All data collected were entered into a database, either directly by the respondent if the school responded using the web version or, in the case of paper-based responses, by the researchers. Each entry included the unique survey ID number that was used to link the response to the description data of that school contained in the Education's National Center for Education Statistics Common Core of Data. The data linked from this source included location information (city, town, urban/rural), the grade range for the school, and the number of students enrolled.

All data were investigated for missing or out of range values. All missing data were coded as either structural missing (the question did not apply to the respondent) or as non-response missing (the question did apply, but the respondent did not provide any data). After the survey data were merged with the CCD data, cleaned, and missing value codes added, they were input into the SPSS statistical package for analysis. The underlying data for all charts presented in this report are included in the report Appendix.

Two-hundred and ten high school administrators participated in this study. This represents 23 percent of all public high schools in Illinois and over one-quarter of all Illinois high school enrollments. Sixty-two percent of the principals reported that at least one student in their schools was enrolled in an online course between July 1, 2010 and June 30, 2011. Almost 23% reported that they had students enrolled in a blended learning course.

SAMPLE - SIZE BASED ON STUDENT ENROLLMENT

	Percent
Under 200	28.6%
201 to 500	28.1%
501 to 1200	19.5%
1201 +	23.3%

SAMPLE - LOCATION

	Percent
City	8.1%
Suburb	21.1%
Town	27.8%
Rural	43.1%

FINDINGS

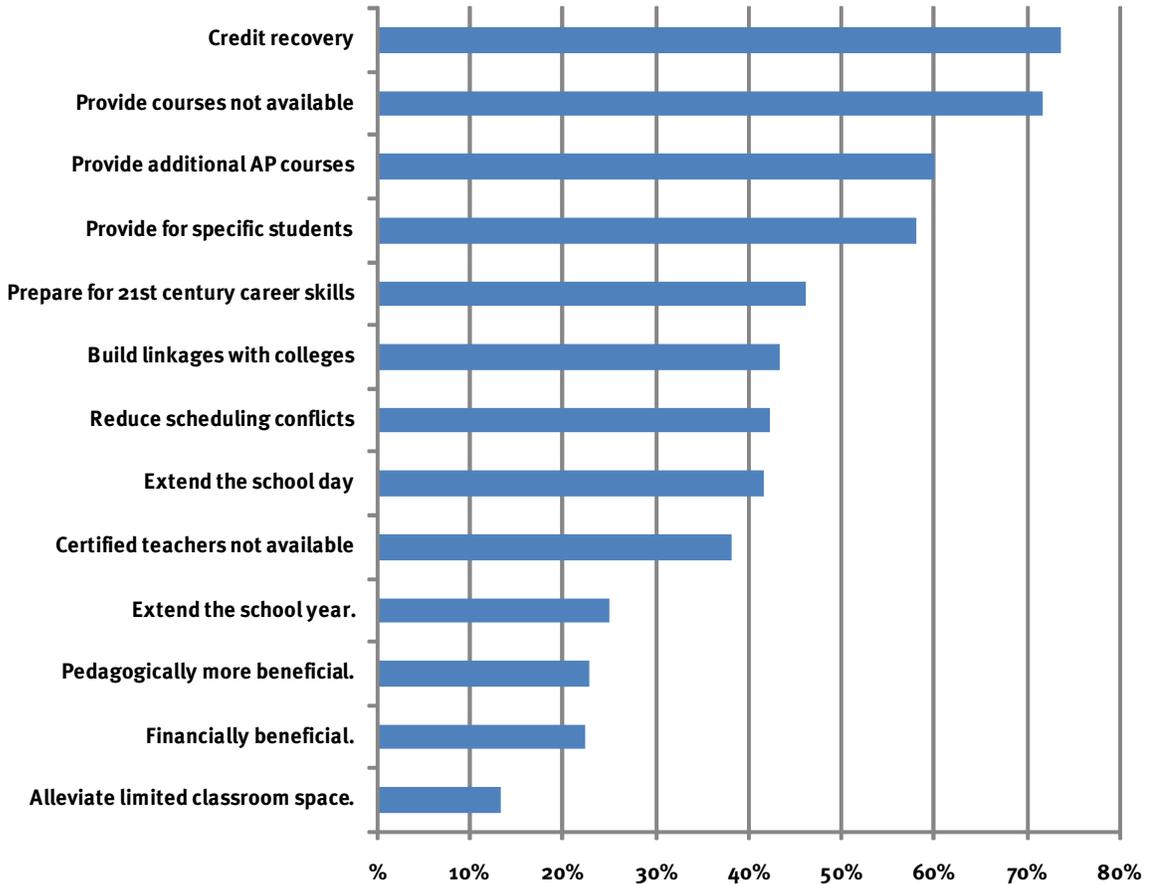
Importance for Offering Online or Blended Courses

Figure 1A provides a summary of the responses from the Illinois principals to the question: "Regardless of whether your school is currently offering online or blended/hybrid courses, please indicate how important you believe each of the following items would be to your school in offering or potentially offering online or blended/hybrid courses. Do not consider web-enhanced courses for this question." (Note: The data for this and all other charts are included in the Appendix.)

The options receiving the highest test responses were:

- Permit students who failed a course to take it again - Credit Recovery (74%)
- Provide courses that otherwise were not available (72%)
- Provide additional Advanced Placement courses (60%)
- Provide for the needs of specific students (58%)

Figure 1A: Importance for Offering Online or Blended/Hybrid Courses



These responses represent the significance of online learning in meeting a variety of student needs whether making up courses that they had previously failed (i.e., credit recovery) or for advanced placement. For the former, the term "credit recovery" has become very popular in recent years and is a fairly new phenomenon in online learning. Meeting needs related to other basic school issues such as extending the school year, finances, pedagogical benefit, and alleviating classroom space were perceived as being of less importance.

Figure 1B: Importance for Offering Online or Blended/Hybrid Courses

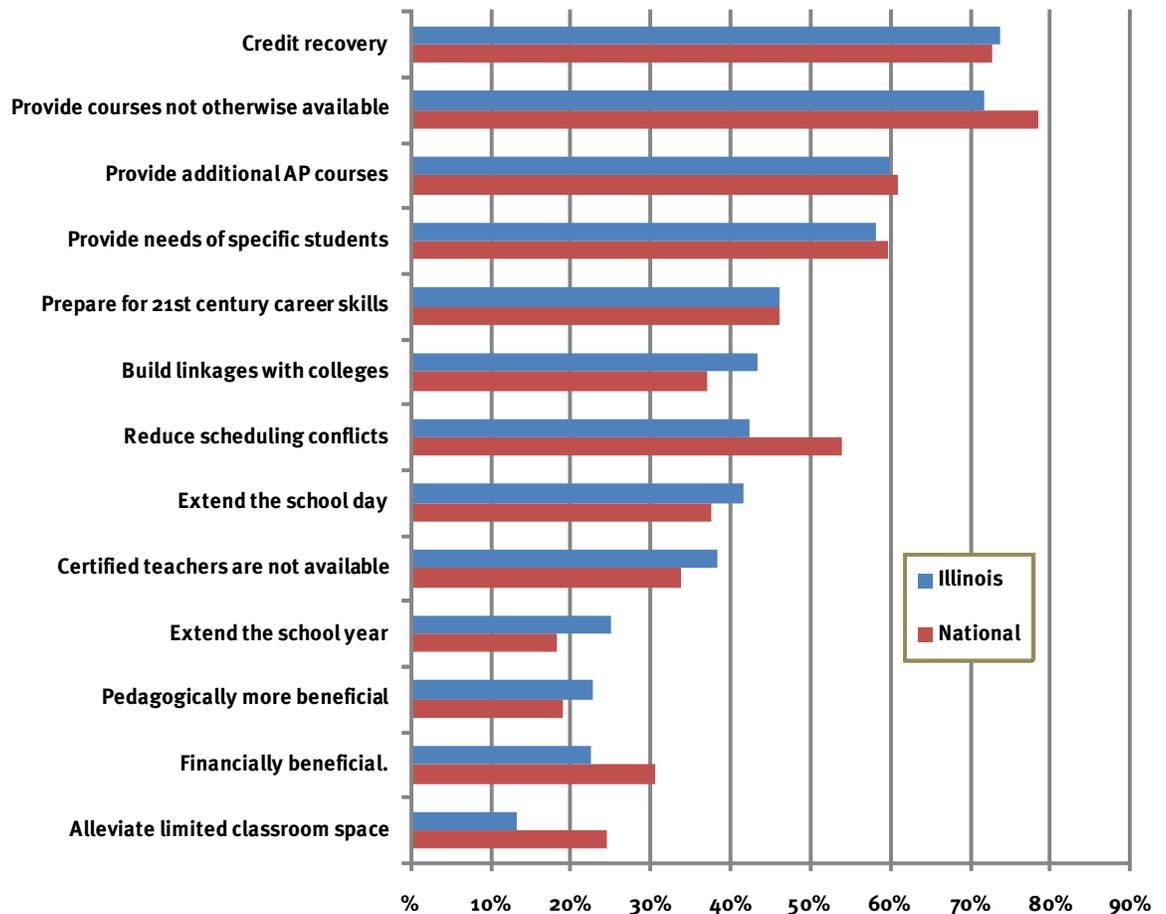


Figure 1B provides comparisons to the data in Figure 1A based on national data. In general, the responses in Illinois are comparable to the national data. Additional information on the characteristics of the Illinois sample is available in the Methodology section.

Types of Online and Blended Courses Offered

Figures 2A and 2B provide summaries to the question: "What is the nature of online and blended/hybrid courses taken by students in your school (check all that apply)". For online learning courses, the most popular courses in order of importance were:

- Credit recovery
- Elective courses
- Required courses

The results for blended show remedial courses are more popular than required courses.

Figure 2A: Types of Online Courses Offered

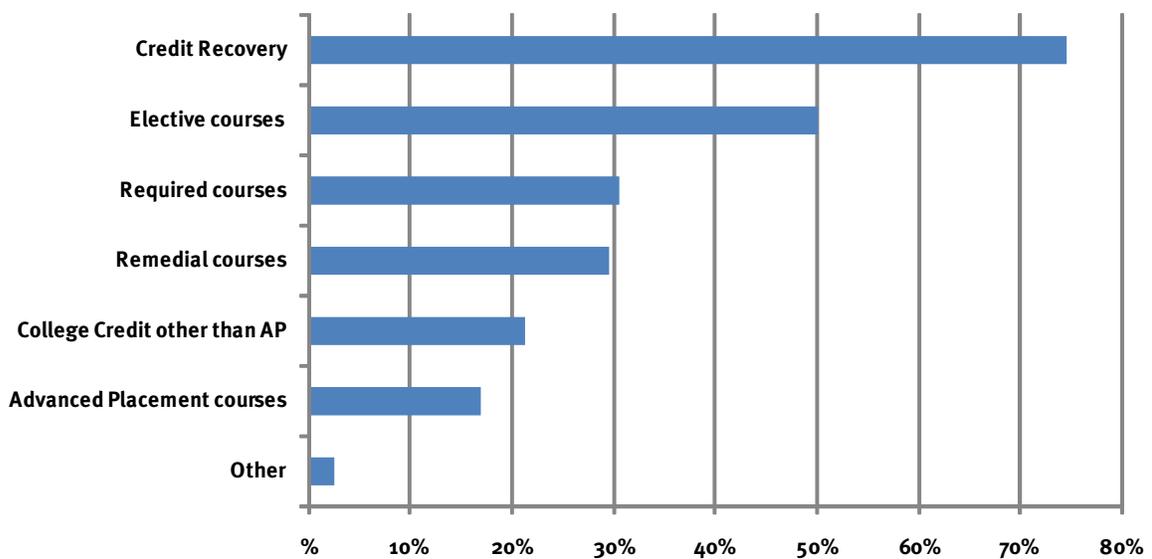
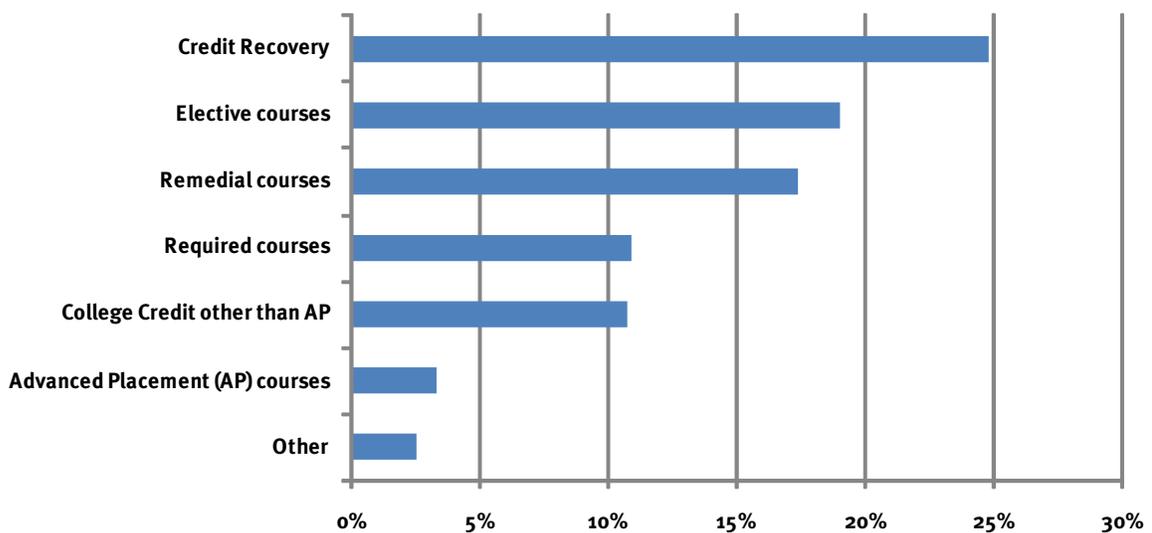


Figure 2B: Types of Blended Courses Offered



Seventy-four percent of the principals reported that fully online courses were being used for credit recovery courses. Figures 2C and 2D provide comparisons to the national data. Differences between the Illinois sample of high schools and the national sample are apparent for elective and required courses.

Figure 2C: Types of Online Courses Offered

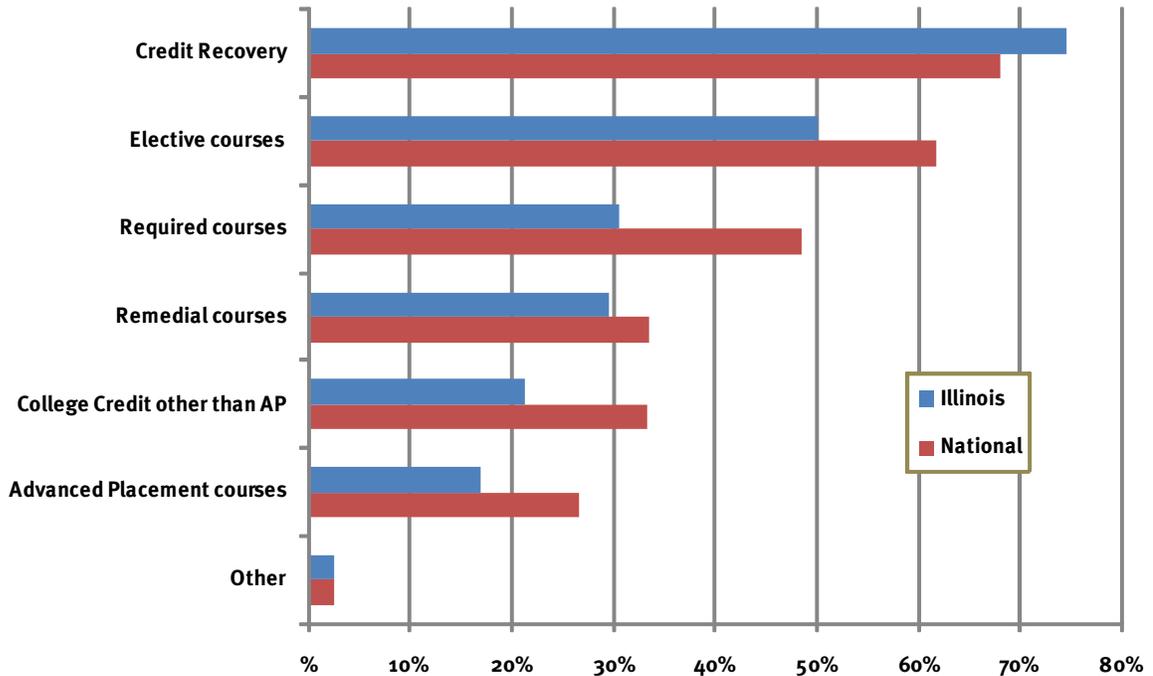
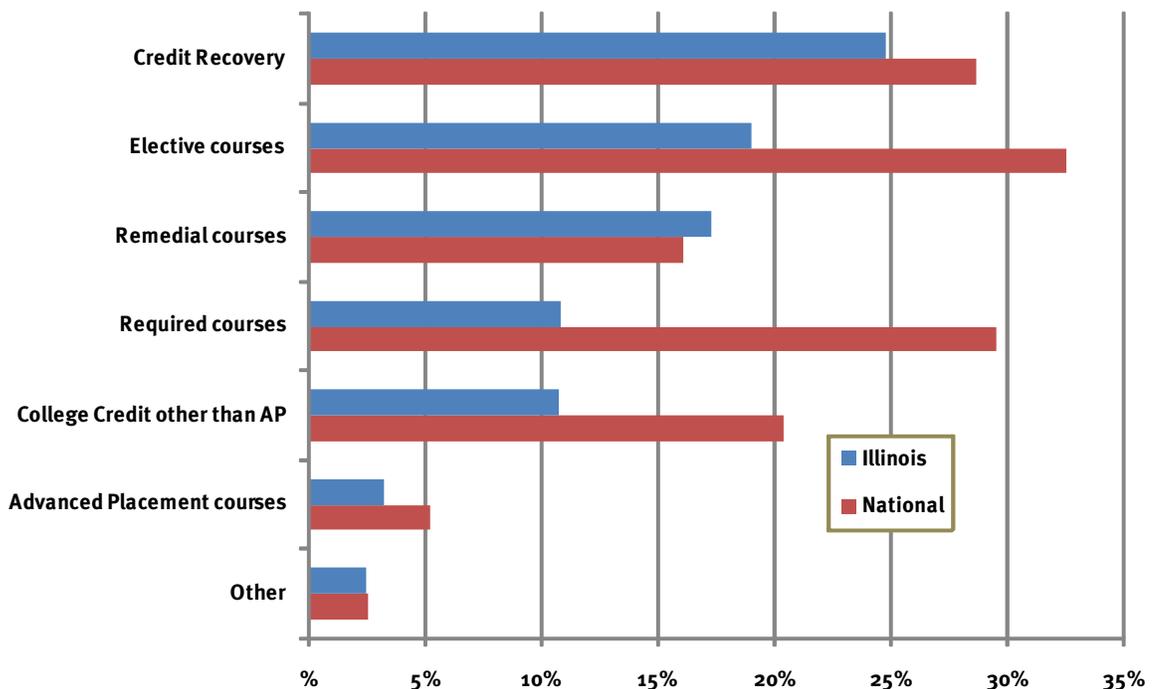


Figure 2D: Types of Blended Courses Offered



Providers of Online Courses

K-12 school districts generally contract out with a number of different providers of online learning programs and courses. Table 1 provides percentage comparisons of samples of Illinois and national high schools in terms of the number of online learning providers being used by the respondents.

TABLE 1: NUMBER OF PROVIDERS OF ONLINE COURSES.

	National	Illinois
1	35%	47%
2	37%	31%
3	15%	15%
4 or more	14%	7%

Figures 3A and 3B provide summaries of the providers of online and blended learning courses. There are clear differences in the nature of the providers of the two modes of learning. While Illinois high schools use a number of different providers, more fully online courses are provided by independent vendors, state virtual school and their own school district.

Figure 3A: Providers of Online Courses

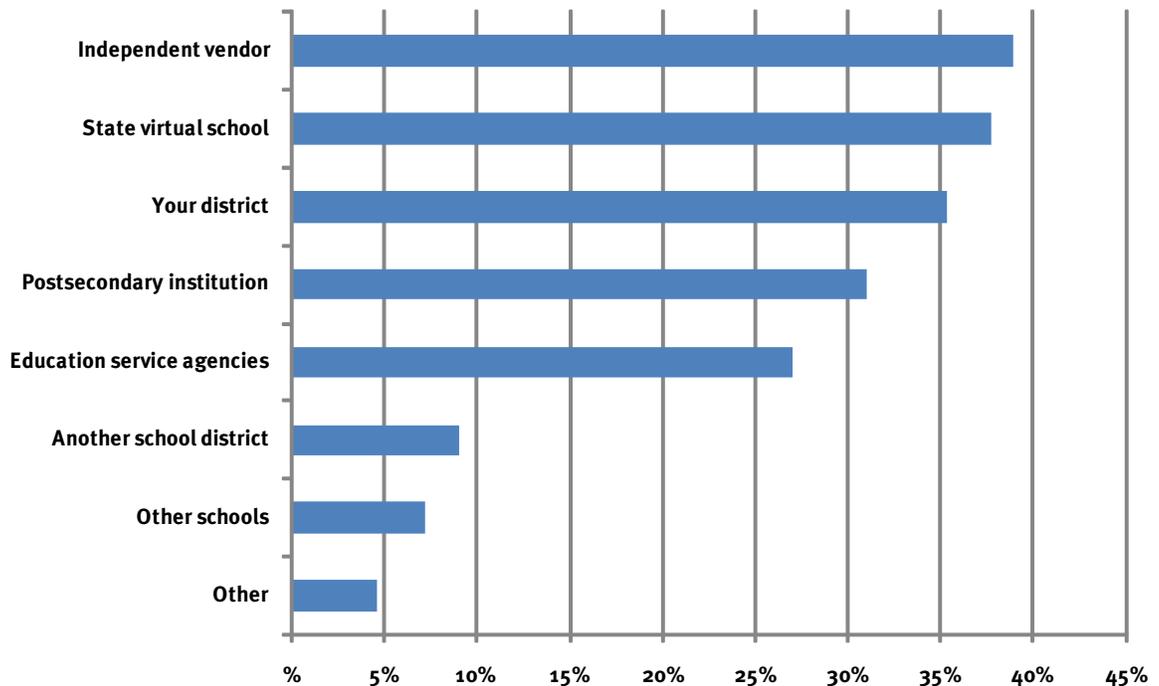


Figure 3B: Providers of Blended/Hybrid Courses

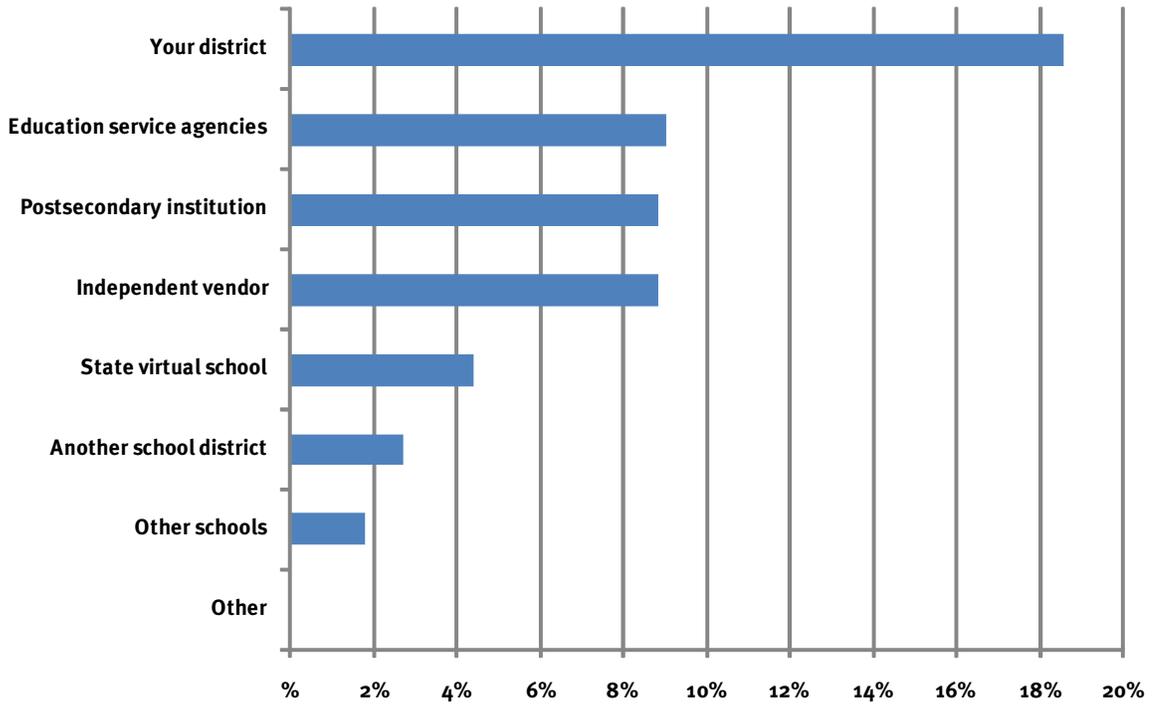
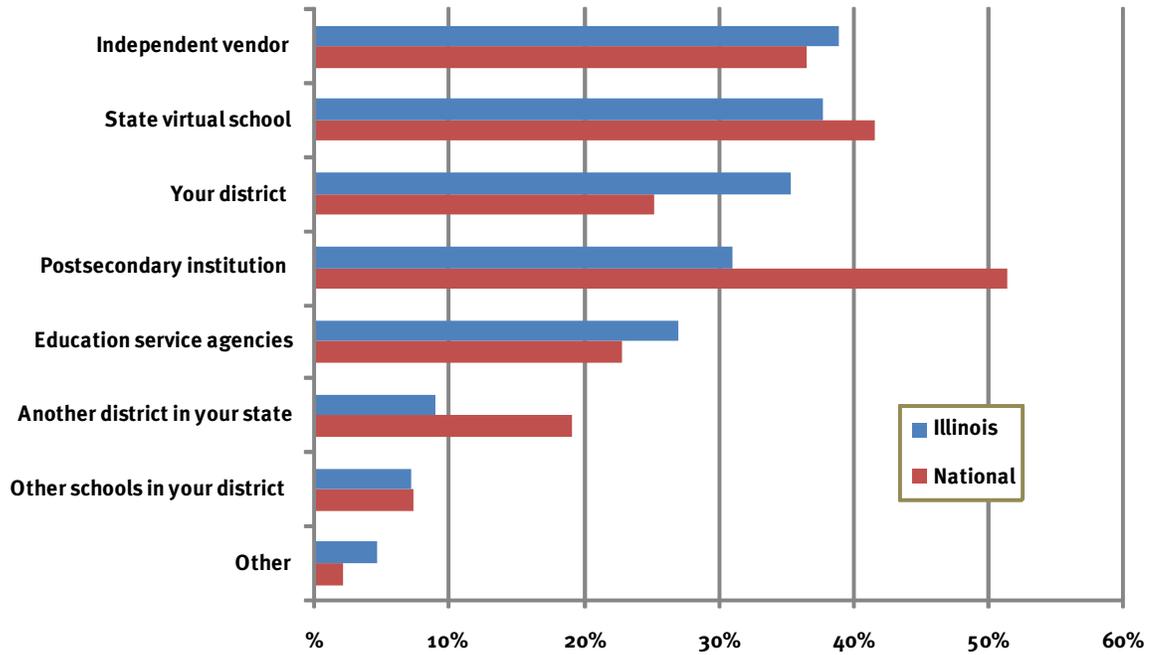
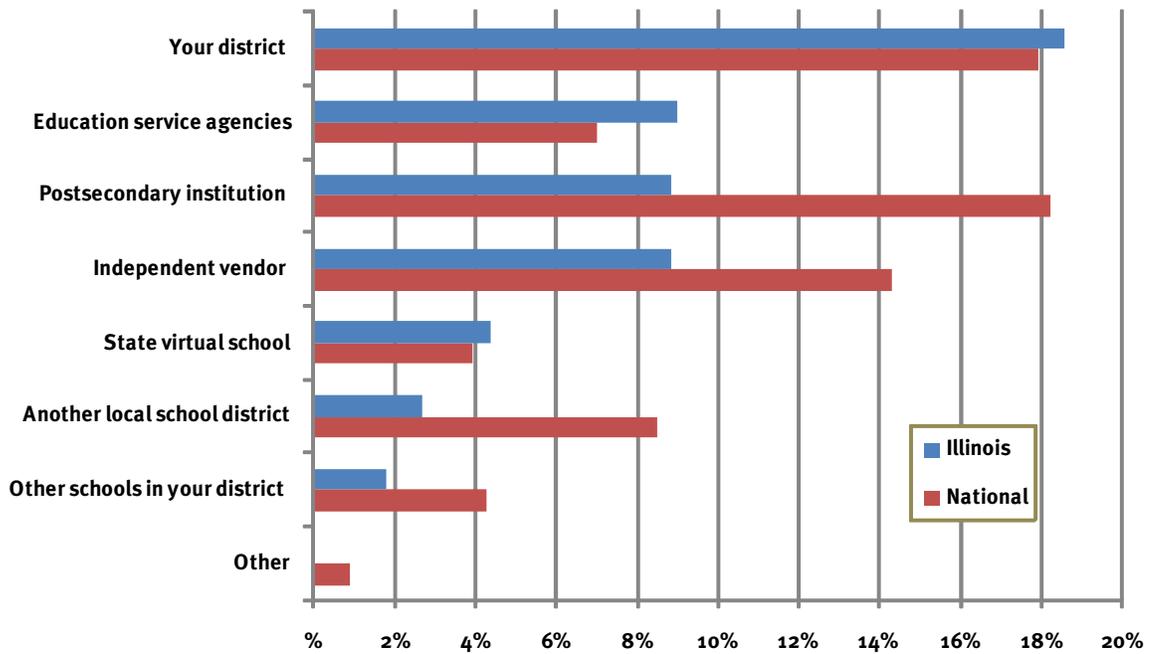


Figure 3C: Providers of Online Courses



Blended learning courses on the other hand, are more often provided by their own school district followed by education service agencies, postsecondary institutions and independent vendors. The rationale for this for blended learning courses is that school districts are tending to utilize in-house teachers and other staff to develop and teach these courses. Figures 3C and 3D provide comparisons to a national sample of high schools. The most significant difference in these comparisons is the greater reliance on postsecondary institutions at the national level especially for fully online courses.

Figure 3D: Providers of Blended/Hybrid Courses



Barriers to Online and Blended Learning

Figure 4A provides a summary of the responses to the question: "Regardless of whether or not your school is currently offering online or blended/hybrid courses, how much of a barrier are the following areas to offering or potentially offering fully online or blended/hybrid learning courses?" Concerns about course quality at 56.2 percent and cost factors at 53.8 percent were identified by a majority of the respondents. The need for teacher training and concerns about attendance-based funding also were mentioned by a substantial percentage of principals.

Figure 4A: Barriers to Offering Online or Blended Courses

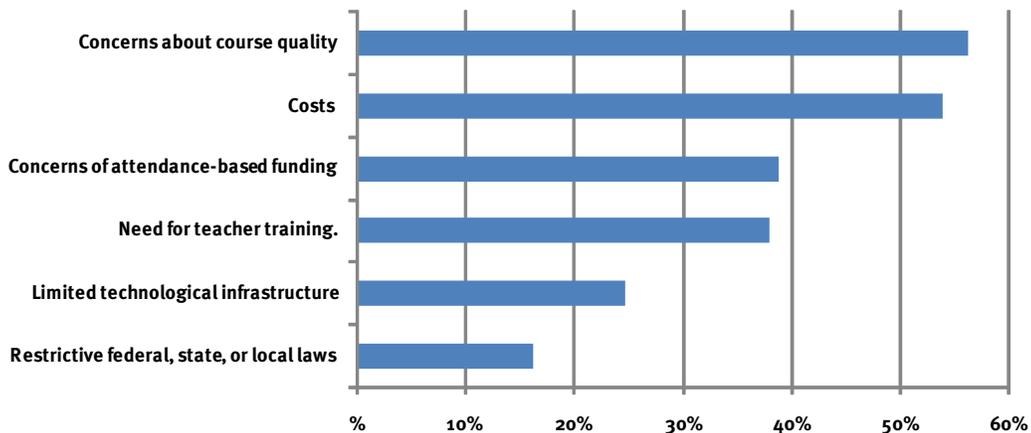
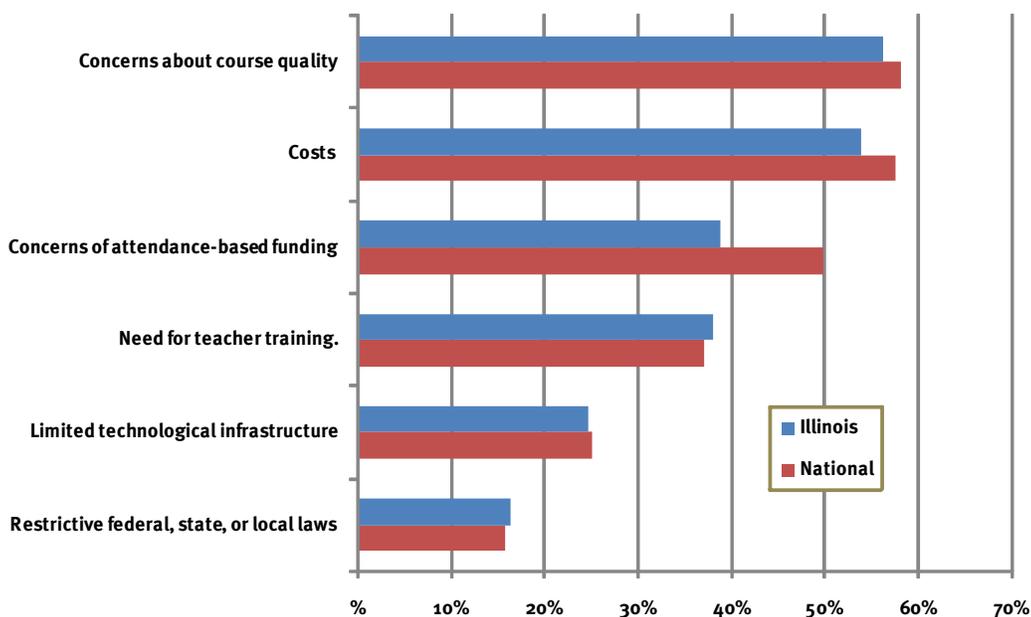


Figure 4B compares the responses of the Illinois principals to the national sample. The responses are comparable with the exception of "concerns for attendance-based funding" which was considered a more significant barrier among the national sample of principals.

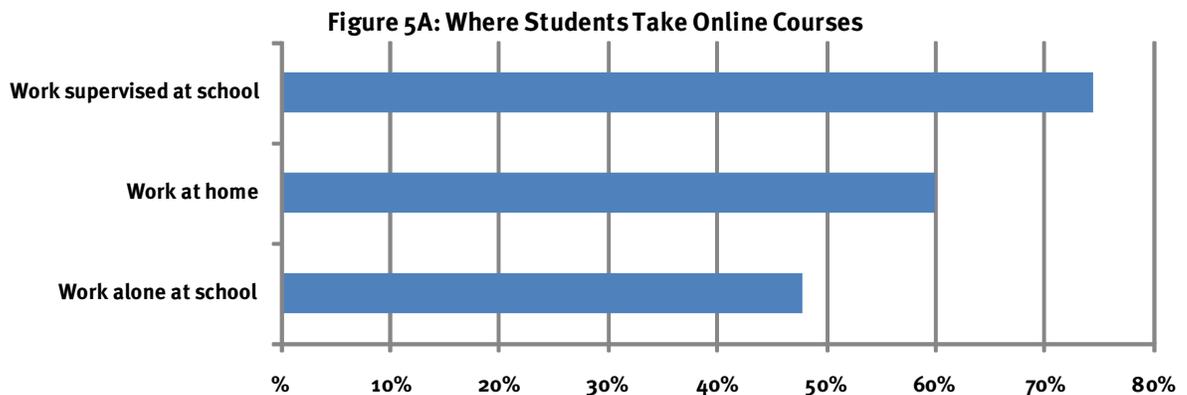
Figure 4B: Barriers to Offering Online and Blended Courses



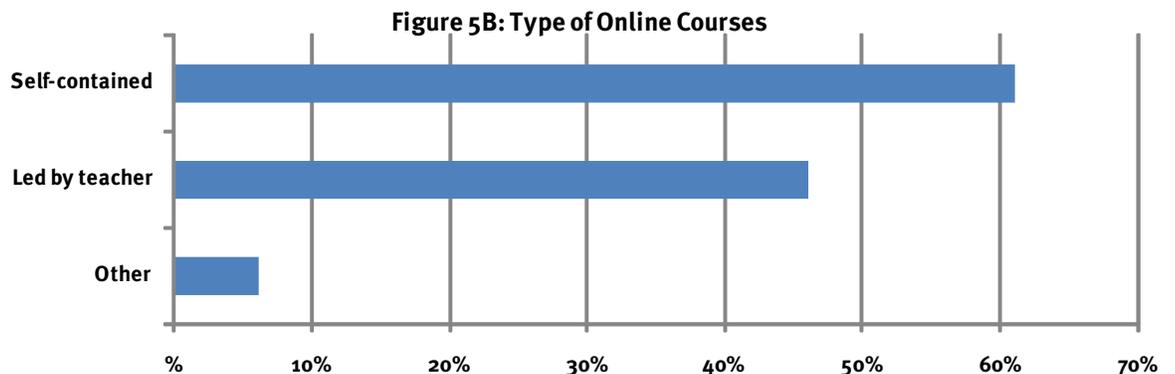
The Nature of Online and Blended Course Offerings

Not all online and blended courses are taught in the same manner. In order to capture some of these important differences in course design and delivery, the survey contained several questions regarding the nature of the online and blended learning course offerings specifically related to:

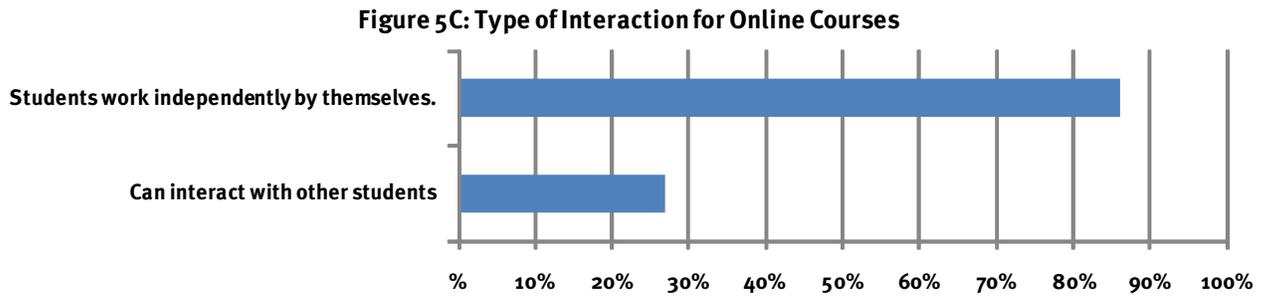
- Where (i.e., at home, in school) students take online and blended learning courses?
- Type (i.e., led by teacher or adult or self-contained) of online and blended courses?
- Interaction (i.e., allow for student interactions or students work independently) within online and blended courses?



Figures 5A, 5B and 5C provides summaries of the responses to these questions. The responses indicate that students work in several environments at the school (supervised and unsupervised) and at home although the highest response (74.4%) indicated that students work in these courses under the supervision of an adult at the school. Note that any single school could report more than one response for each of these questions - they are "check all that apply."



In terms of the type, respondents indicated that 61.1 percent were self-contained and 46.0 percent were led by a teacher or tutor. In terms of interaction, the vast majority (86.1%) indicated that students worked independently and did not interact with other students in online and blended courses.



VOICES FROM THE SCHOOLS

As part of this study, respondents were asked to comment and to offer their voices on any aspect of online or blended learning. Eighty-three principals offered their comments and insights. It is important for the readers of this study to get a feel for the voices of these respondents. The following quotes are presented to show the range of views, both positive and those expressing concerns, about online learning.

Positive Comments

"Any time we can enhance the quality of education for our students, we should do so! We are a small school and need to continue offering these opportunities for our kids."

"Great for credit recovery and to offer courses not otherwise available at the school."

"I believe that online and blended courses are the future of secondary education. Many colleges and universities utilize this type of course, and exposure to these types of courses for college bound students would help them better prepare for their college experience. This may also be a key for reaching students who are independent learners."

"Online courses have allowed our higher level students to take college level classes and gain college credit and high school credit at the same time. This opportunity is great for our students and expands our curriculum."

"Some students do not learn within the traditional school structure. Offering credit recovery courses via online is going to be an important component for us to graduate more students."

"We are a very small rural high school and these type courses allow our students to take more advanced classes and classes we are unable to offer otherwise."

"We primarily use technology for credit recovery for students that have failed classes, some students that are homebound, and considering the thought of online courses for foreign language courses."

Expressing Concerns

"Whereas these courses are important and teach the use of technology and can expand the curriculum, direct instruction can't be duplicated as far as teaching students the value of face to face communication and contact. Students are losing this skill of interpersonal relationships and communication."

"My concern with online courses is that they violate practically every tenet we believe to be true about effective teaching and learning. Research has consistently shown that the quality of the teacher is the greatest determining factor in the quality of a child's education."

"Face to face instruction monitors student concerns, problems, and/or impressions about instruction more effectively. Online, seemingly, is more of a "superficial" type of instruction."

"Generally, I like them as long as students cannot cheat. They are costly to schools however."

"In my personal and professional experiences, including taking some on-line and hybrid courses in my graduate work, the rigor is not there yet. It is also very difficult in and not beneficial for education to limit (correct word) the interaction between pupil and teacher for quality engaged learning and formative feedback."

"The real issue is challenging instruction with a union who feels such movement may impact jobs."

"My biggest concern would be that if we're going to do something new let's make sure that we do it to the best of our abilities. Right now, with limited or no training, we would not do it correctly and our students would not benefit."

DISCUSSION

Overall Comparison between Illinois and National Samples

In comparing the data in this study with those of a national sample of principals, most of the findings are comparable even though the present study was conducted two years later (the 2010-2011 academic year for this report vs. the 2008-2009 academic year for the national report). Online credit recovery courses are proliferating across the country as well as in Illinois. Concerns about costs and course quality continue to dominate the opinions of the principals in both Illinois and across the country. However, these concerns are not preventing the expansion of online learning. Unlike higher education which relies largely on in-house development of online and blended courses, high schools in Illinois and nationally use a number of providers and rather than develop courses in house. This is especially true for fully online courses.

Credit Recovery Leads the Way

Credit recovery courses are becoming the major type of application for online and blended learning in high schools. In Illinois, the picture fully supports this view and even shows an acceleration of the use of credit recovery as a means to give students a second chance to complete necessary coursework. The need for these courses varies but relates to students having not completed required coursework earlier in their high school careers due to illness, being homebound, scheduling conflicts, academic failure, etc. Students needing such courses make up a significant portion of the high school student population that subsequently drops out or is late in graduating. Many high schools, especially those in urban areas, have been forced to find solutions to their high school drop-out problems due to pressure from state education departments and the federal No Child Left Behind mandates to improve student outcomes. Online credit recovery is evolving into a major strategy for addressing the drop-out issue.

Online Learning Providers

In earlier national studies of online learning in K-12 school districts, postsecondary institutions and state virtual schools were the major providers of online and blended learning. Both this study of Illinois high school principals and the national study indicate that this has begun to change. While postsecondary institutions and state virtual schools continue to be major providers, independent vendors riding the credit recovery wave are evolving into the number one provider of online learning to high school students in Illinois and many other states. This could be especially true for those states that do not have a well-established state-supported virtual high school. In the future, it is likely that private companies will be providing other online courses beyond credit recovery.

The Pedagogy of Online Learning v. Graduation Rates

This study provides important insights into the pedagogy of online learning. Principals in Illinois expressed concerns about the quality of online instruction and at the same time have chosen to expand its use. Some see online learning as beneficial only for "higher-level students" while others see it as "superficial". Regardless, the data show that online learning, especially for lower-performing students via credit recovery, has evolved into the most popular type of online course offering. As indicated earlier in this discussion, other factors especially the desire to improve graduation rates for all students have pushed educators to use online courses for those most at risk of not completing their high school educations.

The data collected from the Illinois principals also indicate that the pedagogy of online learning is evolving differently in the high schools than in higher education where it has been used for many years. High schools are making greater use of adults (teachers, tutors, other supervisors) to assist students physically in their schools as they participate in online course activities. Students are more likely to be working on their online courses in their school's computer lab or library. This is especially desirable if many of the students enrolled in these courses need extra assistance as might be typical of those in credit recovery courses. The adult in the room can assist both for technical as well as for content or learning issues. This might also be desirable if many of the online courses are not teacher-led, student-to-student interactive environments but are self-contained, programmed instruction courses where most of the interaction is computer moderated and controlled. Much of the literature on online learning in higher and adult education documents the benefit of student interactions with each other as an important aspect of the learning experience. In the Illinois high schools, it appears that students are not relying on the online course as much as they are using face-to-face contact in school facilities. This needs to be examined further.

Barriers to Online Learning

In addition to pedagogical value, the Illinois principals in this study expressed concerns about cost, the need for teacher training and attendance-based funding. Their concerns are similar to those expressed in the national sample. However, their concern about attendance-based funding policies is considerably lower than principals in the national sample. The fact that Illinois high schools make significant use of teachers and other adults for supervising online learning students in school facilities, might minimize or reduce their concern regarding attendance-based funding.

CONCLUSIONS

The purpose of this study was to examine the role that online learning was playing in addressing the thoughts, concerns and issues facing Illinois high school principals. Data were collected from a sample of high school principals with respect to the extent, nature, and reasons for participating in online learning programs. An important aspect of this study was to compare the findings in Illinois to those collected from a national sample of high school principals. It is our conclusion that online learning and blended learning are making inroads into the high schools in Illinois comparably to those in other parts of the country, albeit at a somewhat slower rate.

The results of this study indicate that online and blended learning are becoming integral to a number of high school reform efforts, especially with regard to improving graduation rates, credit recovery, building connections for students to their future college careers, and differentiating instruction. However, while high schools especially in rural Illinois, are depending upon online and blended learning for many of their programs, concerns remain among educators about the quality of online instruction.

Future study and evaluation should concentrate especially on the efficacy of online credit recovery courses as they continue to evolve into the dominant type of online learning for the students at greatest risk. There need to be assurances that online credit recovery is not being used strictly as a convenient vehicle for improving graduation rates. In sum, the benefits, concerns, and costs related to online and blended learning are prime areas for future research as they become a significant focus in the dialogue on reforming the American high school at national, state, and local levels. Research concentrating on studying these issues is welcome at all levels.

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APPENDIX – DATA TABLES

FIGURE 1A: IMPORTANCE FOR OFFERING ONLINE OR BLENDED/HYBRID COURSES

	Percent
Credit recovery	73.6%
Provide courses not available	71.7%
Provide additional AP courses	60.0%
Provide for specific students	58.1%
Prepare for 21st century career skills	46.2%
Build linkages with colleges	43.4%
Reduce scheduling conflicts	42.3%
Extend the school day	41.5%
Certified teachers not available	38.3%
Extend the school year.	25.0%
Pedagogically more beneficial.	22.8%
Financially beneficial.	22.5%
Alleviate limited classroom space.	13.3%

FIGURE 1B: IMPORTANCE FOR OFFERING ONLINE OR BLENDED/HYBRID COURSES

	National	Illinois
Credit recovery	72.6%	73.6%
Provide courses not otherwise available	78.6%	71.7%
Provide additional AP courses	60.8%	60.0%
Provide needs of specific students	59.7%	58.1%
Prepare for 21st century career skills	46.2%	46.2%
Build linkages with colleges	37.2%	43.4%
Reduce scheduling conflicts	54.0%	42.3%
Extend the school day	37.7%	41.5%
Certified teachers are not available	33.7%	38.3%
Extend the school year	18.2%	25.0%
Pedagogically more beneficial	19.1%	22.8%
Financially beneficial.	30.4%	22.5%
Alleviate limited classroom space	24.4%	13.3%

FIGURE 2A: TYPES OF ONLINE COURSES OFFERED

	Percent
Credit Recovery	74.6%
Elective courses	50.0%
Required courses	30.5%
Remedial courses	29.7%
College Credit other than AP	21.2%
Advanced Placement courses	16.9%
Other	2.5%

FIGURE 2B: TYPES OF BLENDED COURSES OFFERED

	Percent
Credit Recovery	24.8%
Elective courses	19.0%
Remedial courses	17.4%
Required courses	10.8%
College Credit other than AP	10.7%
Advanced Placement (AP) courses	3.3%
Other	2.5%

FIGURE 2C: TYPES OF ONLINE COURSES OFFERED

	National	Illinois
Credit Recovery	68.0%	74.6%
Elective courses	61.7%	50.0%
Required courses	48.4%	30.5%
Remedial courses	33.5%	29.7%
College Credit other than AP	33.2%	21.2%
Advanced Placement courses	26.6%	16.9%
Other	2.5%	2.5%

FIGURE 2D: TYPES OF BLENDED COURSES OFFERED

	National	Illinois
Credit Recovery	28.7%	24.8%
Elective courses	32.6%	19.0%
Remedial courses	16.1%	17.4%
Required courses	29.6%	10.8%
College Credit other than AP	20.4%	10.7%
Advanced Placement courses	5.2%	3.3%
Other	2.6%	2.5%

FIGURE 3A: PROVIDERS OF ONLINE COURSES

	Percent
Independent vendor	38.9%
State virtual school	37.7%
Your district	35.4%
Postsecondary institution	31.0%
Education service agencies	27.0%
Another school district	9.0%
Other schools	7.2%
Other	4.6%

FIGURE 3B: PROVIDERS OF BLENDED/HYBRID COURSES

	Percent
Your district	18.6%
Education service agencies	9.0%
Postsecondary institution	8.8%
Independent vendor	8.8%
State virtual school	4.4%
Another school district	2.7%
Other schools	1.8%
Other	.0%

FIGURE 3C: PROVIDERS OF ONLINE COURSES

	National	Illinois
Independent vendor	36.5%	38.9%
State virtual school	41.6%	37.7%
Your district	25.2%	35.4%
Postsecondary institution	51.4%	31.0%
Education service agencies	22.8%	27.0%
Another district in your state	19.1%	9.0%
Other schools in your district	7.3%	7.2%
Other	2.1%	4.6%

FIGURE 3D: PROVIDERS OF BLENDED/HYBRID COURSES

	National	Illinois
Your district	17.9%	18.6%
Education service agencies	7.0%	9.0%
Postsecondary institution	18.2%	8.8%
Independent vendor	14.3%	8.8%
State virtual school	4.0%	4.4%
Another local school district	8.5%	2.7%
Other schools in your district	4.3%	1.8%
Other	.9%	.0%

FIGURE 4A: BARRIERS TO OFFERING ONLINE OR BLENDED COURSES

	Percent
Concerns about course quality	56.2%
Costs	53.8%
Concerns of attendance-based funding	38.8%
Need for teacher training.	38.0%
Limited technological infrastructure	24.6%
Restrictive federal, state, or local laws	16.3%

FIGURE 4B: BARRIERS TO OFFERING ONLINE AND BLENDED COURSES

	National	Illinois
Concerns about course quality	58.1%	56.2%
Costs	57.5%	53.8%
Concerns of attendance-based funding	49.9%	38.8%
Need for teacher training.	37.0%	38.0%
Limited technological infrastructure	25.1%	24.6%
Restrictive federal, state, or local laws	15.8%	16.3%

FIGURE 5A: WHERE STUDENTS TAKE ONLINE COURSES

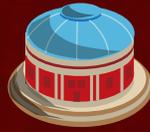
	Percent
Work supervised at school	74.4%
Work at home	59.8%
Work alone at school	47.9%

FIGURE 5B: TYPE OF ONLINE COURSES

	Percent
Self-contained	61.1%
Led by teacher	46.0%
Other	6.2%

FIGURE 5C: TYPE OF INTERACTION FOR ONLINE COURSES

	Percent
Students work independently by themselves.	86.1%
Students can interact with other students	27.0%



Using data collected from a state sample of principals in Illinois this study examines the role of online and blended instruction in addressing concerns and issues facing the American high school.

Key Findings

- Online credit recovery courses are proliferating across the country as well as in Illinois.
- Concerns about costs and course quality continue to dominate the opinions of the principals in both Illinois and across the country.
- Quality concerns are not preventing the expansion of online learning.
- High schools in Illinois and nationally use a number of external providers rather than develop courses in house.

Credit Recovery Leads the Way

Credit recovery courses are becoming the major type of application for online and blended learning in American high schools.

Online Learning Providers

Independent vendors riding the credit recovery wave are evolving into the number one provider of online learning to high school students.

The Pedagogy of Online Learning v. Graduation Rates

Principals in Illinois expressed concerns about the quality of online instruction and at the same time have chosen to use it more. The data also indicate that high schools are making greater use of adults (teachers, tutors, other supervisors) to assist students physically in their schools as they participate in online course activities.

Barriers to Online Learning

Illinois principals also expressed concerns about cost, the need for teacher training and attendance-based funding.

Sample

Two-hundred and ten high school administrators participated in this study. Their high schools come from all regions of the state and represent over one-quarter of all Illinois high school enrollments.



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