Making the Grade

Online Education in the United States, 2006

Midwestern Edition

BABSON Survey Research Group

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Midwestern Higher Education Compact

I. Elaine Allen and Jeff Seaman

Making the Grade

Online Education in the United States, 2006
Midwestern Edition

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March 2007

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Printed in the United States of America
9 8 7 6 5 4 3 2 1

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Data collection for this report was made possible by a grant from the Alfred P. Sloan Foundation. The Sloan Consortium (Sloan-C) acts as the publisher. In order to ensure objectivity, Sloan-C does not have editorial control over the survey design, data capture, data analysis, or presentation of the findings. The authors wish to thank the Sloan-C Publications Director, Kathryn M. Fife, for her efforts in improving the report, and Sloan-C itself for its publication and distribution efforts. Also, thanks to Ann Grindland and the staff at MHEC for their efforts on behalf of the Midwestern edition.

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Franklin W. Olin College of Engineering

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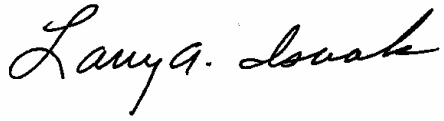
Welcome

This special Midwestern Edition of the latest national report, *Making the Grade: Online Education in the United States, 2006*, provides the first examination of the development and importance of online learning in the Midwest. Because of the exponential increase in online learning of all types in recent years, MHEC is partnering with the non-profit Sloan Consortium on this first MHEC-Sloan Consortium joint report. We believe that you will find this report to be an invaluable planning aid, providing you with the ability to compare your own responses to those of other institutions.

As you may know, the Sloan Consortium conducts an annual survey of the status of online learning in U.S. higher education. The national reports, together with the this Midwestern edition, makes it one of the most current, comprehensive, and widely quoted sources of information on the numbers and trends in online learning.

Sincerely,



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Copies of this and all of the reports in the series can be downloaded without charge from the Sloan Consortium web site at http://www.sloan-c.org/.

Established in 1991 as a statutorily created interstate compact, the Midwestern Higher Education Compact (MHEC) is charged with promoting regional cooperation and resource sharing in higher education. MHEC serves all nonprofit education and state government entities in the eleven-member states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, and Wisconsin.

Executive Summary

Making the Grade: Online Education in the United States, 2006: Midwestern Edition describes the state of online learning among higher education institutions in the eleven-state Midwestern Higher Education Compact (MHEC) region. This study is aimed at answering some of the fundamental questions about the nature and extent of online education. Supported by the Alfred P. Sloan Foundation and based on responses from over 550 Midwestern colleges and universities, the study addresses the following key questions:

Has the Growth of Online Enrollments Begun to Plateau?

Background: *For the past several years, online enrollments have been growing substantially faster than the overall higher education student body. However, last year's national study, while reporting the same numeric increase as the previous year, had a lower percentage growth rate. Could this be an early indicator that online enrollment growth has finally begun to plateau?*

The evidence: There has been no leveling of the growth rate of online enrollments; institutions of higher education report record online enrollment growth on both a numeric and a percentage basis.

- Nationally, nearly 3.2 million students were taking at least one online course during the fall 2005 term, a substantial 35 percent increase over the 2.3 million reported the previous year.
- The eleven MHEC Midwestern states represent about fifteen percent of online enrollments, with over 460,000 students taking at least one online course in fall 2005.

Who is Learning Online?

Background: *There is some evidence that online education appeals to a different type of student from those who participate in face-to-face instruction. Online students tend to be older and often hold additional employment and family responsibilities, as compared to the more traditional student. Do these differences mean that online students are taking different level courses or studying at different types of institutions?*

The evidence: The distribution of online students by level of study is similar to that of the general higher education student body, but the mix of schools at which they are enrolled is not.

- Online students, both nationally and in the Midwest, are overwhelmingly undergraduates, matching their proportion among the overall higher education student body.
- Online students, especially undergraduates, are more likely to be studying at associate's institutions than are their face-to-face contemporaries.

What Types of Institutions Have Online Offerings?

Background: *Previous reports in this series have shown a very uneven distribution of online course and program offerings by type of institution. Public institutions and the largest institutions of all types have consistently been at the forefront of online offerings. Those that are the least likely to offer online courses have been the small, private, four-year institutions.*

The evidence: This year's results show no major changes from previous patterns. The same types of institutions are at the forefront of online offerings.

- More than 98 percent of the very largest Midwestern institutions (more than 15,000 total enrollments) have some online offerings, which is more than double the rate observed for the smallest institutions.
- The proportion of Midwestern institutions with fully online programs rises steadily as institutional size increases, and about two-thirds of the very largest institutions have fully online programs, compared to only about one-sixth of the smallest institutions.
- Midwestern doctoral/research institutions have the greatest penetration of offering online programs as well as the highest overall rate (more than 90%) of having some form of online offering (either courses or full programs).
- Midwestern associate's institutions are teaching over six in ten (62.8%) of all Midwestern online undergraduate students.

Have Perceptions of Quality Changed for Online Offerings?

Background: *The first national study in this series found that a majority of chief academic officers rated the learning outcomes for online education "as good as or better" than those for face-to-face instruction. The following year's report displayed similar results. Do academic leaders hold the same opinion today, given the rapid growth in the numbers of online students?*

The evidence: By an increasing margin, most chief academic officers believe that the quality of online instruction is equal to or superior to that of face-to-face learning.

- In 2003, 56 percent of academic leaders in the eleven Midwestern states rated the learning outcomes in online education as the same or superior to those in face-to-face instructional settings. That number is now 62 percent.
- The proportion who believe that online learning outcomes are superior to those for face-to-face is still relatively small but has grown by 34 percent since 2003, from 10.2 percent to 13.7 percent.

What are the Barriers to Widespread Adoption of Online Education?

Background: *Previous studies have identified a number of areas of concern for the potential growth of online offerings and enrollments. Academic leaders have commented that their faculty often don't accept the value of online learning and that it takes more time and effort to teach an online course. To what extent do these leaders see these issues and others as critical barriers to the widespread adoption of online learning?*

The evidence: Problem areas identified in previous years are still seen as areas of concern among academic leaders.

- Only 7.2 percent of Midwestern chief academic officers agreed that there are no significant barriers to widespread adoption of online learning.
- More than half of Midwestern academic leaders cite the need for more discipline on the part of online students as a critical barrier.
- Faculty issues, including acceptance of online instruction and the need for greater time and effort to teach online, remain important barriers.
- Neither a perceived lack of demand on the part of potential students nor the acceptance of an online degree by potential employers was seen as a critical barrier.

What Is Online Learning?

The focus of this report is online education. To be consistent with previous work, we have applied the same definitions used in our prior national reports. These definitions were presented to the respondents at the beginning of the survey, and repeated in the body of individual questions where appropriate.

Online courses, the primary focus of this report, are those in which at least 80 percent of the course content is delivered online. Face-to-face instruction includes those courses in which zero to 29 percent of the content is delivered online; this category includes both traditional and Web facilitated courses. The remaining alternative, blended (sometimes called hybrid) instruction is defined as having between 30 percent and 80 percent of the course content delivered online. While the survey asked respondents for information on all types of courses, results of the analysis of blended options will be presented in future publications; the current report is devoted to online instruction only.

While there is a great deal of diversity among course delivery methods used by individual instructors, the following is presented to illustrate the prototypical course classifications used in this study.

Proportion of Content Delivered Online	Type of Course	Typical Description
0%	Traditional	Course with no online technology used — content is delivered in writing or orally.
1 to 29%	Web Facilitated	Course that uses web-based technology to facilitate what is essentially a face-to-face course. Uses a course management system (CMS) or web pages to post the syllabus and assignments, for example.
30 to 79%	Blended/Hybrid	Course that blends online and face-to-face delivery. Substantial proportion of the content is delivered online, typically uses online discussions, and typically has some face-to-face meetings.
80+%	Online	A course where most or all of the content is delivered online. Typically have no face-to-face meetings.

Schools may offer online learning in a variety of ways. The survey asked respondents to characterize their face-to-face, blended, and online learning by the level of the course (undergraduate, graduate, continuing education, etc.). Likewise, respondents were asked to characterize their face-to-face, blended, and online program offerings for certificate, associate's, bachelor's, master's, doctoral, and professional programs.

Detailed Survey Findings

How Many Students Are Learning Online?

Online enrollment growth continues unabated, tops 3 million.

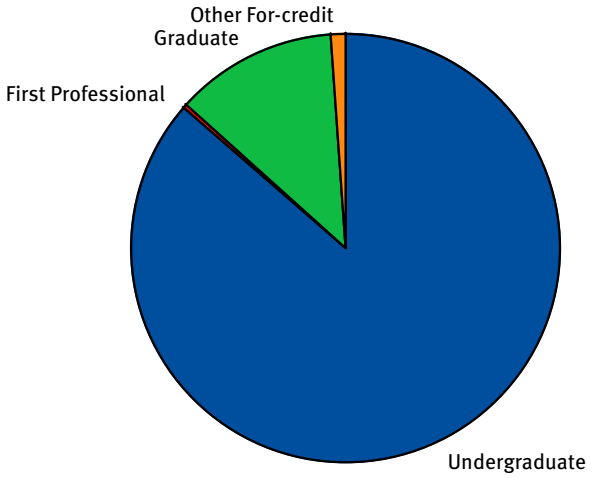
In 2003, the first in the series of national annual reports on the state of online learning in U.S. higher education, *Sizing the Opportunity: The Quality and Extent of Online Education in the United States, 2002 and 2003* was released. The initiation of this annual study emerged from a search for an authoritative answer to a simple question: "How many students are learning online?" The answer determined by that first study was that for the fall 2002 term, slightly more than 1.6 million students took at least one online course at U.S. degree-granting institutions. This same study asked institutions to predict the rate of growth (or decline) in their online enrollments for the following year, and respondents projected an average annual growth rate of 19.8 percent. The second annual study, *Entering the Mainstream, The Quality and Extent of Online Education in the United States, 2003 and 2004*, found that the overall growth in the number of online learners actually exceeded the optimistic projections of the previous year, increasing at a 22.9 percent rate, to reach 1.9 million online students nationally for fall 2003.

Students Taking at Least One Online Course – Midwestern States – Fall 2005

Undergraduate	367,673
First Professional	1,329
Graduate	52,702
Other for-credit	4,158
Total	462,970

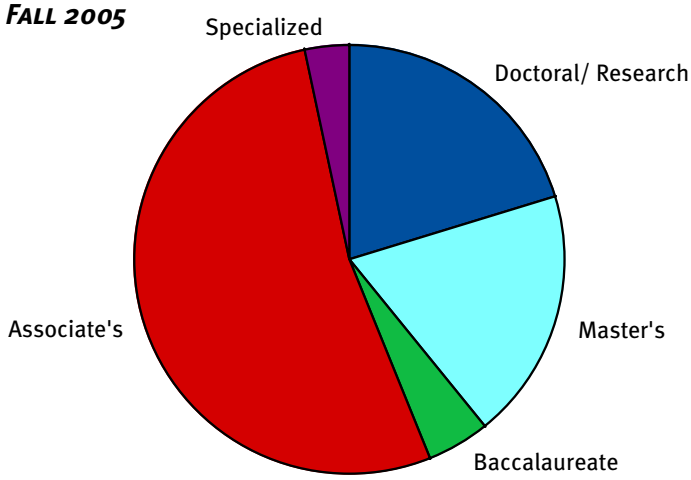
This national increase of about 360,000 new online learning students in 2004 was matched by the results of the 2005 study, *Growing by Degrees, Online Education in the United States, 2005*, with more than 2.3 million students taking at least one online course. Despite a similar increase in numerical terms, the larger base population meant that the actual percentage growth reported in the 2005 study was somewhat lower (18.2%) than both the previous year's rate and institutions' own predictions of their rate of growth. Some observers had postulated that this slowing of the national growth rate might mark the beginning of a plateau in online enrollments.

Level of Student Taking at Least One Online Course - Midwestern States- Fall 2005



Contrary to such expectations, the results from the fourth national study clearly show there has been no leveling in the growth rate. Higher education institutions taught nearly 3.2 million online students during the fall term of 2005, an increase of about 850,000 students and a growth rate of 35 percent. This year marks both the largest absolute increase in the number of online students and the largest percentage increase. Students taking at least one online course now represent close to 17 percent of the 17 million higher education students.

Type of Institution for Students Taking at Least One Online Course - Midwestern States- Fall 2005



The number of students taking at least one online course is now over 460,000 in the eleven Midwestern states, up from 340,000 the previous year. This represents a one-year growth rate of 35 percent; the same as observed nationally. Who are these nearly half-million Midwestern online students? The overwhelming majority (over 80%) are studying at the undergraduate level with only 12 percent taking graduate level courses and the remainder working towards a first professional degree (chiropractic, dentistry, medicine, optometry, veterinary medicine, law, etc.) or in some other for-credit course.

There are only small differences in the distribution by level of study between online students and the general higher education student body. Using figures from the most recent *Digest of Education Statistics, 2005* to compare enrollment patterns shows the proportion of undergraduates among Midwestern online students (87.2%) is slightly higher than the proportion of undergraduates among all Midwestern higher education students (84.9%), while graduate level students are slightly underrepresented (12.1% of the online population versus 12.5% of the general Midwestern student population). The largest difference is among first professional degree students, who comprise 2.2% of the online population compared to only 0.3% of the overall student body at Midwestern institutions.

Students Taking at Least One Online Course – Midwestern States – Fall 2005

	Doctoral/ Research	Master's	Baccalaureate	Associate's	Specialized
Undergraduate	49,471	55,503	19,225	229,625	11,727
First Professional	629	73	0	0	627
Graduate	23,825	25,337	1,254	19	2,177
Other for-credit	460	1,482	143	1,538	535
Total	93,719	86,558	20,759	243,122	15,117

Examining enrollment patterns by institution type yields strikingly different results between online education and all of higher education. More than half (52.9%) of all Midwestern online students are studying at two-year associate's institutions, compared to 34.8 percent of the Midwestern higher education student population (*Digest of Education Statistics, 2005*). This pattern is just as pronounced among undergraduate-level students, with associate's institutions teaching over six in ten (62.8%) of all Midwestern undergraduate online students (compared to 41% of all Midwestern undergraduates). Midwestern associate's institutions are clearly making more inroads among online learners than they have for the higher education student population in general.

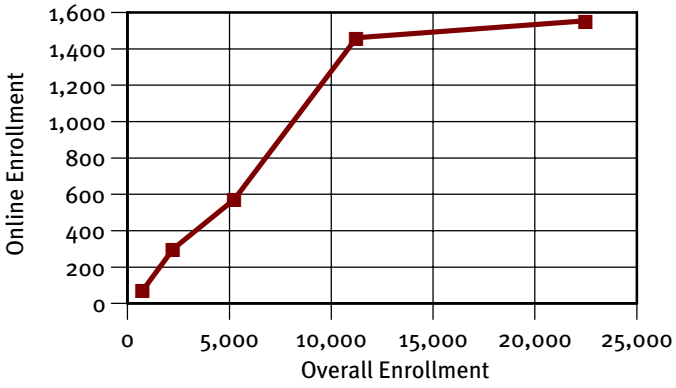
As might be expected, the largest institutions teach the greatest number of online students. This is due not just to their larger size translating into a larger absolute number of students, but also because the larger the institution, the more likely it is to have developed online courses and online programs.

Mean Number of Online Students per Institution – Midwestern States – Fall 2005

	Doctoral/ Research	Master's	Baccalaureate	Associate's	Specialized
Undergraduate	881	424	119	1,019	100
First Professional	11	1	0	0	5
Graduate	424	194	8	0	19
Other for-credit	8	11	1	7	5

Institution size has a clear impact on the average number of online students at institutions. The larger institutions (overall enrollments of 7,500 or more) are teaching an average of about 1,500 online students at the undergraduate level. This compares to an average enrollment of about 600 online students for the next smaller-sized institution type (those with overall enrollments between 3,000 and 7,499). The average number of online students enrolled is proportional to institutional size in general, although mean undergraduate online enrollment levels off for the largest institutions (those with overall enrollments greater than 15,000). The proportion of the student population taking at least one online course has begun to reach a significant level for all except the very smallest Midwestern institutions.

Mean Undergraduate Online Enrollment by Size of Institution - Midwestern States - Fall 2005



Mean Number of Online Students per Institution – Midwestern States – Fall 2005

	Under 1500	1500–2999	3000–7499	7500–14999	15000+
Undergraduate	72	299	573	1,461	1,554
First Professional	2	1	1	0	10
Graduate	6	19	101	163	323
Other for-credit	3	6	14	0	7

Not surprisingly, the doctoral/research institutions have the largest average online enrollments since they are more likely on average to be the largest schools. Associate's institutions also have a sizable average online enrollment (more than 1,000 undergraduate students per institution), but the large number of associate's institutions is what accounts for the large number of online students at such schools. Midwest baccalaureate and specialized institutions lag far behind in the average number of online students, with only about 130 per institution.

Who Offers Online Courses and Programs?

The largest institutions continue to lead in online offerings.

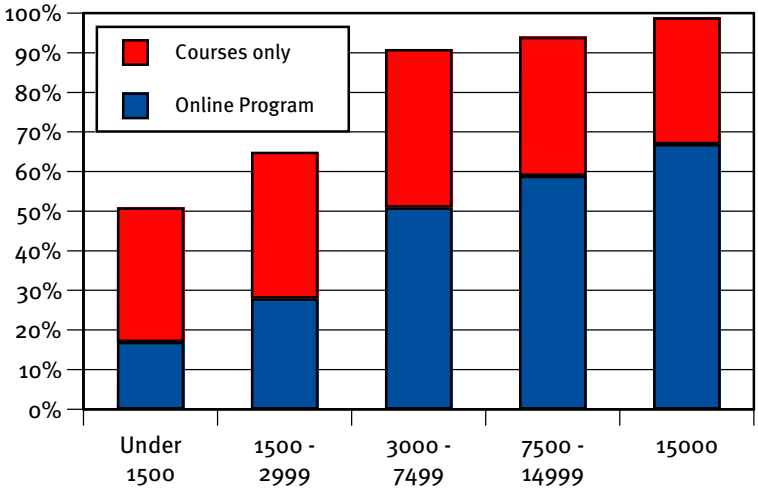
Previous national reports in this series have shown a very uneven distribution of online course and program offerings by type of institution. Public institutions and the largest institutions of all types have consistently been at the forefront of online offerings. Those that are the least likely to offer online education have been the small, private, four-year institutions. This year's results show no major changes to that pattern.

Online Offerings – Midwestern States – Fall 2005

Online program	36.9%
Courses only	35.9%
No online	27.2%

The preeminence of public institutions among the providers of online education is evident again this year. Almost all (96%) of the public institutions in the eleven-state Midwestern region offer some form of online course or program. This compares to about one-half (50%) of private institutions.

Online Offerings by Size of Institution - Midwest Institutions - Fall 2005



Not all schools offer online courses, and not all schools that have online courses offer fully online programs. Examining the pattern of online offerings does show some interesting patterns when the results are compared to the distribution of online students. Midwestern doctoral/research institutions, which enroll 15 percent of all online students, have the greatest penetration of offering online programs as well as the highest overall rate (more than 90%) of having some form of online offering (either courses or full programs). Although associate's schools have by far the largest contingent of online students, they trail doctoral/research and match master's institutions in the proportion with online programs. This matches the distribution for the average number of online students per institution, where these three types of institutions were ranked in the same order. The lower proportion of associate's institutions having online offerings coupled with their larger total enrollment speaks to both the larger numbers of this type of institution and to the possibility of a few associate's institutions with very large online enrollments. Only a minority (36% Midwest, 45% nationally) of baccalaureate institutions provide any form of online offerings.

Online Offerings – Midwestern States – Fall 2005

	Doctoral/ Research	Master's	Baccalaureate	Associate's	Specialized
Online program	69.6%	44.9%	17.2%	45.6%	18.9%
Courses only	21.4%	36.8%	19.2%	49.1%	40.2%
No online	8.9%	18.4%	63.6%	5.3%	41.0%

There is a very strong positive relationship between institution size and online program offerings: the larger the institution, the more likely it is to have a completely online program, and the more likely it is to have some form of online offering. Virtually all (98%) of the very largest Midwestern institutions (over 15,000 total enrollments) have some online offerings, which is almost double the rate observed for the smallest institutions. The proportion of institutions with fully online programs also rises steadily as institution size increases, and about two-thirds of the very largest institutions have fully online programs, compared to only about one-sixth of the smallest institutions.

In for the Long Term?

The proportion of academic leaders reporting online education as critical to their long-term strategy continues to grow.

One criticism of online education has been that while it may serve some students for some specialized areas, it may not be well suited to meet the core needs of higher education. Our previous studies have addressed several aspects of this belief, with mixed results. Topics investigated have included perceptions of the quality of online courses, faculty acceptance (both reported later in this report), core/adjunct faculty mix, and the importance of online education to long-term institutional strategy. The 2005 national study reported that schools were using the same mix of core and adjunct faculty for their online offerings as they were for their face-to-face courses.

Online Education is Critical to the Long-term Strategy of my Institution – Midwestern States

	2003	2004	2005	2006
Agree	50.9%	50.1%	49.7%	58.8%
Neutral	36.3%	34.7%	32.9%	25.6%
Disagree	12.8%	15.3%	17.4%	15.6%

For online education to continue its rapid growth, the chief academic officers who are planning tomorrow's educational offerings must perceive it as important. Chief academic officers were asked again this year to rate their level of agreement with the statement that online education is "critical" to the long-term strategy of their school. The proportion of Midwestern chief academic officers who agree with this statement hovered at the 50 percent level for the previous three years. This year's results show a notable increase in agreement level to 58.8 percent, which is about the same as the agreement level on this question nationwide.

Online Education is Critical to the Long-term Strategy of my Institution – Midwestern States

	Doctoral/ Research	Master's	Baccalaureate	Associate's	Specialized
2006	68.4%	58.1%	37.7%	74.2%	53.6%
2005	56.9%	45.4%	32.6%	69.2%	38.6%
2004	53.5%	52.1%	22.7%	70.4%	44.8%
2003	62.3%	43.8%	33.5%	69.1%	43.2%

Almost all types and sizes of institutions in the eleven-state Midwestern region show a recent increase in reporting that online education is critical to their long-term strategy.

Associate's and doctoral/research institutions have maintained consistently high levels of agreement over all four years. Over two-thirds of both institution types now report that online education is critical to their long-term strategy. Master's institutions began the period with lower levels of agreement and continue to lag behind associate's and doctoral/research institutions. Baccalaureate institutions, both nationally and in the Midwest, have consistently been the most negative towards online education. Midwestern specialized institutions show the largest one-year increase in agreement in 2006; a majority of these institutions now report online is a critical part of their long-term strategy.

Are These New Students?

The belief that online education serves new students is pervasive.

A critical question for those who support online education is whether online learning is merely a different way to serve the existing student base, or whether it provides opportunities for an entirely new group of students. Measuring the specific characteristics of online students is beyond the scope of this study, but we are able to probe the beliefs of those running and planning both face-to-face and online programs. Widespread belief that online education provides access to those who would not otherwise be able to attend college on campus is evident when chief academic officers were asked the degree to which "online education reaches students not served by face-to-face programs."

Online Education Reaches Students Not Served by Face-to-face Programs – Midwestern States

Agree	72.8%
Neutral	25.6%
Disagree	1.6%

There is an overwhelming level of agreement with this statement among all Midwestern institutions. Unlike virtually every other opinion about online education that we have measured in the four years of these studies, there appears to be no difference among the various types and sizes of institutions in their agreement with this statement. The pattern of Midwestern responses mirrors the national numbers; between two-thirds and three-quarters of all institutions consistently agree with this statement.

Online Education Reaches Students Not Served by Face-to-face Programs – Midwestern States

	Doctoral/ Research	Master's	Baccalaureate	Associate's	Specialized
Agree	72.7%	79.4%	72.1%	72.0%	65.5%
Neutral	23.6%	20.6%	26.6%	26.1%	31.9%
Disagree	3.6%	0.0%	1.3%	1.9%	2.6%

While it is clear that academic leaders believe that online education serves a new base of students, it is not clear whether they believe that it serves *only* those who would not otherwise be served. There is some evidence that many administrators, especially those using online offerings to provide schedule flexibility for their on-campus students or to free up limited physical space such as classrooms, believe that online learning serves both types of students. Determining the relative proportions of how online education serves these two groups is beyond the scope of this study.

Learning Outcomes

A majority of academic leaders continue to believe learning outcomes for online instruction are as good as or better than those for face-to-face instruction.

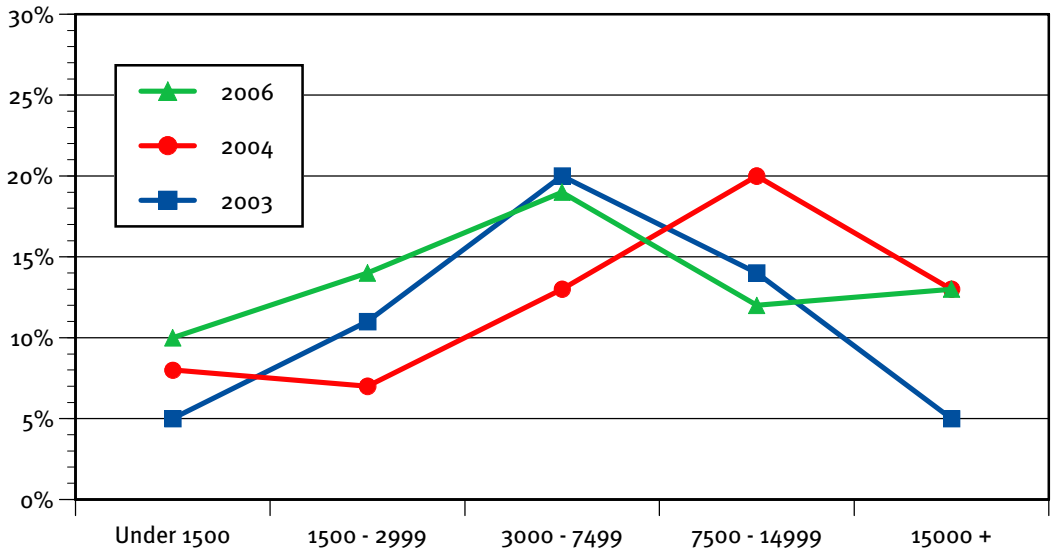
The most continually surprising survey finding to those new to online instruction is that a majority of chief academic officers rated learning outcomes for online instruction as the same or superior to those for face-to-face instruction. This result was first observed in 2003, when 56 percent of Midwestern and 57 percent of national academic leaders responded that the learning outcomes in online education were on a par or better than those for face-to-face instruction. This was by no means universal endorsement of the quality of online courses, as over 40 percent of Midwestern academic leaders felt it to be inferior. Nevertheless, the consistency of this majority response and the small but measurable increase in this rating continues to be at odds with the lingering belief that sacrificing quality necessarily results from moving instruction online.

Learning Outcomes in Online Education Compared to Face-to-face – Midwestern States

	2003	2004	2006
Superior	0.0%	0.6%	1.7%
Somewhat superior	10.2%	9.9%	12.0%
Same	45.6%	46.3%	48.0%
Somewhat inferior	32.1%	30.1%	29.5%
Inferior	12.1%	13.1%	8.7%

Results for 2004 were very similar, with about 57 percent of chief academic officers rating the learning outcomes for online instruction as equal to or better than those of face-to-face courses. The most recent results have 62 percent of Midwestern respondents rating the learning outcomes as equal to or superior – a small but steady increase. The results for the Midwestern region are similar to those for the nation as a whole, but display a lower overall level of agreement. Both Midwestern and national results show an improvement between 2003 and 2006 among those rating online as superior to face-to-face instruction, but the level of change is small. Doctoral/research institutions both nationally and among Midwestern states are the most likely to rate online learning outcomes as superior to face-to-face instruction. However, the proportion of Midwestern doctoral/research institutions which rated online as superior in 2006 lags behind the national figure (19% vs. 28% nationally).

Proportion Reporting Learning Outcomes for Online are Superior to Face-to-face by Size of Institution and Year - Midwestern States



Nationally, there is a consistent linear pattern by size of institution; the larger the institution the more favorable its opinion towards online learning outcomes. The Midwestern institutions do not show this same linear relationship by size of institution. Similar to the national results, the smallest Midwestern institutions are the least positive. However, the pattern among mid- and large-sized institutions is different, with the mid-sized Midwestern institutions (3,000-7,499 enrollments) more positive than the large-sized institutions.

Barriers to Widespread Adoption of Online Learning

Fewer than 8 percent of chief academic officers believe there are no significant barriers.

Chief academic officers have the primary responsibility for the conduct and planning of each school's academic offerings, so their opinions about online education play a critical role in understanding how and where online may continue its growth. These academic leaders are very positive about a number of aspects of online education. Previous reports in this series have shown that they believe students are at least as satisfied with online instruction as they are with face-to-face classes, that evaluating the quality of online instruction is no more difficult than for face-to-face, that online education is part of their long-term strategy, and that an increasing majority view the quality of online education as the same or better than face-to-face instruction.

A number of concerns have been apparent as well. Chief academic officers have reported that online instruction takes more time and effort than face-to-face courses, that students need more discipline to succeed in online courses, and that much of their faculty have yet to accept the value of online instruction.

There are No Significant Barriers to Widespread Adoption of Online Learning – Midwestern States

Agree	7.2%
Neutral	41.0%
Disagree	51.8%

Previous studies have noted the dichotomy of chief academic officers' positions. On the one hand, they have a high opinion of a number of aspects of online learning, have made it part of their long-term strategy, and are presiding over impressive levels of growth in online enrollments. On the other hand, their issues about faculty acceptance and the time and effort required to teach online may put significant limits on how rapidly their online programs can grow. This year's study revisits a number of these concerns to see if the substantial growth in the numbers of online learning students has translated to changes in attitudes on these potential problem issues. Do these academic leaders see significant barriers to the widespread adoption of online learning?

The short answer is that most Midwestern academic leaders see significant barriers to widespread adoption of online learning; only 7.2 percent of all chief academic officers reported that "there are no significant barriers to widespread adoption of online learning." This belief is pervasive; even among those who are the most positive towards online instruction (academic leaders at the largest institutions); only 13 percent believe that there are no significant barriers.

There are No Significant Barriers to Widespread Adoption of Online Learning – Midwestern States

	Under 1500	1500–2999	3000–7499	7500–14999	15000+
Agree	7.0%	0.0%	5.0%	20.8%	13.1%
Neutral	37.4%	44.1%	46.4%	31.9%	42.6%
Disagree	55.5%	55.9%	48.6%	47.2%	44.3%

The inclusion of the phase "significant barrier" in the question wording is deliberate, to differentiate between normal problems of growth for any type of program and those that the academic leaders saw as having far more impact. Survey respondents were presented with a list of possible barriers, and asked to rate degree to which they considered these to be "significant barriers" to the widespread adoption of online learning. The choices included those issues identified by our previous studies, as well as questions about the potential demand and acceptance of online instruction.

The most commonly cited barrier by Midwestern academic leaders of almost every institutional size and type was that "students need more discipline to succeed in online courses." Over one-half (56.7%) of all Midwestern institutions agreed that this represents a significant barrier, with results ranging from a low of 34.5 percent (doctoral/research institutions) to a high of 67.9 percent (associate's institutions). No other factor was close; the next-most cited issue, "greater faculty time and effort required to teach online," was mentioned by fewer than 40 percent (37.8%) of chief academic officers.

Barriers to Widespread Adoption of Online Learning (Percent Agreeing) – Midwestern States

Students need more discipline to succeed in online courses	56.7%
Greater faculty time and effort required to teach online	37.8%
Lack of acceptance of online instruction by faculty	35.3%
Online education costs more to develop and deliver	25.7%
Lack of acceptance of online degrees by potential employers	11.5%
Lack of student demand for online courses and degrees	3.1%

It is interesting to note that those institutions which are the most engaged in online education and the most positive about its future are also most likely to cite the need for more discipline on the part of students as a barrier to widespread adoption of online education. It may be that these institutions perceive that self-discipline is a barrier for most of their students, or it may be that experienced institutions are simply more aware of the issue of "self-discipline" than those who are less experienced with online education.

Faculty at My School Accept the Value and Legitimacy of Online Education – Midwestern States

Agree	19.9%
Neutral	65.6%
Disagree	14.4%

This overall pattern of results among Midwestern institutions masks some important differences among institutional subgroups. Faculty time and effort (34.5%) was equal in importance for Midwestern doctoral/research institutions as the issue of student self-discipline (34.5%). As might be expected, those with the greatest numbers of online students (doctoral/research, master's, and associate's schools) had few worries about student demand. Baccalaureate institutions were the only group to report any notable level of concern with lack of student demand, but only a small minority (7.1%) of these institutions rated this factor as a significant barrier.

The question of acceptance of an online degree by potential employers was near the bottom of the list of concerns, with the three online leaders (doctoral/research, master's, and associate's schools) again showing a lower rate of concern with this factor relative to baccalaureate institutions. Clearly, institutions with the greatest average number of online students have relatively little concern that student demand or employer acceptance will be a significant barrier to the growth of online courses and programs.

An economic and logistic issue – that faculty need greater time and effort to teach online – is the second-most often cited significant potential barrier for all but baccalaureate institutions. Results from last year's report indicated that institutions with the most experience with online instruction are the most concerned with this issue. Interestingly, a majority of respondents (58%) to last year's survey felt there was no difference in faculty time and effort between online and face-to-face teaching. It appears that virtually all of those who agree that it takes more faculty time and effort to teach online (35% from last year's study) also believe that this issue is a critical barrier (37.8% this year).

Barriers to Widespread Adoption of Online Learning (Percent Agreeing) – Midwestern States

	Doctoral/ Research	Master's	Baccalaureate	Associate's	Specialized
Students need more discipline to succeed in online courses	34.5%	55.6%	48.1%	67.9%	62.7%
Greater faculty time and effort required to teach online	34.5%	35.9%	33.8%	33.5%	55.5%
Lack of acceptance of online instruction by faculty	26.3%	35.7%	59.6%	19.5%	37.5%
Online education costs more to develop and deliver	21.1%	26.3%	24.7%	24.4%	30.6%
Lack of acceptance of online degrees by potential employers	10.5%	1.5%	20.8%	9.7%	14.8%
Lack of student demand for online courses and degrees	3.8%	1.5%	7.1%	0.9%	2.6%

The issue of faculty acceptance of online education has been an important one for academic leaders since the first survey. Results from this year show no significant changes. Only one in five academic leaders (19.9%) believes that their faculty "accept the value and legitimacy of online education." This number has shown little change in acceptance over the course of the research (22.9% in 2003 and 25.9% in 2005). The results for 2006 remain very close to those recorded in 2003 for public and private nonprofit institutions. The proportion of academic leaders who believe that their faculty accept the value of online education is nowhere near a majority for any of these institutional categories.

Faculty at My School Accept the Value and Legitimacy of Online Education – Midwestern States

	Public			Private nonprofit			Private for-profit		
	2003	2005	2006	2003	2005	2006	2003	2005	2006
Agree	33.6%	36.9%	26.6%	14.7%	17.2%	13.6%	**	**	**
Neutral	65.6%	57.8%	67.9%	70.2%	63.5%	63.5%	**	**	**
Disagree	0.8%	5.3%	5.5%	15.1%	19.3%	22.9%	**	**	**

** Results withheld to protect the privacy of reporting institutions.

Survey Methodology

The 2006 Sloan Survey of Online Learning was supported by a grant from the Alfred P. Sloan Foundation, conducted by the Babson Survey Research Group, and published by the Sloan Consortium. In order to ensure objectivity, neither the Sloan Foundation nor the Sloan Consortium had editorial control over the survey design, data capture, data analysis, or presentation of the findings.

The sample is composed of all active, degree-granting institutions of higher education open to the public in the eleven MHEC Midwestern states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, and Wisconsin. An email invitation and two reminders with links to a web-based survey were sent to chief academic officers at these institutions. If there was no designated chief academic officer, the survey was sent to the president of the institution.

Data for this analysis also come from a data collection partnership with the College Board, which now includes questions on online learning as part of its extensive data collection effort for its Annual Survey of Colleges. The survey team worked with the Midwestern Higher Education Compact (MHEC) on a joint outreach to schools in the MHEC-member states. Nationally, the survey universe contains 4,491 institutions; a total of 2,472 responses were received, representing a 55.0 percent overall response rate. Of these, 2,251 responded to a sufficient number of questions to be included in this analysis (50.1%). The Midwestern survey universe is composed of 706 institutions; a total of 573 responses were received (81.2% response rate) with 520 responding to a sufficient number of questions to be included in this analysis (73.7%). These responses have been merged with the data from previous survey years (994 national and 226 Midwestern in 2003, 1,170 national and 282 Midwestern in 2004, and 1,025 national and 205 Midwestern responses in 2005) for examination of changes over time.

Data were linked to the College Board's Annual Survey of Colleges and to the federal Integrated Postsecondary Education Data System database to provide the institutional characteristics used in the analysis. A very small number of institutions are omitted from the results when their classifying data is unknown. Results presented by size of the institution, for example, omit institutions for which total enrollment is not known. This can lead to slightly different totals of the number of online learners reported in different tables. Responders and nonresponders were compared to create weights, if necessary, to ensure that the survey results reflected the characteristics of the entire population of schools. The responses are compared for 35 unique categories based on the 2005 Carnegie Classification of Institutions of Higher Education (http://www.carnegiefoundation.org). To ensure that a different response rate from schools in MHEC-member states did not bias the results, weights were computed independently for schools in MHEC states and for those in other states. These weights provided a small adjustment to the results allowing for inferences to be made about the entire population of active, degree-granting institutions of higher education in the United States and the Midwestern states.

Note: *To encourage participation and ensure objectivity, respondents were promised that no individual-level responses would be released. Results are not reported for table cells that contain a small number of institutions, to prevent the "guessing" of individual responses. No results are presented for Midwestern for-profit institutions for this reason.*

Appendix

How Many Students Are Learning Online?

Students Taking at Least One Online Course – Midwestern States – Fall 2005

	Under 1500	1500–2999	3000–7499	7500–14999	15000+
Undergraduate	17,113	50,855	85,092	118,719	95,894
First Professional	513	114	75	0	628
Graduate	1,327	3,197	15,057	13,205	19,916
Other For-Credit	655	1,008	2,058	0	436
Total	19,763	57,486	116,382	132,490	136,849

Who Offers Online Courses and Programs?

Online Offerings – Midwestern States – Fall 2005

	Public	Private, nonprofit	Private, for-profit
Online Program	55.1%	19.6%	**
Courses Only	41.3%	30.7%	**
No online	3.5%	49.7%	**

** Results withheld to protect the privacy of reporting institutions.

Online Offerings – Midwestern States – Fall 2005

	Under 1500	1500–2999	3000–7499	7500–14999	15000+
Online Program	16.9%	27.5%	51.2%	59.0%	66.7%
Courses Only	33.8%	37.1%	40.2%	34.9%	31.7%
No online	49.3%	35.3%	8.5%	6.0%	1.6%

In for the Long Term?

Online Education is Critical to the Long-Term Strategy of my Institution (Percent Agreeing) – Midwestern States

	Public	Private, nonprofit	Private, for-profit
2006	75.2%	43.1%	**
2005	69.6%	34.2%	**
2004	66.7%	35.2%	**
2003	69.1%	37.1%	**

** Results withheld to protect the privacy of reporting institutions.

Online Education is Critical to the Long-Term Strategy of my Institution (Percent Agreeing) – Midwestern States

	Under 1500	1500–2999	3000–7499	7500–14999	15000+
2006	44.8%	55.9%	68.2%	68.0%	74.2%
2005	35.0%	44.8%	68.3%	64.3%	71.3%
2004	35.8%	39.7%	67.4%	70.3%	66.3%
2003	36.2%	57.6%	61.7%	65.8%	59.7%

Are These New Students?

Online Education Reaches Students Not Served by Face-to-face Programs – Midwestern States

	Public	Private, nonprofit	Private, for-profit
Agree	74.8%	70.9%	**
Neutral	23.3%	27.6%	**
Disagree	1.8%	1.4%	**

** Results withheld to protect the privacy of reporting institutions.

Online Education Reaches Students Not Served by Face-to-face Programs – Midwestern States

	Under 1500	1500–2999	3000–7499	7500–14999	15000+
Agree	70.5%	70.6%	74.4%	73.3%	80.0%
Neutral	25.9%	29.4%	24.4%	24.0%	20.0%
Disagree	3.6%	0.0%	1.1%	2.7%	0.0%

Learning Outcomes in Online Education Compared to Face-to-face – Midwestern States

	Doctoral/ Research			Master's			Baccalaureate		
	2003	2004	2006	2003	2004	2006	2003	2004	2006
Superior	0.0%	0.0%	3.4%	0.0%	1.5%	2.2%	0.0%	0.0%	1.9%
Somewhat Superior	11.8%	11.4%	15.5%	20.1%	9.5%	13.7%	5.1%	4.2%	7.8%
Same	62.7%	54.3%	53.4%	45.1%	56.9%	55.4%	26.9%	32.8%	21.4%
Somewhat Inferior	17.6%	30.0%	20.7%	25.0%	27.0%	27.3%	47.2%	30.7%	48.7%
Inferior	7.8%	4.3%	6.9%	9.7%	5.1%	1.4%	20.8%	32.3%	20.1%

	Associate's			Specialized		
	2003	2004	2006	2003	2004	2006
Superior	0.0%	1.1%	1.9%	0.0%	0.0%	0.0%
Somewhat Superior	9.5%	12.7%	11.6%	8.4%	11.7%	16.2%
Same	64.9%	59.6%	69.4%	31.9%	27.8%	30.8%
Somewhat Inferior	21.8%	24.7%	16.2%	41.9%	41.1%	35.9%
Inferior	3.8%	1.9%	0.9%	17.8%	19.4%	17.1%

Learning Outcomes in Online Education Compared to Face-to-face – Midwestern States

	Under 1500			1500–2999			3000–7499		
	2003	2004	2006	2003	2004	2006	2003	2004	2006
Superior	0.0%	0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	1.1%	3.9%
Somewhat Superior	4.6%	7.6%	9.2%	10.8%	7.3%	13.9%	19.6%	11.6%	15.6%
Same	29.5%	34.6%	27.9%	49.6%	48.6%	56.3%	48.5%	54.7%	53.3%
Somewhat Inferior	50.6%	39.0%	48.5%	18.7%	26.3%	19.4%	23.2%	22.6%	22.2%
Inferior	15.3%	18.7%	13.1%	20.9%	17.9%	10.4%	8.8%	10.0%	5.0%

	7500–14999			15000+		
	2003	2004	2006	2003	2004	2006
Superior	0.0%	3.3%	0.0%	0.0%	0.0%	3.2%
Somewhat Superior	13.8%	16.5%	12.0%	4.5%	13.3%	9.7%
Same	64.2%	49.5%	73.3%	81.8%	62.7%	56.5%
Somewhat Inferior	18.3%	27.5%	12.0%	13.6%	24.1%	24.2%
Inferior	3.7%	3.3%	2.7%	0.0%	0.0%	6.5%

Learning Outcomes in Online Education Compared to Face-to-face – Midwestern States

	Public			Private, nonprofit			Private, for-profit		
	2003	2004	2006	2003	2004	2006	2003	2004	2006
Superior	0.0%	0.7%	1.8%	0.0%	0.4%	1.7%	**	**	**
Somewhat Superior	15.3%	13.5%	14.0%	6.2%	6.7%	10.1%	**	**	**
Same	62.6%	60.9%	66.9%	32.4%	33.1%	30.3%	**	**	**
Somewhat Inferior	17.5%	21.6%	14.3%	43.5%	37.8%	43.8%	**	**	**
Inferior	4.6%	3.2%	3.0%	17.9%	22.0%	14.0%	**	**	**

** Results withheld to protect the privacy of reporting institutions.

Barriers to Widespread Adoption of Online Learning

There are No Significant Barriers to Widespread Adoption of Online Learning – Midwestern States

	Public	Private, nonprofit	Private, for-profit
Agree	10.6%	4.0%	**
Neutral	41.5%	40.5%	**
Disagree	47.9%	55.5%	**

There are No Significant Barriers to Widespread Adoption of Online Learning – Midwestern States

	Doctoral/ Research	Master's	Baccalaureate	Associate's	Specialized
Agree	14.0%	8.1%	3.9%	7.5%	7.0%
Neutral	43.9%	42.6%	40.1%	42.5%	34.8%
Disagree	42.1%	49.3%	55.9%	50.0%	58.3%

Barriers to Widespread Adoption of Online Learning (Percent Agreeing) – Midwestern States

	Public	Private, nonprofit	Private, for-profit
Students need more discipline to succeed in online courses	59.9%	53.7%	**
Greater faculty time and effort required to teach online	32.6%	42.6%	**
Lack of acceptance of online instruction by faculty	25.6%	44.3%	**
Online education costs more to develop and deliver	23.6%	27.7%	**
Lack of acceptance of online degrees by potential employers	7.5%	15.1%	**
Lack of student demand for online courses and degrees	3.4%	2.9%	**

** Results withheld to protect the privacy of reporting institutions.

Barriers to Widespread Adoption of Online Learning (Percent Agreeing) – Midwestern States

	Under 1500	1500–2999	3000–7499	7500–14999	15000+
Students need more discipline to succeed in online courses	60.7%	60.7%	51.9%	55.6%	49.2%
Greater faculty time and effort required to teach online	43.8%	40.7%	38.0%	17.4%	30.6%
Lack of acceptance of online instruction by faculty	42.8%	39.0%	31.1%	16.9%	32.2%
Online education costs more to develop and deliver	26.5%	28.3%	28.2%	22.2%	12.9%
Lack of acceptance of online degrees by potential employers	14.6%	13.0%	8.6%	7.1%	9.8%
Lack of student demand for online courses and degrees	2.7%	3.5%	5.0%	0.0%	3.4%

Faculty Accept the Value and Legitimacy of Online Education – Midwestern States

	Doctoral/Research			Master's			Baccalaureate		
	2003	2005	2006	2003	2005	2006	2003	2005	2006
Agree	30.2%	13.6%	11.1%	20.1%	23.8%	14.0%	14.3%	4.1%	10.5%
Neutral	69.8%	71.2%	81.5%	72.2%	69.5%	75.0%	64.8%	63.7%	50.0%
Disagree	0.0%	15.3%	7.4%	7.6%	6.7%	11.0%	20.9%	32.2%	39.5%

	Associate's			Specialized		
	2003	2005	2006	2003	2005	2006
Agree	36.4%	36.3%	27.2%	13.6%	33.3%	31.3%
Neutral	59.9%	60.7%	68.5%	78.5%	54.6%	60.7%
Disagree	3.7%	3.0%	4.2%	7.9%	12.0%	8.0%

Faculty Accept the Value and Legitimacy of Online Education – Midwestern States

	Under 1500			1500–2999			3000–7499		
	2003	2005	2006	2003	2005	2006	2003	2005	2006
Agree	19.0%	20.3%	18.1%	15.9%	17.6%	19.3%	18.7%	35.7%	20.2%
Neutral	65.7%	63.2%	64.3%	77.5%	61.6%	52.1%	75.6%	62.2%	71.9%
Disagree	15.3%	16.5%	17.6%	6.5%	20.8%	28.6%	5.7%	2.1%	7.9%

	7500–14999			15000+		
	2003	2005	2006	2003	2005	2006
Agree	50.5%	39.4%	21.9%	23.9%	34.6%	25.0%
Neutral	46.8%	54.9%	78.1%	76.1%	54.3%	68.3%
Disagree	2.7%	5.6%	0.0%	0.0%	11.1%	6.7%

Partner Organizations

Alfred P. Sloan Foundation

The Alfred P. Sloan Foundation makes grants in science, technology and the quality of American life. It's Anytime, Anyplace Learning program seeks to make high quality learning, education and training available anytime and anywhere for those motivated to seek it. The program has paved the way for nearly 3.2 million learners nationwide to take online courses today. www.sloan.org

The College Board

The College Board is a not-for-profit membership association whose mission is to connect students to college success and opportunity. Founded in 1900, the association is composed of more than 5,000 schools, colleges, universities, and other educational organizations. www.collegeboard.com

Midwestern Higher Education Compact

Established in 1991 as an interstate compact agency, the Midwestern Higher Education Compact is charged with promoting interstate cooperation and resource sharing in higher education accomplishing this through three core functions: cost savings programs, student access and policy research. www.mhec.org

Southern Regional Education Board

SREB, a nonprofit and nonpartisan organization based in Atlanta, Georgia, advises state education leaders on ways to improve education. SREB was created in 1948 by Southern governors and legislatures to help leaders in education and government work cooperatively to advance education and improve the social and economic life of the region. www.sreb.org

American Distance Education Consortium

ADEC is a non-profit distance education consortium composed of approximately 65 state universities and land-grant colleges. The consortium was conceived and developed to promote the creation and provision of high quality, economical distance education programs and services to diverse audiences through the most appropriate information technologies available. www.adec.edu

The Sloan Consortium

The Sloan Consortium is the nation's largest association of institutions and organizations committed to quality online education and administered through Babson College and Franklin W. Olin College of Engineering. www.sloan-c.org

Babson Survey Research Group

The Babson Survey Research Group in the Arthur M. Blank Center for Entrepreneurial Research at Babson College conducts regional, national, and international research projects, including survey design, sampling methodology, data integrity, statistical analyses and reporting.

Making the Grade: *Online Education in the United States, 2006 - Midwestern Edition* is based on data collected for the fourth annual report on the state of online education in U.S. Higher Education. Supported by the Alfred P. Sloan Foundation and based on responses from over 500 Midwestern colleges and universities, this year's study, like last year's, is aimed at answering some of the fundamental questions about the nature and extent of online education:

- Has the growth in online enrollments begun to plateau?
- Who offers online courses and programs?
- Is online education becoming part of long-term strategy for most schools?
- How do chief academic officers rate the quality of online courses?
- What barriers do academic leaders see to widespread adoption of online learning?

The survey analysis is based on a comprehensive sample of active, degree-granting institutions of higher education in the eleven member states of the Midwestern Higher Education Compact.

BABSON Survey Research Group

MHEC
Midwestern Higher Education Compact

Franklin W. Olin College of Engineering

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ISBN 0-9766714-9-2

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US $29.95