



At the time IDEA student ratings of instruction were first developed, most college and university courses were taught on campus. With the growth of the Internet, more and more courses are being offered online. Since 2002, the IDEA Student Ratings of Instruction system has been available through an online survey delivery system – IDEA Online. Initially, online survey administration was used primarily for online courses. However, the use of online surveys has increased each year in both online *and* traditional courses.

This report summarizes findings from IDEA *Technical Report No. 15* (Benton, Webster, Gross, & Pallett, 2010), which compared IDEA ratings in traditional (i.e., on campus) and online courses. That study examined similarities and differences in students' response rates and instructor and student ratings in classes identified exclusively as either traditional or online. The following sections describe the sample investigated, methods employed, and key findings from the analyses contained in Technical Report No. 15. Conclusions and recommendations are provided at the end of the report.

### The Sample

The sample of classes came from institutions that administered the IDEA Student Ratings of Instruction system with IDEA online between 2002 and 2008. A total of 5,272 classes from 38 institutions were identified as exclusively traditional and 13,416 classes from 67 institutions were classified as exclusively online. The classes were representative of the overall IDEA database and of all ratings administered online. In addition, the principal types of students enrolled in the courses were, for the most part, consistent across modalities. The percentage of IDEA Online use in traditional, face-to-face courses increased from 6.5% in 2002 to 31.9% of all use in 2008. The number of online courses has dramatically increased within the same time period from 216 classes in 2002 to 6,361 classes in 2008.

### The IDEA Student Ratings of Instruction System

Instructors in each course completed the *Faculty Information Form* (FIF), which is used to solicit information about the course. They rated 12 learning

objectives as either 1=Essential, 2=Important, or 3=of Minor or No Importance; they also responded to additional questions about the course.

Students completed either the IDEA *Diagnostic Form* or *Short Form*. Students rated their progress on each of the 12 learning objectives using a five-point scale of 1=No apparent progress, 2=Slight progress, 3=Moderate progress, 4=Substantial progress, and 5=Exceptional progress. Students also rated other aspects of the course and responded to questions about their typical work habits, motivation to take the course, and effort. Students using the *Diagnostic Form* also reported how frequently their instructor employed each of several teaching methods, using the scale 1=Hardly Ever, 2=Occasionally, 3=Sometimes, 4=Frequently, and 5=Almost Always.

### Response Rates to Online Surveys in Traditional and Online Courses

Response rate indicates how representative course ratings are of all students enrolled in the class. Between 2002 and 2008, among classes using IDEA Online, students in traditional courses had an average response rate of 58% compared to 50% for students enrolled in online courses. Notably, the overall average response rate using IDEA Online (55%) is lower than the paper-and-pencil version (78%).

Response rates in this sample varied by class size. For both traditional and online courses, the highest response rates were found in classes enrolling fewer than 10 students (traditional courses, 64%; online courses, 58%). Online courses with enrollments exceeding 39 students had the lowest response rate (41%).

Many explanations could be given for why response rates were somewhat higher in traditional courses and smaller classes. Perhaps because of face-to-face contact with students, an instructor in a traditional course has more influence. This is probably even more common in smaller classes. Some traditional instructors also may have access to computer labs where students can complete the ratings in-class. Others may work in institutions where students are encouraged to bring laptops to class. In contrast, most

online instructors never meet students in person. The lack of face-to-face contact may diminish the instructor's influence on student compliance. (For recommendations to improve IDEA Online response rates, see *Facilitating Response Rates in IDEA Online*, [www.theideacenter.org/OnlineResponseRates](http://www.theideacenter.org/OnlineResponseRates)).

### **Instructor Ratings of 12 Learning Objectives**

A basic premise of IDEA student ratings is that types of learning must reflect the instructor's purpose. This is why instructors rate the importance of the 12 learning objectives on the FIF. They identify which learning outcomes are most essential. Findings from Technical Report No. 15 indicated similarities between online and traditional courses in average ratings of objectives and the percent of instructors rating each objective as essential, important, or of minor/no importance. Inter-correlations among instructor ratings of the 12 objectives were also very similar, which implies the associations instructors make between the objectives are consistent across course types. Expectations for learning outcomes were consistent between online and traditional courses. The 12 learning objectives are, therefore, relevant for both course delivery formats.

### **Student Ratings of Learning Objectives and Teaching Methods**

One of the underlying assumptions of the IDEA Students Ratings of Instruction system is that effectiveness is determined by students' progress on objectives stressed by the instructor. Students should, therefore, report greater progress on objectives the instructor designates as either essential or important. In both traditional and online courses, average student ratings were, in fact, higher for essential and important objectives than for minor or unimportant objectives, supporting the use of IDEA in either course delivery format.

Students also rated how frequently the instructor used various teaching methods. The research investigated whether students reported differences in the frequency of 20 teaching methods utilized by the course instructor. The teaching methods represented five areas: Stimulating Student Interest; Fostering Student Collaboration; Establishing Rapport; Encouraging Student Involvement; and Structuring the Classroom Experiences. As documented in Technical Report No. 15 (2010, Table 13), on the whole, students' ratings of the teaching methods were highly similar across course type. This means students in online and traditional courses believed their instructors employed the teaching methods with similar frequency. However,

there was one notable exception. Online students reported greater instructional use of educational technology to promote learning (Item 47). This difference makes sense when one considers that, by their very nature, online courses rely heavily upon technology. These results suggest that the pedagogical principles underlying the 20 teaching methods are employed when courses are taught face-to-face or in an online learning environment.

### **The Relationship between Instructor and Student Ratings of Learning Objectives**

An indirect test of the validity of the IDEA system involves correlating students' reported progress for each learning objective with the instructors' ratings of the importance of those objectives (see Hoyt & Lee, 2002a). The highest correlations should be found in ratings of the same objectives (i.e., students rate the most learning on essential objectives and the least learning on objectives not stressed in the course). This hypothesis was supported, as correlations among ratings of the same objectives were on average higher in both traditional and online courses (Benton, et al., 2010, see Tables 15-18). Evidence for validity of the IDEA objectives is, therefore, found in both types of courses.

### **The Relationship between Student Ratings of Learning Objectives and Teaching Methods**

In the IDEA Diagnostic Form Report, suggestions are made for improving teaching effectiveness based on correlations between students' ratings of progress on the 12 learning objectives and their ratings of the instructor's teaching methods. In order for the suggestions to be of value to instructors utilizing both course modalities, the pattern of correlations should be similar. The findings indicate that the suggestions are valuable, as the strength and pattern of correlations were very consistent across type of course (Benton, et al., 2010, Table 19).

The only meaningful difference was found in the correlation between the instructor's use of educational technology (Item 47) and students' self-reported progress on relevant (important or essential) objectives. The correlation in online courses was higher ( $r = .50$ ) than in traditional courses ( $r = .35$ ). As one might expect, using technology to promote student learning is more strongly associated with students' progress on relevant objectives in the online format. Although there may be additional teaching methods and strategies to facilitate learning in either the traditional or online learning environment, this

research demonstrates support for the usefulness of the feedback provided by IDEA to guide faculty reflection about their teaching and student learning.

### **The Relationship between Student/Course Characteristics and Global Ratings**

A unique feature of IDEA is adjusted scores, which control for extraneous factors that influence student ratings. Student characteristics (e.g., work habits, motivation, and course effort) and course characteristics (e.g., enrollment, difficulty) can affect instructors' scores, but such characteristics are beyond the control of the instructor. Students are, therefore, asked to rate their typical work habits, desire to take the course regardless of who taught it, effort in the course, and perceived difficulty of the course. Enrollment is reported by the instructors on the FIF.

Students' global ratings and their progress on relevant objectives (PRO) are then adjusted for their correlations with student/course characteristics. Therefore, it is important to investigate the similarity of those correlations across types of courses. Global ratings include three items: "As a result of taking this course, I have more positive feelings toward this field of study," "Overall, I rate this instructor an excellent teacher," and "Overall, I rate this course as excellent." In this study, the pattern of correlations between student/course characteristics and global ratings was very consistent across traditional and online courses (Benton et al., 2010, Table 20). Adjustments to raw scores made in traditional courses are, therefore, generalizable to online courses.

### **Approaches to Instruction and Teaching Styles**

*IDEA Research Note #1* (2003) reported the importance of five teaching approaches to the three global ratings of teaching effectiveness. The five teaching approaches were (1) Stimulating Student Interest, (2) Fostering Student Collaboration, (3) Establishing Rapport, (4) Encouraging Student Involvement, and (5) Structuring the Classroom Experiences. Students' ratings on the teaching approaches were more important to ratings on the "Excellent teacher" item compared to the other global ratings of teaching effectiveness. So, whether or not students regard the instructor as "excellent" has much to do with the teaching approaches she/he utilizes. To determine whether this finding would be consistent in both online and traditional courses, the analyses from the 2003 study were replicated for Technical Report No. 15. As before, the five teaching approaches were most important for understanding the "Excellent

teacher" item, regardless of course type. For traditional courses, the five scales explained more variance in the "Excellent teacher" item ( $R^2 = .83$ ) than in the "Increased positive feeling toward the field" ( $R^2 = .60$ ) and "Excellent course" ( $R^2 = .66$ ) items. For online courses, the pattern was the same: "Excellent teacher" ( $R^2 = .82$ ), "Increased positive feeling toward the field" ( $R^2 = .52$ ), and "Excellent course" ( $R^2 = .67$ ). This suggests that high ratings on "Excellent teacher" have much to do with how frequently the instructor employs the various teaching approaches in both formats.

A replication of *IDEA Report #4* (Hoyt & Lee, 2002b) was also conducted by investigating the relative importance of six teaching styles for facilitating student progress on specific learning objectives. The six teaching styles originated from combinations of the five teaching approaches. It seemed important to investigate whether these teaching styles would be similar across course modalities.

The results from this analysis were consistent across traditional and online courses for the six teaching styles with only three exceptions. First, Fostering Student Collaboration is more helpful in traditional courses when the focus is on values development and critical analysis/evaluation. Instructors can facilitate collaboration by asking students to help each other understand ideas or concepts, forming teams or discussion groups, and by asking students to share ideas with others whose background and viewpoints differ. Second, Structuring the Classroom Experiences may be somewhat more important in online courses if the instructor wishes to help students achieve a broad liberal education. Online instructors can provide structure by explaining the course material clearly and concisely, communicating expectations, following a course schedule, and providing timely and frequent feedback. Finally, when the outcome is for students to find and use resources, Establishing Rapport may be somewhat more important in online courses. Online instructors can build rapport by helping students to answer their own questions, explaining the reasons for criticisms of students' work, and displaying a personal interest in students and their learning.

### **Summary and Conclusions**

The findings reported here provide evidence of the validity of IDEA student ratings in both traditional and online classrooms. Instructor ratings of the importance of the 12 learning objectives and student progress on those objectives are highly similar. Moreover, regardless of course format, students make greater

progress on relevant (important or essential) objectives.

The pattern of relationships between student ratings of teaching methods and learning objectives is consistent across modalities, providing support for the diagnostic use of the instrument. Furthermore, the magnitude and direction of correlations between student/course characteristics and global ratings, which underlie adjusted scores, are generally the same, making the use of adjusted scores comparable in both settings. Finally, the teaching approaches instructors apply in the classroom are associated with teaching excellence in both course formats.

Only a few minor differences were found. First, response rates are somewhat higher for traditional than online courses. Second, instructors in online courses reportedly use educational technology more frequently to promote student learning. Third, more frequent use of educational technology is an important teaching method related to greater student progress on relevant objectives in online environments. Fourth, Fostering Student Collaboration is more helpful in traditional courses when the focus is on values development and critical analysis/evaluation. Fifth, Structuring the Classroom Experiences may be somewhat more important in online courses if the instructor wishes to help students achieve a broad liberal education. Finally, when helping students to find and use resources, Establishing Rapport may be somewhat more important in online courses.

While this research supports the use of IDEA in online learning environments, The IDEA Center recognizes that no single survey can anticipate the unique needs of every learning situation. The use of additional questions may be helpful in addressing areas not covered in the IDEA instrument, but important to a particular course or learning environment. [Using Additional Questions for Online Learning Environments](#) has been developed to serve as a guide to maximizing the feedback obtained through the IDEA Student Ratings of Instruction System.

## References

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T: 800.255.2757  
T: 785.320.2400  
F: 785.320.2424

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211 South Seth Child Road  
Manhattan, KS 66502-3089  
E: [info@theideacenter.org](mailto:info@theideacenter.org)  
[www.theideacenter.org](http://www.theideacenter.org)

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