



Technical Report No. 15

**An Analysis of  
IDEA Student Ratings of Instruction  
in Traditional Versus Online Courses  
2002-2008 Data**

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**Table of Contents**

**EXECUTIVE SUMMARY** ..... 1

**METHOD** ..... 3

**Sample**..... 3

**Instrumentation**..... 7

**RESULTS** ..... 7

**Are student response rates to IDEA similar between traditional and online courses? ....** 7

**Are instructors’ ratings of the importance of the 12 IDEA learning objectives similar between types of courses?.....** 12

**Are the inter-correlations among the instructor ratings of the 12 learning objectives similar across type of course? .....** 14

**Are there differences in students’ ratings of progress on the 12 learning objectives? ...** 15

**Do students’ ratings of how frequently the instructor used various teaching methods differ between traditional and online courses? .....** 15

**Are the correlations between instructors’ and students’ ratings of learning objectives similar in traditional and online environments?.....** 17

**Are the correlations between students’ ratings of progress on learning objectives and their ratings of the instructor’s teaching methods similar between types of courses? .....** 21

**Are the correlations between students’ characteristics (e.g., work habits, motivation), overall ratings of the course and the instructor, and perceived progress on relevant objectives similar across types of courses? .....** 23

**Are the correlations between student ratings of teaching methods and overall measures of effectiveness similar in online and traditional courses? .....** 25

**CONCLUSIONS** ..... 28

**REFERENCES**..... 30

**Appendix A: Faculty Information Form, Diagnostic Form, Short Form**..... 31

**Appendix B: Using Additional Questions for Online Courses** ..... 38

## Tables

Number and Description	Page
Table 1- <i>Frequency and Percentage of Classes Using IDEA Online Disaggregated by Year and Type of Course Instruction (Traditional vs. Online)</i> .....	4
Table 2 - <i>Frequency and Percentage of Highest Degree Awarded by Type of Course Instruction</i> .....	5
Table 3 - <i>Frequency and Percentage of Principal Type of Student Enrolled by Type of Course Instruction</i> .....	6
Table 4 - <i>Descriptive Statistics for Response Rate by User Status and Type of Course Instruction</i> .....	6
Table 5 - <i>Means and Standard Deviations for Proportion of Students Responding by Type of Course Instruction</i> .....	8
Table 6 - <i>Means and Standard Deviations for Proportion of Students Responding by Year and Type of Course Instruction</i> .....	8
Table 7 - <i>Means and Standard Deviations for Proportion of Students Responding by Type of Course Instruction and Form Type</i> .....	8
Table 8 - <i>Means and Standard Deviations for Proportion of Students Responding Disaggregated by Type of Course Instruction, Year, and Form Type</i> .....	9
Table 9 - <i>Means and Standard Deviations for Proportion of Students Responding Disaggregated By Type of Course Instruction and Number of Students Enrolled</i> .....	10
Table 10 - <i>Correlations between Student Ratings and Response Rate by Type of Course Instruction</i> .....	10
Table 11 - <i>Frequencies and Descriptive Statistics for Instructor (FIF) Ratings of Learning Objectives</i> .....	13
Table 12 - <i>Inter-Correlations of IDEA Faculty Information Form Faculty Ratings (FR) by Type of Course Instruction</i> .....	14
Table 13 - <i>Student Ratings of Individual Items on the IDEA Diagnostic Form by Type of Course Instruction</i> ....	16
Table 14 - <i>Descriptive Statistics for Student Ratings of Progress on Objectives by Type of Course Instruction at Each Level of Instructor Rating of Importance</i> .....	17
Table 15 - <i>Correlations between Faculty Ratings and Student Ratings of Learning Objectives for Traditional and Online Course Instruction</i> .....	18
Table 16 - <i>Correlations between Faculty Ratings and Student Ratings of Learning Objectives for Traditional and Online Course Instruction (Excluding Short Form Users)</i> .....	19
Table 17 - <i>Correlations between Faculty Ratings and Student Ratings of Learning Objectives for Traditional and Online Course Instruction (Excluding Novice Users)</i> .....	20
Table 18 - <i>Correlations between Faculty Ratings and Student Ratings of Learning Objectives for Traditional and Online Course Instruction (Excluding Classes with &lt; 10 Respondents)</i> .....	21
Table 19 - <i>Correlations between Student Ratings on Learning Outcomes and Teaching Methods for Traditional and Online Courses</i> .....	22
Table 20 - <i>Inter-Correlations between Student/Course Characteristics and Summary Judgment Items</i> .....	24
Table 21 - <i>Inter-Correlations between Student Ratings of Teaching Methods and Summary Judgment Items for Traditional and Online Courses</i> .....	25
Table 22 - <i>Standardized Beta Coefficients for Explanatory Variables in Teaching Style A Objectives</i> .....	26
Table 23 - <i>Standardized Beta Coefficients for Explanatory Variables in Teaching Style B Objectives</i> .....	27
Table 24 - <i>Standardized Beta Coefficients for Explanatory Variables in Teaching Style C Objectives</i> .....	27
Table 25 - <i>Standardized Beta Coefficients for Explanatory Variables in Teaching Style D Objectives</i> .....	27
Table 26 - <i>Standardized Beta Coefficients for Explanatory Variables in Teaching Style E Objectives</i> .....	28
Table 27 - <i>Standardized Beta Coefficients for Explanatory Variables in Teaching Style F Objectives</i> .....	28

## EXECUTIVE SUMMARY

This report summarizes analyses performed on IDEA student ratings of instruction collected in traditional (i.e., on-campus) and online courses from 2002 to 2008. Only classes utilizing online survey delivery and identified exclusively as either traditional ( $N = 5,272$ ) or online ( $N = 13,416$ ) were included. Classes were removed until all institutions contributed no more than approximately 5% of all classes analyzed. Instructors in each course rated the importance of each of 12 learning objectives and responded to questions about the course, using the *IDEA Faculty Information Form (FIF)*. Students rated progress on the same 12 objectives, characteristics about themselves and the course, and overall measures of course and instructor effectiveness, using either the *IDEA Diagnostic Form* or *Short Form*. Those responding to the *Diagnostic Form* also rated the instructor's use of various teaching methods.

Comparisons made between traditional and online courses revealed the following similarities. First, online instructor ratings of the importance of the 12 learning objectives paralleled those of on-campus instructors. No meaningful differences were found in instructors' average ratings of importance and in the percent of instructors rating each objective as essential or important. Instructors, therefore, found the objectives relevant at similar levels in both on-campus and online courses. Second, students' ratings of progress on relevant objectives and global measures of course and instructor excellence were very similar. Good teaching was good teaching, regardless of the course modality. Third, students consistently reported greater progress on objectives the instructor rated as important or essential regardless of the course format. Furthermore, the highest correlations between instructor ratings of importance and students' ratings of progress were consistently observed in ratings of the same objectives. These findings support the validity of IDEA in both traditional and online environments. Fourth, student ratings of how frequently the instructor used each of 20 teaching methods did not vary meaningfully between the type of course. Instructors in online courses were perceived to use the various teaching methods as frequently as those in traditional courses. Fifth, the pattern of correlations between students' ratings of progress on relevant objectives and the instructor's use of teaching methods was also similar in traditional and online courses. Formative evaluations, based on these relationships, therefore have similar validity across modalities. Sixth, correlations between student/course characteristics and global measures of effectiveness were highly comparable. Adjustments to raw scores, based on these relationships, therefore have similar validity in both course formats.

Some minor differences were observed, however. First, student response rate was higher in traditional than online courses. When using IDEA Online, administrators and instructors should consider employing best practices for online response rates (see <http://www.theideacenter.org/OnlineResponseRates>). Second, students in online courses reported more frequent instructor use of educational technology to promote student learning than did those in traditional courses. Moreover, instructor use of educational technology was more highly correlated with student progress on relevant objectives in online than in traditional courses. These differences make sense because, by their very nature, online courses rely heavily upon educational technology. However, the differences do not affect course evaluations because instructor use of educational technology does not affect summative or formative scores on the *Diagnostic* and *Short Form* reports. Third, students in online courses reported somewhat more

reading and somewhat less motivation to take the course from the instructor. However, neither of these variables figures prominently in any raw score adjustments. Fourth, structuring the classroom environment 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.

In general, the current findings indicate the IDEA Student Ratings System is useful for both online and traditional courses. The minor differences observed ultimately may guide instructors to improve student learning outcomes in online teaching environments.

However, The IDEA Center recognizes that no single survey can anticipate the unique needs of every learning environment. The use of additional questions may be helpful in addressing areas not covered in the IDEA instrument that are important to a particular course or learning environment. Appendix B contains the handout, *Using Additional Questions for Online Learning Environments*, which can serve as a guide to maximizing the feedback obtained through the IDEA Student Ratings of Instruction System.

## **An Analysis of IDEA Student Ratings in Online Versus Traditional Courses 2002-2008 Data**

The purpose of this report is to summarize results from statistical analyses comparing online and traditional courses that completed the IDEA Student Ratings instrument from 2002 to 2008. Only courses utilizing online survey delivery were included. Comparisons were made on students' response rates and on instructor and student ratings. Since the IDEA system has historically been used to provide instructional feedback in the traditional classroom environment, the current investigation was undertaken to determine if the instrument is appropriate for use in an online learning environment. Several questions guided the analyses:

1. Do student response rates to IDEA Online differ between traditional and online courses?
2. Do instructor ratings of the importance of the 12 IDEA learning objectives differ between types of courses?
3. Are the inter-correlations among the instructor ratings of the 12 learning objectives similar across types of courses?
4. Are there differences in students' ratings of progress on the 12 learning objectives?
5. Do students' ratings of how frequently the instructor used various teaching methods differ between traditional and online courses?
6. Are the correlations between instructors' and students' ratings of learning objectives similar in traditional and online environments?
7. Are the correlations between students' ratings of progress on learning objectives and their ratings of the instructor's teaching methods similar between types of courses?
8. Are the correlations between students' characteristics (e.g., work habits, motivation), overall measures of the course and the instructor, and perceived progress on relevant objectives similar across these course modalities?
9. Are the correlations between students' ratings of teaching methods and overall global ratings similar across types of courses?

### **METHOD**

#### **Sample**

The sample of classes was taken from 2002 to 2008 IDEA surveys administered through the IDEA Online survey delivery system. Not all classes that use IDEA Online are considered "online courses"; therefore, staff at The IDEA Center contacted users individually to ascertain whether their courses were taught on campus (traditional), via the Internet (online), or in some combination. This report included only classes identified exclusively as traditional or online. Prior to conducting the analyses, classes were removed until all institutions contributed no more

than approximately 5% of all classes.<sup>1</sup> Although 73,514 classes administered online surveys, accurate course delivery information was only available for 18,688 classes. We were unable to designate 38,049 as either exclusively traditional or online, and numerous classes were eliminated to conform to the 5% institutional criterion. A total of 5,272 classes were identified as traditional (the course was conducted on campus), and 13,416 were determined to be online courses. Table 1 presents the frequency and percentage of classes coded as either traditional or online across the seven-year period. In this sample of classes, the proportion of traditional courses using IDEA Online increased across the years. Initially, online survey delivery was used almost exclusively for online courses. Over time, campuses have shifted to administering surveys online for traditional, on-campus courses as well.

Table 1  
*Frequency and Percentage of Classes Using IDEA Online  
 Disaggregated by Year and Type of Course Instruction (Traditional vs. Online)*

Type of Course Instruction					
Traditional			Online		Total
Year	N	%	N	%	
2002	15	6.5%	216	93.5%	231
2003	30	9.2%	296	90.8%	326
2004	109	23.4%	357	76.6%	466
2005	355	32.1%	750	67.9%	1,105
2006	754	28.1%	1,932	71.9%	2,686
2007	1,032	22.8%	3,504	77.2%	4,536
2008	2,977	31.9%	6,361	68.1%	9,338
Total	5,272	28.2%	13,416	71.8%	18,688

Table 2 presents the frequency and percentage of traditional and online classes, respectively, by the highest degrees awarded. There were 38 institutions represented in the traditional group and 67 in the online group. Table 2 also presents the frequency and percentage of highest degrees awarded in the overall IDEA database and among users of IDEA Online. In both traditional and online classes, the percentage of institutions offering the respective degrees was, in most cases, similar to that in the 2002 to 2008 overall IDEA database. There were two notable exceptions. The online courses in the current sample slightly underrepresented institutions offering the baccalaureate as the highest degree. Classes in the traditional-course group somewhat underrepresented institutions offering degrees beyond the master's. However, as reported in Technical Report 12, IDEA students ratings do not differ by the highest degree awarded (Hoyt and Lee, 2002a). The current samples of classes are representative of the overall IDEA database and all ratings administered online.

<sup>1</sup> Not all exclusion criteria from "IDEA Technical Report 12" were enacted. Removing classes with < 10 respondents, classes using the short form, and novice classes would have dramatically reduced the number of available classes (Traditional Courses  $n = 1,176$ , with 3 institutions making up 48% of classes; Online Courses  $n = 2,993$ , with 7 institutions making up 48% of classes).



Table 2

*Frequency and Percentage of Highest Degree Awarded by Type of Course Instruction*

Highest Degree Awarded	<u>Traditional Courses</u>		<u>Online Courses</u>		<u>2002-2008 IDEA Database</u>		<u>2002-2008 IDEA Online</u>	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Associate's	1,137	21.6	3,715	27.7	150,962	21.4	7,989	15.1
Baccalaureate	1,084	20.6	611	4.5	104,743	14.9	8,869	16.7
First professional degree	14	.3	0	0.0	1,959	0.3	14	.03
Master's	1,694	32.1	4,423	33.0	192,049	27.3	16,982	32.0
Beyond Master's but less than Doctorate	49	.9	1,010	7.5	43,302	6.1	5,175	9.8
Doctorate	1,214	23.0	3,657	27.3	211,389	30.0	13,891	26.2
Not applicable	80	1.5	0	0.0	183	.03	80	.2
Total	5,272	100.0	13,416	100.0	704,587	100.0	53,000	100.0

Before comparing the student ratings, it was important to examine whether similar types of students were enrolled in traditional and online courses. Table 3 presents the frequency and percentage of principal types of students enrolled across type of course, as reported by the instructor on the *Faculty Information Form*. The percentage of students enrolled in lower division, general education classes was very similar in traditional (25.5%) and online (24.4%) courses. Slight differences between course modalities were found, however, in lower division, specialized; upper division, specialized; and graduate/professional classes. The largest difference was observed in the percentage of students enrolled in graduate/professional classes, which was somewhat greater for online (26.1%) than traditional (15.3%) courses. Although none of these differences is large, they should be kept in mind when interpreting the results of this report. Table 3 also shows that student response rates to IDEA Online were highest in graduate/professional classes and lowest in lower division classes, regardless of course modality.

Table 3

*Frequency and Percentage of Principal Type of Student Enrolled by Type of Course Instruction*

<b>Traditional Courses</b>				
<b>Student Type</b>	<b>Frequency</b>	<b>Percent</b>	<b>Response Rate</b>	
			<b>M</b>	<b>SD</b>
Lower Division, General Education	1,228	25.5%	0.54	0.25
Lower Division, Specialized	1,073	22.3%	0.56	0.25
Upper Division, General Education	244	5.1%	0.60	0.23
Upper Division, Specialized	1,076	22.4%	0.62	0.24
Graduate/Professional	734	15.3%	0.74	0.26
Combination	453	9.4%	0.55	0.24
Total	4,808	100.0%	0.60 <sup>1</sup>	0.26
Missing	464	8.8%	-	-

<b>Online Courses</b>				
<b>Student Type</b>	<b>Frequency</b>	<b>Percent</b>	<b>Response Rate</b>	
			<b>M</b>	<b>SD</b>
Lower Division, General Education	2,983	24.4%	0.40	0.20
Lower Division, Specialized	1,924	15.7%	0.43	0.21
Upper Division, General Education	752	6.1%	0.49	0.20
Upper Division, Specialized	1,684	13.8%	0.54	0.22
Graduate/Professional	3,199	26.1%	0.61	0.22
Combination	1,698	13.9%	0.47	0.22
Total	12,240	100.0%	0.50	0.23
Missing	1,176	8.8%	-	-

Note: *M* = mean; *SD* = standard deviation.

The percentage of experienced and novice campus users of the IDEA Student Ratings system in both types of courses was computed (see Table 4). The vast majority of instructors were experienced users of IDEA in both traditional (62.8%) and online courses (73.7%). As one might expect, the mean student response rates were slightly higher for experienced users; this was especially true in traditional courses.

Table 4

*Descriptive Statistics for Response Rate by User Status and Type of Course Instruction*

<b>Traditional Courses</b>					<b>Online Courses</b>				
<b>User Status</b>	<b>N</b>	<b>%</b>	<b>Response Rate</b>		<b>User Status</b>	<b>N</b>	<b>%</b>	<b>Response Rate</b>	
			<b>M</b>	<b>SD</b>				<b>M</b>	<b>SD</b>
Experienced	3,313	62.8%	0.61	0.25	Experienced	9,881	73.7%	0.50	0.23
Novice	1,959	37.2%	0.53	0.28	Novice	3,535	26.3%	0.47	0.23
Total	5,272	100.0%	0.58 <sup>1</sup>	0.26	Total	13,416	100.0%	0.50	0.23

Note: *M* = mean; *SD* = standard deviation.

<sup>1</sup>The response rate for traditional courses is different in Tables 3 and 4 because of the 464 classes excluded in the first analysis.

## Instrumentation

*Faculty Information Form (FIF).* The FIF solicits information about each course from the instructor. Each campus determines the start and end dates for the survey completion. The online version is delivered to faculty via e-mail. Instructors rate each of 12 learning objectives as either 3 = “Essential,” 2 = “Important,” or 1 = of “Minor or No Importance.” Instructors respond to contextual questions about the primary and secondary instructional approaches to the course (e.g., lecture, discussion/recitation, seminar); course requirements (e.g., writing, oral communication, group work); whether any of several factors may have had a positive, negative, or neutral impact on students’ learning (e.g., physical facilities, student enthusiasm to take the course, technical/instructional support); and the primary type of student enrolled (e.g., first year/sophomore meeting general education requirements, upperclassmen non-majors, graduate or professional students). They also indicate whether the course was team taught and whether it was taught through distance learning (see Appendix A).<sup>2</sup>

*Student Ratings Forms.* The IDEA Center recommends students complete ratings at least after the first half of the course but not the last day of class. On the 47-item *IDEA Diagnostic Form*, students are asked to indicate how frequently their instructor used each of 20 teaching methods, using a scale of 1 = “Hardly Ever,” 2 = “Occasionally,” 3 = “Sometimes,” 4 = “Frequently,” and 5 = “Almost Always.” Students also rate their progress on each of the same 12 learning objectives their instructor rated for importance. Students respond with 1 = “No apparent progress,” 2 = “Slight progress,” 3 = “Moderate progress,” 4 = “Substantial progress,” and 5 = “Exceptional progress.” Additional questions concern course characteristics, the student’s characteristics (i.e., work habits, motivation), the student’s overall rating of course and instructor excellence, and four additional experimental items addressing teaching methods. The 18-item *IDEA Short Form* includes the 12 learning objectives, three summary measures of teaching effectiveness, two items addressing student characteristics (i.e., student motivation and work habits), and one experimental item related to student background (see Appendix A).

Four survey delivery methods are available online: survey links available through a Blackboard® Building Block, e-mail, the course website, or a combination of all three. Students completing the online survey are restricted to one submission.

## RESULTS

Because the samples for this research are so large and measures of statistical significance are sensitive to large sample size, comparisons between paper and online survey administration were focused primarily on “practical significance” (i.e., are differences meaningful enough to change the interpretation of results) and an examination of results to determine if consistently different patterns emerged.

### **Are student response rates to IDEA similar between traditional and online courses?**

On average, the proportion of students responding to the paper version of IDEA is higher than the online version ( $M_s = .78$  vs.  $.55$ , respectively; see Benton, Webster, Pallett, and Gross,

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<sup>2</sup> The question on the FIF reads “Is this class taught through distance learning?” along with the response options of “Yes” or “No.” However, the question offers no possibility for distinguishing between courses taught online versus off-campus. In addition, the question is optional and is not always completed by the instructor. Therefore, this item could not be used to identify online courses.

2010). Accordingly, the possible difference in response rate between traditional and online courses was assessed. As shown in Table 5, traditional courses ( $M = .58$ ,  $SD = .26$ ) in this sample had higher response rates than did online courses ( $M = .50$ ,  $SD = .23$ ); the magnitude of this difference was about one-third standard deviation. As can be seen in Table 6, the overall mean student response rate for online survey delivery declined from a high of 56% in 2002 to 51% in 2008. The general decline has been somewhat more dramatic in online courses.

Table 5  
*Means and Standard Deviations for Proportion of Students Responding by Type of Course Instruction*

Course Instruction	<i>M</i>	<i>SD</i>	<i>N</i>
Traditional	.58	.26	5,272
Online	.50	.23	13,416
Total	.52	.24	18,688

Note: *M* = mean; *SD* = standard deviation.

Table 6  
*Means and Standard Deviations for Proportion of Students Responding by Year and Type of Course Instruction*

Year	Overall			Traditional Courses			Online Courses		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
2002	.56	.19	231	.60	.18	15	.56	.19	216
2003	.56	.19	326	.63	.14	30	.55	.20	296
2004	.50	.23	466	.43	.23	109	.52	.23	357
2005	.53	.23	1,105	.51	.27	355	.54	.21	750
2006	.54	.23	2,686	.64	.25	754	.50	.22	1,932
2007	.52	.23	4,536	.62	.25	1,032	.49	.23	3,504
2008	.52	.24	9,338	.57	.27	2,977	.49	.23	6,361
Total	.52	.24	18,688	.58	.26	5,272	.50	.23	13,416

The cause of the moderate difference in response rates between online and traditional courses becomes clearer when examining Tables 7 and 8. Overall, traditional classes that used the *Diagnostic Form* exhibited slightly higher response rates compared to those using the *Short Form* (see Table 7). Although this was not the case every year (as indicated in Table 8), the differences between form types in 2007 and 2008 (boxed area) weighed more heavily because classes in those years made up the preponderance of this sample of traditional courses (76%). Meanwhile, response rates for online courses did not vary as much between the *Diagnostic* and *Short Forms* in 2007 and 2008.

Table 7  
*Means and Standard Deviations for Proportion of Students Responding by Type of Course Instruction and Form Type*

Form Type	Overall			Traditional Courses			Online Courses		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
Short	.51	.24	4,149	.53	.26	1,566	.49	.23	2,583
Diagnostic	.53	.24	14,539	.61	.26	3,706	.50	.23	10,833
Total	.52	.24	18,688	.58	.26	5,272	.50	.23	13,416

Note: *M* = mean; *SD* = standard deviation.

Table 8

*Means and Standard Deviations for Proportion of Students Responding Disaggregated by Type of Course Instruction, Year, and Form Type*

Traditional Courses									
Year	Form Type/Statistic			Form Type/Statistic			Short <i>N</i>	Diagnostic <i>N</i>	Total <i>N</i>
	Short <i>M</i>	Diagnostic <i>M</i>	Total <i>M</i>	Short <i>SD</i>	Diagnostic <i>SD</i>	Total <i>SD</i>			
2002	.59	.61	.60	.24	.15	.18	5	10	15
2003	.62	.63	.63	.16	.14	.14	13	17	30
2004	.53	.41	.43	.20	.22	.23	18	91	109
2005	.59	.50	.51	.32	.25	.27	54	301	355
2006	.66	.64	.64	.27	.25	.25	100	654	754
2007	.56	.65	.62	.24	.25	.25	328	704	1,032
2008	.50	.61	.57	.25	.26	.27	1,048	1,929	2,977
Total	.53	.61	.58	.26	.26	.26	1,566	3,706	5,272

  

Online Courses									
Year	Form Type/Statistic			Form Type/Statistic			Short <i>N</i>	Diagnostic <i>N</i>	Total <i>N</i>
	Short <i>M</i>	Diagnostic <i>M</i>	Total <i>M</i>	Short <i>SD</i>	Diagnostic <i>SD</i>	Total <i>SD</i>			
2002	.51	.59	.56	.19	.19	.19	80	136	216
2003	.54	.56	.55	.17	.21	.20	100	196	296
2004	.46	.61	.52	.21	.22	.23	220	137	357
2005	.46	.59	.54	.19	.20	.21	273	477	750
2006	.48	.50	.50	.22	.22	.22	350	1,582	1,932
2007	.50	.48	.49	.25	.22	.23	495	3,009	3,504
2008	.49	.49	.49	.25	.23	.23	1,065	5,296	6,361
Total	.49	.50	.50	.23	.23	.23	2,583	10,833	13,416

Note: *M* = mean; *SD* = standard deviation.

Additional explanations may suggest why response rates were somewhat higher in traditional courses. Perhaps because of face-to-face contact with students, an instructor in a traditional course has more influence on them. 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, which may diminish the instructor's influence on student compliance.

Also of interest was whether student response rates varied by size of class. Class sizes were categorized into subgroups separately by type of course instruction (see Table 9). For online courses, the highest student response rate was found in classes enrolling fewer than 10 students (58%). Response rates declined as enrollments increased. In traditional courses, the response rates for class sizes less than 10 (64%) and greater than 39 (63%) were about the same. Response rates were relatively lower, regardless of course type, in classes enrolling anywhere from 10 to 39 students. The lowest response rate (41%) was found in online classes with enrollments exceeding 39 students.

Table 9  
*Means and Standard Deviations for Proportion of Students Responding Disaggregated By Type of Course Instruction and Number of Students Enrolled*

Students Enrolled	Traditional Courses			Online Courses		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
< 10	.64	.26	879	.58	.25	2,403
10-14	.58	.25	1,083	.52	.22	2,433
15-24	.54	.25	2,002	.48	.22	5,387
25-39	.59	.27	811	.45	.21	2,366
> 39	.63	.28	497	.41	.21	827
Total	.58	.26	5,272	.50	.23	13,416

Note: *M* = mean; *SD* = standard deviation.

*M* (and *SD*) students enrolled for traditional = 21.97 (22.36), online = 20.17 (18.61).

*Correlations between response rate and student ratings.* Because students' response rate was slightly higher in traditional courses, we computed correlations between response rates and student ratings (*Diagnostic Form*) separately for both types of courses. As indicated in Table 10 (below and continued on the next page), although the correlations between response rate and student ratings were slightly higher in online courses, the correlations were quite low in both types of courses. Thus, in this sample response rate did not have a strong relationship with student ratings in either type of course.

Table 10  
*Correlations between Student Ratings and Response Rate by Type of Course Instruction*

Student Item <sup>1</sup>	Traditional Courses	Online Courses
TM 1. Displayed a personal interest in students and their learning	.08	.16
TM 2. Found ways to help students answer their own questions	.04	.14
TM 3. Scheduled course work (class activities, tests, projects) in ways which encouraged students to stay up-to-date in their work	-.01	.10
TM 4. Demonstrated importance and significance of the subject matter	.05	.16
TM 5. Formed "teams" or "discussion groups" to facilitate learning	.12	.19
TM 6. Made it clear how each topic fit into the course	.04	.16
TM 7. Explained the reasons for criticisms of student academic performance	.06	.15
TM 8. Stimulated students to intellectual effort beyond that required by most courses	.04	.15
TM 9. Encouraged students to use multiple resources (e.g., data banks, library holdings, outside experts) to improve understanding	-.01	.14
TM 10. Explained course material clearly and concisely	.00	.10
TM 11. Related course material to real life situations	.09	.19
TM 12. Gave projects, tests, etc. which covered the most important parts of the course	-.06	.08
TM 13. Introduced stimulating ideas about the subject	.05	.16
TM 14. Involved students in "hands on" projects such as research, case studies, or "real life" activities	.07	.21
TM 15. Inspired students to set and achieve goals which really challenged them	.04	.17
TM 16. Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own	.05	.19
TM 17. Provided timely and frequent feedback on tests, reports, projects, etc. to help students improve	-.01	.07
TM 18. Asked students to help each other understand ideas or concepts	.08	.18
TM 19. Gave projects, tests, or assignments that required original or creative thinking	.01	.16
TM 20. Encouraged student-faculty interaction outside of class (office visits, phone calls, e-mail, etc.)	.05	.15

Table 10 (continued)

*Correlations between Student Ratings and Response Rate by Type of Course Instruction*

<b>Student Item<sup>1</sup></b>	<b>Traditional Courses</b>	<b>Online Courses</b>
TM 44. The instructor used a variety of methods—not only tests—to evaluate student progress on course objectives.	.02	.18
TM 45. The instructor expected students to take their share of responsibility for learning.	-.07	.12
TM 46. The instructor had high achievement standards in this class.	.00	.16
TM 47. The instructor used educational technology (e.g., Internet, email, computer exercises, multi-media presentations, etc.) to promote learning	-.01	.13
Obj 1. Gaining factual knowledge (terminology, classifications, methods, trends)	-.01	.09
Obj 2. Learning fundamental principles, generalizations, or theories	-.02	.08
Obj 3. Learning to <i>apply</i> course material (to improve thinking, problem solving, and decisions)	.01	.12
Obj 4. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course	.01	.13
Obj 5. Acquired skills in working with others as a member of a team	.07	.15
Obj 6. Developing creative capacities (writing, inventing, designing, performing in art, music, drama, etc.)	-.02	.10
Obj 7. Gaining a broader understanding and appreciation of intellectual/cultural activity (music, science, literature, etc.)	-.04	.04
Obj 8. Developing skill in expressing myself orally or in writing	.00	.12
Obj 9. Learning how to find and use resources for answering questions or solving problems	.04	.09
Obj 10. Developing a clearer understanding of , and commitment to, personal values	-.01	.09
Obj 11. Learning to <i>analyze</i> and <i>critically evaluate</i> ideas, arguments, and points of view	.01	.12
Obj 12. Acquiring an interest in learning more by asking my own questions and seeking answers	.00	.11
CR 33. Amount of reading	-.04	-.05
CR 34. Amount of work in other (non-reading) assignments	.01	.06
CR 35. Difficulty of subject matter	.04	.01
Self 36. I had a strong desire to take this course.	.03	.11
Self 37. I worked harder on this course than on most courses I have taken.	.00	.08
Self 38. I really wanted to take a course from this instructor.	.10	.15
Self 39. I really wanted to take this course regardless of who taught it.	-.01	.01
Self 43. As a rule, I put forth more effort than other students on academic work.	-.04	.06
GL 40. As a result of taking this course, I have more positive feelings toward this field of study.	.01	.12
GL 41. Overall, I rate this instructor as an excellent teacher.	0.00	0.10
GL 42. Overall, I rate this course as excellent.	-0.03	0.09
PRO. Progress on Relevant (Important and Essential) Objectives	0.03	0.12
PROadj. Adjusted Progress on Relevant Objectives Score	0.05	0.08

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*Note:* Ns for traditional and online courses ranged from 3,704 to 5,272 and 10,784 to 13,416, respectively.

## **Are instructors' ratings of the importance of the 12 IDEA learning objectives similar between types of courses?**

Table 11 presents descriptive statistics for instructor ratings of importance on each of the 12 IDEA learning objectives by type of course instruction and for the overall IDEA database. The “% Total” columns in Table 11 indicate the percentage of instructors rating an objective either “important” or “essential.” Those percentages did not differ meaningfully between traditional and online courses. Differences in the “% Total” ranged from |0.9%| for “communication skills” (Objective 8) to |11.3%| for “team skills” (Objective 5). Similarly, when examining mean differences in importance ratings of the 12 learning outcomes, differences ranged from |.01| for “communication skills” to |.17| for “creative capacities (Objective 6). Given that the average *SD* for the objectives was quite large (.74), mean ratings of importance did not differ meaningfully between online and traditional courses.



Table 11

*Frequencies and Descriptive Statistics for Instructor (FIF) Ratings of Learning Objectives*

Learning Outcome	Traditional Courses						Online Courses						IDEA Database 2002-2008					
	% I	% E	% Total	M	SD	Valid N	% I	%E	% Total	M	SD	Valid N	% I	%E	% Total	M	SD	Valid N
FR 1. Factual knowledge	33.6	44.1	77.7	2.22	0.79	4,753	33.0	48.5	81.5	2.30	0.76	12,553	30.4	49.3	79.7	2.29	.78	647,582
FR2. Principles and theories	33.5	41.7	75.2	2.17	0.80	4,725	33.8	43.1	76.9	2.20	0.79	12,501	33.9	41.9	75.8	2.18	.79	642,218
FR3. Applications	36.8	45.4	82.2	2.27	0.75	4,743	35.9	48.0	83.9	2.32	0.74	12,554	38.2	39.5	77.7	2.17	.77	643,623
FR4. Professional skills, viewpoints	32.0	33.2	65.2	1.99	0.82	4,698	31.2	30.5	61.7	1.92	0.83	12,409	30.0	29.3	59.3	1.89	.83	625,806
FR5. Team skills	26.0	11.1	37.1	1.48	0.69	4,628	19.3	6.5	25.8	1.32	0.59	12,211	22.7	8.9	31.6	1.40	.65	612,520
FR6. Creative capacities	20.1	13.2	33.3	1.47	0.72	4,589	15.7	7.1	22.8	1.30	0.59	12,168	14.9	11.5	26.4	1.38	.68	609,445
FR7. Broad liberal education	18.4	13.1	31.5	1.45	0.71	4,600	13.3	10.9	24.2	1.35	0.67	12,199	16.4	10.6	27.0	1.38	.67	609,518
FR8. Communication skills	29.8	20.0	49.8	1.70	0.78	4,671	31.8	18.9	50.7	1.69	0.77	12,262	26.3	19.5	45.8	1.65	.79	620,235
FR9. Find, use resources	35.6	18.6	54.2	1.73	0.76	4,663	37.7	22.0	59.7	1.82	0.77	12,326	30.4	12.3	42.7	1.55	.70	613,826
FR10. Values development	21.8	9.1	30.9	1.40	0.65	4,589	20.1	8.1	28.2	1.36	0.63	12,160	17.1	7.1	24.2	1.31	.60	603,964
FR11. Critical analysis	29.3	25.1	54.4	1.80	0.82	4,653	32.0	27.0	59.0	1.86	0.81	12,346	27.8	20.8	48.6	1.69	.79	620,827
FR12. Interest in learning	36.2	17.5	53.7	1.71	0.75	4,608	33.5	13.9	47.4	1.61	0.72	12,205	30.5	12.2	42.7	1.55	.70	607,185

Note: Note. *M* = mean; *SD* = standard deviation. % I = % Important; % E = % Essential.

*M* number of objectives selected as “important” or “essential” for traditional and online courses = 5.73 (*SD* = 3.20) and = 5.74 (*SD* = 3.07), respectively. For the overall 2002-2008 IDEA Database, *M* = 5.27 (*SD* = 2.89).

Instructors rated importance of learning objectives as 1 = *Minor or No Importance*, 2 = *Important*, or 3 = *Essential*.

Valid *N* = Number of responses from all classes excluding missing responses.

**Are the inter-correlations among the instructor ratings of the 12 learning objectives similar across type of course?**

Table 12 presents inter-correlations among instructor ratings of the importance of the 12 learning objectives, computed separately for traditional and online courses. The only conspicuous difference was that the correlation between Objective 6 (Developing creative capacities) and Objective 8 (Developing skill in expressing oneself orally or in writing) was higher in online ( $r = .47$ ) than traditional ( $r = .29$ ) courses. However, in both cases the correlation was moderately positive. Given the high number of correlations computed, this single difference was not considered meaningful. In general, then, there were no systematic differences between traditional and online courses in the correlations among instructor ratings of objectives.

Table 12

*Inter-Correlations of IDEA Faculty Information Form Faculty Ratings (FR) by Type of Course Instruction*

Traditional											
Item	FR1	FR2	FR3	FR4	FR5	FR6	FR7	FR8	FR9	FR10	FR11
FR1	1										
FR2	0.42	1									
FR3	0.08	0.22	1								
FR4	0.08	0.07	0.29	1							
FR5	-0.07	0.01	0.20	0.21	1						
FR6	-0.11	-0.04	0.13	0.21	0.29	1					
FR7	0.01	0.04	0.00	-0.03	0.14	0.37	1				
FR8	-0.11	-0.03	0.12	0.05	0.34	0.29	0.27	1			
FR9	0.08	0.14	0.32	0.24	0.32	0.21	0.14	0.39	1		
FR10	-0.03	0.06	0.16	0.08	0.35	0.24	0.28	0.33	0.31	1	
FR11	-0.03	0.15	0.24	0.03	0.24	0.19	0.29	0.42	0.38	0.40	1
FR12	0.09	0.18	0.29	0.19	0.33	0.29	0.32	0.38	0.52	0.43	0.50

Online											
Item	FR1	FR2	FR3	FR4	FR5	FR6	FR7	FR8	FR9	FR10	FR11
FR1	1										
FR2	0.44	1									
FR3	0.03	0.22	1								
FR4	0.00	0.06	0.32	1							
FR5	-0.05	0.07	0.22	0.26	1						
FR6	-0.01	0.07	0.15	0.16	0.31	1					
FR7	0.08	0.09	0.01	0.00	0.17	0.41	1				
FR8	-0.06	0.02	0.12	0.09	0.30	0.47	0.33	1			
FR9	0.08	0.10	0.27	0.28	0.29	0.29	0.19	0.38	1		
FR10	0.06	0.15	0.20	0.18	0.34	0.34	0.29	0.35	0.32	1	
FR11	0.00	0.16	0.27	0.08	0.27	0.33	0.29	0.47	0.38	0.39	1
FR12	0.16	0.24	0.27	0.22	0.35	0.37	0.34	0.43	0.50	0.47	0.52

Note: Ns for Traditional and Online Courses = 4,589 to 4,753 and = 12,074 to 12,553, respectively. See Table 11 for item descriptions.

## Are there differences in students' ratings of progress on the 12 learning objectives?

Table 13 presents student ratings of individual items on the IDEA *Diagnostic Form* by type of course instruction. For each item, the magnitude of the difference between traditional and online courses is noted, as well as the approximate value of  $d$ , the standardized mean difference (Cohen, 1988). A measure of effect size,  $d = [(Traditional\ Mean - Online\ Mean) / \text{pooled standard deviation}]$ .<sup>3</sup> Cohen (1988) considered effect sizes approximating .20 (1/5 standard deviation) as small, .50 as medium, and .80 as large. The effect sizes in Table 13 indicate students' self-reported progress on the 12 objectives ("Obj 1" to "Obj 12") was very similar across the two types of courses. Therefore, students in the current sample reported similar progress regardless of whether they were enrolled in on-campus or online courses.

One of the important hallmarks of IDEA student ratings is that students consistently report making greater progress on objectives their instructor rated as important or essential (Hoyt, 1973; Hoyt & Lee, 2002a). Table 14 shows that this was the case, regardless of type of instruction. Across both traditional and online courses, students consistently reported greater progress on important and essential objectives. This provides evidence of criterion-related validity for IDEA student ratings in both traditional and online courses.

## Do students' ratings of how frequently the instructor used various teaching methods differ between traditional and online courses?

Student ratings of the frequency of 20 teaching methods (TM 1 to TM 20) were highly similar across the type of course (see Table 13). Students in traditional and online courses did not differ meaningfully in their ratings of how frequently their instructor used various teaching methods. This implies that instructors are perceived to employ similar teaching methods across course modalities, which supports the generalizability of the 20 teaching methods. However, one experimental teaching method item did differ: TM 47, "The instructor used educational technology (e.g., Internet, e-mail, computer exercises, multi-media presentations, etc.) to promote learning." As indicated in Table 13 (see TM 47), online students ( $M = 4.44$ ) rated their instructors higher on this method than did traditional students ( $M = 4.16$ ). The  $d$  of -.49 indicates a medium effect size due to course modality. This difference makes sense when one considers that, by their very nature, online courses rely heavily upon technology.

On two other items, small effect sizes were found between online and traditional courses. First, students in online courses ( $M = 3.48$ ) reported a greater amount of reading (see TM 33) than did those in traditional courses ( $M = 3.23$ ). This is to be expected given how much information is typically presented in text form in online classes; students are often expected to read lectures, e-mail, and instructor and student postings. In contrast, traditional courses frequently rely upon in-class lectures to deliver content, which requires more listening than reading. Second, students in online courses ( $M = 3.37$ ) reported *less* motivation for taking the course from "this instructor" (see TM 38) than did those in traditional courses ( $M = 3.59$ ). It is likely that students in online programs are less likely to know an instructor until they take the course. Therefore, they are less likely to have strong preferences for a specific instructor.

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<sup>3</sup>  $s = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}}$

Table 13

*Student Ratings of Individual Items on the IDEA Diagnostic Form by Type of Course Instruction*

Item	2002-2008 (IDEA Database)		2002-2008 (Traditional)			2002-2008 (Online)			Traditional - Online	Approx <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>ABS Δ</i>	<i>M</i>	<i>SD</i>	<i>ABS Δ</i>		
TM 1	4.43	0.49	4.33	0.59	0.10	4.19	0.68	0.24	0.14	0.21
TM 2	4.23	0.53	4.17	0.63	0.06	4.07	0.68	0.16	0.10	0.15
TM 3	4.30	0.50	4.24	0.61	0.06	4.32	0.60	-0.02	-0.08	-0.13
TM 4	4.41	0.47	4.32	0.58	0.09	4.23	0.63	0.18	0.09	0.15
TM 5	3.68	0.96	3.74	0.94	-0.06	3.66	1.02	0.02	0.08	0.08
TM 6	4.30	0.52	4.22	0.62	0.08	4.12	0.68	0.18	0.10	0.15
TM 7	3.99	0.60	3.98	0.71	0.01	3.87	0.79	0.12	0.11	0.14
TM 8	4.05	0.58	4.03	0.68	0.02	4.00	0.69	0.05	0.03	0.04
TM 9	3.98	0.67	4.02	0.69	-0.04	4.11	0.71	-0.13	-0.09	-0.13
TM 10	4.24	0.61	4.15	0.71	0.09	4.09	0.73	0.15	0.06	0.08
TM 11	4.31	0.58	4.27	0.63	0.04	4.15	0.71	0.16	0.12	0.17
TM 12	4.35	0.51	4.26	0.61	0.09	4.35	0.56	0.00	-0.09	-0.16
TM 13	4.17	0.58	4.15	0.66	0.02	4.06	0.71	0.11	0.09	0.13
TM 14	3.93	0.80	4.02	0.76	-0.09	3.97	0.83	-0.04	0.05	0.06
TM 15	3.97	0.63	3.99	0.69	-0.02	3.95	0.72	0.02	0.04	0.06
TM 16	3.87	0.78	3.89	0.81	-0.02	3.93	0.88	-0.06	-0.04	-0.05
TM 17	4.23	0.60	4.12	0.73	0.11	4.07	0.80	0.16	0.05	0.06
TM 18	3.96	0.65	3.97	0.71	-0.01	3.86	0.85	0.10	0.11	0.14
TM 19	4.07	0.64	4.10	0.67	-0.03	4.16	0.68	-0.09	-0.06	-0.09
TM 20	4.07	0.62	4.08	0.69	-0.01	3.98	0.77	0.09	0.10	0.13
TM 44	3.94	0.60	3.97	0.64	-0.03	4.07	0.68	-0.13	-0.10	-0.15
TM 45	4.35	0.36	4.41	0.43	-0.06	4.52	0.41	-0.17	-0.11	-0.26
TM 46	4.19	0.44	4.22	0.52	-0.03	4.27	0.51	-0.08	-0.05	-0.10
TM 47	3.95	0.72	4.16	0.65	-0.21	4.44	0.54	-0.49	-0.28	-0.49
Obj 1	4.14	0.50	4.09	0.58	0.05	4.09	0.54	0.05	0.00	0
Obj 2	4.09	0.51	4.06	0.58	0.03	4.05	0.55	0.04	0.01	0.02
Obj 3	4.12	0.52	4.08	0.60	0.04	4.08	0.58	0.04	0.00	0
Obj 4	4.07	0.54	4.04	0.61	0.03	4.02	0.60	0.05	0.02	0.03
Obj 5	3.59	0.79	3.60	0.80	-0.01	3.44	0.82	0.15	0.16	0.20
Obj 6	3.59	0.77	3.66	0.76	-0.07	3.64	0.75	-0.05	0.02	0.03
Obj 7	3.58	0.74	3.62	0.77	-0.04	3.54	0.77	0.04	0.08	0.10
Obj 8	3.60	0.77	3.56	0.78	0.04	3.68	0.76	-0.08	-0.12	-0.16
Obj 9	3.80	0.61	3.80	0.66	0.00	3.93	0.63	-0.13	-0.13	-0.20
Obj 10	3.66	0.70	3.65	0.75	0.01	3.71	0.72	-0.05	-0.06	-0.08
Obj 11	3.82	0.64	3.79	0.70	0.03	3.88	0.67	-0.06	-0.09	-0.13
Obj 12	3.91	0.58	3.86	0.67	0.05	3.89	0.65	0.02	-0.03	-0.05
CR 33	3.22	0.74	3.23	0.79	-0.01	3.48	0.59	-0.26	-0.25	-0.38
CR 34	3.49	0.58	3.53	0.62	-0.04	3.53	0.54	-0.04	0.00	0
CR 35	3.46	0.58	3.49	0.63	-0.03	3.42	0.55	0.04	0.07	0.12
Self 36	3.77	0.70	3.89	0.71	-0.12	3.81	0.71	-0.04	0.08	0.11
Self 37	3.67	0.57	3.72	0.62	-0.05	3.72	0.57	-0.05	0.00	0
Self 38	3.56	0.71	3.59	0.77	-0.03	3.37	0.73	0.19	0.22	0.30
Self 39	3.53	0.61	3.61	0.68	-0.08	3.63	0.66	-0.10	-0.02	-0.03
Self 43	3.80	0.39	3.85	0.42	-0.05	3.86	0.44	-0.06	-0.01	-0.02
GL 40	4.01	0.60	3.99	0.68	0.02	3.97	0.67	0.04	0.02	0.03
GL 41	4.29	0.61	4.20	0.72	0.09	4.18	0.71	0.11	0.02	0.03
GL 42	4.07	0.61	4.05	0.69	0.02	4.06	0.68	0.01	-0.01	-0.01
PRO	53.26	8.74	52.09	9.92	1.17	52.16	9.72	1.10	-0.07	-0.01
PROadj	51.01	8.98	48.91	10.37	2.10	48.43	10.60	2.58	0.48	0.05

Note: TM = Teaching Method; Obj = Teaching Objective; CR = Course Rating; Self = Self-Rating; GL = Global; PRO = Progress on relative objectives; adj = adjusted. ABS Δ = Absolute value of 2002-2008 IDEA Database mean minus 2002-2008 Traditional or Online mean. Approx *d* = measure of effect size (see page 15 footnote). See Table 10 for item descriptions.

Table 14

*Descriptive Statistics for Student Ratings of Progress on Objectives by Type of Course Instruction at Each Level of Instructor Rating of Importance*

Traditional Courses												
Learning Outcome	<u>Minor or No Importance</u>			<u>Important</u>			<u>Essential</u>			<u>Important &amp; Essential</u>		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
1. Factual knowledge	3.95	0.62	1,063	4.09	0.54	1,595	4.17	0.54	2,095	4.14	.54	3,690
2. Principles and theories	3.94	0.62	1,175	4.10	0.54	1,582	4.11	0.54	1,968	4.11	.54	3,550
3. Applications	4.00	0.57	847	4.04	0.61	1,745	4.14	0.57	2,151	4.10	.59	3,896
4. Professional skills, viewpoints	3.93	0.59	1,632	4.04	0.61	1,504	4.16	0.57	1,562	4.10	.59	3,066
5. Team skills	3.43	0.79	2,911	3.82	0.72	1,204	4.06	0.59	513	3.89	.68	1,717
6. Creative capacities	3.55	0.75	3,060	3.83	0.69	924	4.04	0.67	605	3.91	.68	1,529
7. Broad liberal education	3.50	0.76	3,149	3.79	0.73	848	4.02	0.67	603	3.89	.71	1,451
8. Communication skills	3.35	0.79	2,342	3.64	0.72	1,394	4.00	0.60	935	3.78	.67	2,329
9. Find, use resources	3.70	0.65	2,136	3.86	0.64	1,660	3.94	0.63	867	3.89	.64	2,527
10. Values development	3.56	0.74	3,169	3.80	0.71	1,002	3.98	0.64	418	3.85	.69	1,420
11. Critical analysis	3.65	0.70	2,118	3.85	0.68	1,365	3.96	0.63	1,170	3.90	.66	2,535
12. Interest in learning	3.81	0.65	2,135	3.89	0.65	1,668	3.93	0.68	805	3.90	.66	2,473

Online Courses												
Learning Outcome	<u>Minor or No Importance</u>			<u>Important</u>			<u>Essential</u>			<u>Important &amp; Essential</u>		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
1. Factual knowledge	4.06	0.53	2,329	4.08	0.53	4,139	4.11	0.54	6,085	4.10	.54	10,224
2. Principles and theories	4.04	0.55	2,881	4.05	0.54	4,226	4.07	0.54	5,394	4.06	.54	9,620
3. Applications	4.03	0.58	2,025	4.07	0.56	4,506	4.12	0.57	6,023	4.10	.57	10,529
4. Professional skills, viewpoints	3.94	0.57	4,755	4.03	0.59	3,866	4.14	0.58	3,788	4.08	.59	7,654
5. Team skills	3.33	0.81	9,056	3.72	0.72	2,360	3.82	0.77	795	3.75	.73	3,155
6. Creative capacities	3.60	0.75	9,391	3.76	0.72	1,907	3.92	0.68	870	3.81	.71	2,777
7. Broad liberal education	3.48	0.75	9,245	3.64	0.75	1,625	3.91	0.72	1,329	3.76	.74	2,954
8. Communication skills	3.52	0.78	6,054	3.78	0.69	3,896	3.96	0.64	2,312	3.85	.68	6,208
9. Find, use resources	3.88	0.62	4,961	3.94	0.63	4,649	4.03	0.61	2,716	3.98	.62	7,365
10. Values development	3.65	0.72	8,728	3.86	0.64	2,448	3.93	0.66	984	3.88	.65	3,432
11. Critical analysis	3.78	0.69	5,063	3.91	0.65	3,947	4.00	0.63	3,336	3.95	.64	7,283
12. Interest in learning	3.88	0.64	6,411	3.89	0.64	4,093	3.93	0.65	1,701	3.90	.64	5,794

*Note:* Students responded to all items on a scale of 1 = *No Apparent Progress* to 5 = *Exceptional progress; I made outstanding gains on this objective.*

**Are the correlations between instructors' and students' ratings of learning objectives similar in traditional and online environments?**

An indirect test of the validity of the IDEA ratings involves correlating students' reported progress for each objective with the instructors' ratings of the importance of those objectives. The highest correlations should be found in ratings of the same objectives (see Hoyt, 1973). The correlations in Table 15 confirm that correlations among ratings of the same objectives (indicated in bold along the diagonal) are, on average, higher in both traditional and online courses. The average correlation between instructor and student ratings of the same 12 learning outcomes was, however, somewhat higher in traditional ( $r = .19$ ) than in online ( $r = .12$ ) courses. Nonetheless, the average off-diagonal correlation was quite low in both traditional and online courses,  $r_s = .03$  and  $.01$ , respectively. This provides indirect evidence of the validity of the student ratings in both course modalities.

Table 15

*Correlations between Faculty Ratings and Student Ratings of Learning Objectives for Traditional and Online Course Instruction*

Traditional												
Item	FR1	FR2	FR3	FR4	FR5	FR6	FR7	FR8	FR9	FR10	FR11	FR12
SR21	<b>.15</b>	.09	.04	.07	-.05	-.07	-.01	-.06	-.03	-.04	-.04	-.01
SR22	.12	<b>.11</b>	.05	.06	-.05	-.07	-.01	-.05	-.03	-.02	-.02	-.02
SR23	.01	.02	<b>.09</b>	.12	.02	.01	-.04	.01	.02	.02	-.01	.01
SR24	.02	.01	.08	<b>.16</b>	.02	.02	-.04	.00	.02	-.02	-.05	-.01
SR25	-.07	-.05	.09	.10	<b>.29</b>	.05	.00	.12	.07	.10	.03	.07
SR26	-.13	-.11	.02	.11	.12	<b>.24</b>	.14	.20	.07	.08	.07	.09
SR27	-.04	-.06	-.04	-.03	.03	.15	<b>.25</b>	.15	.01	.10	.12	.11
SR28	-.13	-.11	.02	.00	.11	.09	.09	<b>.33</b>	.10	.14	.17	.10
SR29	.01	-.01	.09	.07	.05	-.02	-.05	.13	<b>.15</b>	.02	.07	.05
SR30	-.06	-.05	.03	.03	.08	.05	.05	.14	.06	<b>.19</b>	.13	.10
SR31	-.05	-.01	.06	.00	.04	.00	.04	.16	.07	.11	<b>.19</b>	.07
SR32	-.01	-.01	.06	.06	.04	.02	.03	.09	.06	.07	.08	<b>.07</b>

Online												
Item	FR1	FR2	FR3	FR4	FR5	FR6	FR7	FR8	FR9	FR10	FR11	FR12
SR21	<b>.04</b>	-.01	.00	.05	-.02	-.03	-.04	-.02	.00	-.01	-.04	.00
SR22	.02	<b>.02</b>	.02	.05	-.01	-.02	-.05	-.01	-.01	.01	-.02	.01
SR23	-.06	-.05	<b>.06</b>	.12	.03	-.01	-.08	.01	.02	.03	-.02	.00
SR24	-.05	-.06	.05	<b>.14</b>	.04	-.01	-.08	.00	.02	.01	-.04	-.01
SR25	-.13	-.10	.07	.12	<b>.22</b>	.01	-.06	.05	.04	.06	.03	.01
SR26	-.15	-.15	-.01	.07	.07	<b>.13</b>	.06	.18	.06	.06	.08	.02
SR27	-.06	-.09	-.06	-.03	.02	.09	<b>.18</b>	.13	.03	.07	.08	.05
SR28	-.16	-.13	-.01	.03	.09	.11	.07	<b>.24</b>	.06	.11	.14	.05
SR29	-.05	-.08	.01	.07	.03	.01	-.03	.07	<b>.09</b>	.01	.02	.01
SR30	-.09	-.08	.01	.05	.07	.03	.00	.09	.03	<b>.14</b>	.06	.03
SR31	-.10	-.07	.02	.01	.06	.05	.03	.13	.02	.08	<b>.13</b>	.04
SR32	-.08	-.09	.02	.07	.05	.02	-.01	.06	.03	.05	.03	<b>.03</b>

Note: Average  $r$  on-diagonal, Traditional = .18, Online = .12.

Average  $r$  off-diagonal, Traditional = .03, Online = .01.

Ns for Traditional and Online Courses = 4,589 to 4,753 and = 12,160 to 12,554, respectively.

See Table 10 for item descriptions.

In both types of courses, the average on-diagonal correlations were lower than those reported in Hoyt (1973) and Hoyt and Lee (2002a). However, those studies excluded from the analysis classes having fewer than 10 respondents, whereas in Table 15 all classes were included. In addition, Hoyt and Lee (2002a) excluded novice users and classes using the *Short Form*. Therefore the correlations were computed between instructor and student ratings on the 12 learning outcomes three more times; first removing Short-Form users only (Table 16), then removing novice users only (Table 17), and then removing classes with < 10 respondents only (Table 18). In some cases, enacting the Technical Report 12 exclusion criteria slightly increased on-diagonal correlations. This was especially true when removing classes with fewer than 10 respondents (see Table 18).

Table 16

*Correlations between Faculty Ratings and Student Ratings of Learning Objectives for Traditional and Online Course Instruction (Excluding Short Form Users)*

Traditional												
Item	FR1	FR2	FR3	FR4	FR5	FR6	FR7	FR8	FR9	FR10	FR11	FR12
SR21	<b>.13</b>	.08	.03	.07	-.07	-.07	-.03	-.07	-.02	-.04	-.04	-.02
SR22	.10	<b>.10</b>	.04	.07	-.07	-.06	-.02	-.06	-.02	-.02	-.02	-.03
SR23	.00	.01	<b>.08</b>	.13	.01	.01	-.05	.02	.03	.03	-.01	.00
SR24	.00	-.01	.06	<b>.17</b>	.01	.03	-.05	-.01	.02	-.01	-.05	-.02
SR25	-.08	-.08	.08	.09	<b>.29</b>	.07	.00	.13	.08	.11	.05	.06
SR26	-.15	-.13	.01	.12	.13	<b>.27</b>	.15	.20	.06	.10	.09	.09
SR27	-.08	-.08	-.05	-.01	.04	.19	<b>.25</b>	.15	.01	.12	.12	.13
SR28	-.15	-.14	.01	.02	.12	.11	.08	<b>.33</b>	.11	.16	.18	.11
SR29	-.02	-.04	.08	.09	.06	.01	-.04	.15	<b>.16</b>	.05	.09	.05
SR30	-.08	-.07	.03	.04	.08	.08	.06	.16	.08	<b>.21</b>	.14	.11
SR31	-.08	-.03	.05	.01	.04	.02	.03	.18	.08	.13	<b>.20</b>	.08
SR32	-.04	-.04	.05	.08	.05	.05	.03	.11	.08	.10	.09	<b>.07</b>

Online												
Item	FR1	FR2	FR3	FR4	FR5	FR6	FR7	FR8	FR9	FR10	FR11	FR12
SR21	<b>.03</b>	-.01	.00	.06	-.02	-.04	-.05	-.04	-.01	-.02	-.05	-.01
SR22	.02	<b>.02</b>	.02	.06	-.02	-.03	-.06	-.03	-.01	.01	-.03	.00
SR23	-.07	-.06	<b>.06</b>	.13	.03	-.02	-.09	-.01	.02	.02	-.03	-.01
SR24	-.06	-.07	.05	<b>.15</b>	.03	-.03	-.09	-.01	.01	.01	-.05	-.02
SR25	-.15	-.10	.07	.14	<b>.21</b>	.00	-.07	.04	.03	.06	.01	.00
SR26	-.16	-.15	-.01	.08	.06	<b>.11</b>	.04	.16	.04	.06	.06	.01
SR27	-.06	-.09	-.05	-.01	.01	.08	<b>.16</b>	.11	.02	.07	.06	.04
SR28	-.17	-.14	-.01	.06	.08	.09	.06	<b>.21</b>	.05	.11	.12	.04
SR29	-.06	-.08	.02	.09	.02	.00	-.04	.06	<b>.09</b>	.01	.00	.00
SR30	-.11	-.09	.01	.06	.06	.02	-.01	.07	.02	<b>.13</b>	.04	.01
SR31	-.11	-.07	.02	.02	.05	.03	.02	.11	.02	.08	<b>.11</b>	.02
SR32	-.08	-.09	.02	.08	.04	.01	-.02	.05	.02	.05	.02	<b>.14</b>

Note: Average *r* on-diagonal, Traditional = .19, Online = .12.

Average *r* off-diagonal, Traditional = .03, Online .004.

Ns for Traditional and Online Courses = 3,292 to 3,396 and = 9,818 to 10,152, respectively.

See Table 10 for item descriptions.

Table 17

*Correlations between Faculty Ratings and Student Ratings of Learning Objectives for Traditional and Online Course Instruction (Excluding Novice Users)*

Traditional												
Item	FR1	FR2	FR3	FR4	FR5	FR6	FR7	FR8	FR9	FR10	FR11	FR12
SR21	<b>.19</b>	.11	.03	.06	-.09	-.11	.00	-.08	-.06	-.06	-.05	-.01
SR22	.16	<b>.14</b>	.04	.05	-.09	-.11	-.02	-.08	-.06	-.04	-.03	-.02
SR23	.03	.04	<b>.09</b>	.12	.01	-.01	-.05	.00	.01	.02	-.02	.01
SR24	.04	.03	.08	<b>.16</b>	.03	.01	-.04	-.01	.01	-.02	-.04	.01
SR25	-.07	-.05	.09	.09	<b>.31</b>	.02	.00	.12	.06	.09	.01	.07
SR26	-.14	-.12	.01	.10	.11	<b>.24</b>	.17	.23	.07	.07	.10	.10
SR27	-.03	-.06	-.06	-.04	.00	.12	<b>.29</b>	.18	-.01	.11	.15	.12
SR28	-.15	-.13	-.01	-.03	.10	.07	.12	<b>.35</b>	.10	.14	.18	.11
SR29	.00	-.03	.09	.07	.06	-.05	-.05	.14	<b>.15</b>	.01	.07	.04
SR30	-.05	-.05	.03	-.01	.05	.01	.08	.15	.05	<b>.20</b>	.15	.11
SR31	-.04	-.01	.04	-.02	.02	-.04	.05	.15	.05	.10	<b>.21</b>	.06
SR32	.00	-.01	.05	.05	.03	-.02	.04	.08	.05	.08	.08	<b>.08</b>

Online												
Item	FR1	FR2	FR3	FR4	FR5	FR6	FR7	FR8	FR9	FR10	FR11	FR12
SR21	<b>.02</b>	-.01	.00	.07	.00	-.01	-.02	-.02	.00	-.02	-.05	.00
SR22	.01	<b>.03</b>	.03	.07	.01	.00	-.04	-.01	.00	.00	-.02	.01
SR23	-.08	-.05	<b>.07</b>	.13	.05	.02	-.06	.02	.02	.03	-.02	.01
SR24	-.06	-.06	.06	<b>.16</b>	.05	.01	-.07	.01	.03	.01	-.04	.00
SR25	-.15	-.10	.07	.14	<b>.24</b>	.04	-.05	.07	.05	.05	.03	.02
SR26	-.16	-.15	.00	.08	.09	<b>.14</b>	.08	.19	.07	.06	.08	.03
SR27	-.08	-.09	-.06	-.02	.03	.11	<b>.19</b>	.14	.05	.06	.08	.06
SR28	-.16	-.123	.00	.05	.11	.12	.09	<b>.25</b>	.08	.11	.15	.06
SR29	-.07	-.08	.03	.09	.05	.04	-.01	.09	<b>.11</b>	.02	.03	.03
SR30	-.10	-.07	.03	.07	.08	.05	.01	.11	.04	<b>.15</b>	.07	.05
SR31	-.11	-.06	.03	.03	.08	.07	.03	.14	.04	.08	<b>.13</b>	.05
SR32	-.09	-.08	.03	.09	.07	.05	.01	.07	.05	.05	.03	<b>.04</b>

Note: Average  $r$  on-diagonal, Traditional = .20, Online = .13.

Average  $r$  off-diagonal, Traditional = .03, Online = .02.

$N$ s for Traditional and Online Courses = 2,943 to 3,095 and = 8,976 to 9,291, respectively.

See Table 10 for item descriptions.



Table 18

*Correlations between Faculty Ratings and Student Ratings of Learning Objectives for Traditional and Online Course Instruction (Excluding Classes with < 10 Respondents)*

Traditional												
Item	FR1	FR2	FR3	FR4	FR5	FR6	FR7	FR8	FR9	FR10	FR11	FR12
SR21	<b>.21</b>	.10	.04	.10	-.07	-.13	-.05	-.09	-.06	-.08	-.07	-.06
SR22	.17	<b>.14</b>	.06	.10	-.06	-.12	-.05	-.07	-.06	-.04	-.03	-.05
SR23	.03	.02	<b>.10</b>	.17	.04	-.03	-.07	.02	.02	.01	-.03	-.01
SR24	.05	.03	.10	<b>.23</b>	.04	-.01	-.09	.02	.03	-.04	-.06	-.03
SR25	-.11	-.07	.13	.15	<b>.35</b>	.05	-.02	.17	.13	.07	.05	.09
SR26	-.17	-.16	.05	.16	.17	<b>.26</b>	.14	.27	.13	.10	.11	.11
SR27	-.04	-.09	-.02	.01	.04	.14	<b>.28</b>	.19	.03	.13	.16	.13
SR28	-.18	-.16	.03	.05	.17	.13	.12	<b>.38</b>	.14	.16	.20	.13
SR29	-.02	-.03	.13	.14	.11	.03	-.04	.16	<b>.19</b>	.01	.07	.06
SR30	-.07	-.07	.06	.06	.11	.05	.08	.19	.11	<b>.26</b>	.17	.13
SR31	-.07	-.03	.06	.04	.08	.01	.07	.20	.08	.15	<b>.23</b>	.10
SR32	-.01	-.03	.08	.11	.08	.02	.04	.13	.09	.09	.11	<b>.09</b>

Online												
Item	FR1	FR2	FR3	FR4	FR5	FR6	FR7	FR8	FR9	FR10	FR11	FR12
SR21	<b>.09</b>	.00	.02	.05	-.05	-.05	-.05	-.01	-.01	-.02	-.06	-.01
SR22	.06	<b>.04</b>	.04	.06	-.03	-.04	-.06	.00	-.02	.01	-.02	.00
SR23	-.04	-.05	<b>.09</b>	.12	.02	-.03	-.11	.03	.01	.02	-.01	.00
SR24	-.02	-.07	.08	<b>.16</b>	.02	-.03	-.11	.02	.01	.00	-.04	-.01
SR25	-.14	-.07	.13	.14	<b>.28</b>	.03	-.06	.09	.05	.06	.08	.05
SR26	-.17	-.15	.02	.07	.09	<b>.15</b>	.10	.25	.08	.07	.12	.05
SR27	-.07	-.10	-.07	-.06	-.01	.11	<b>.23</b>	.18	.03	.07	.10	.06
SR28	-.18	-.12	.01	.04	.09	.13	.08	<b>.30</b>	.08	.12	.19	.07
SR29	-.04	-.08	.04	.09	.02	.01	-.04	.11	<b>.12</b>	.01	.04	.02
SR30	-.10	-.07	.04	.06	.05	.04	-.01	.13	.03	<b>.17</b>	.10	.05
SR31	-.11	-.05	.05	.00	.06	.05	.02	.17	.03	.09	<b>.17</b>	.05
SR32	-.06	-.07	.05	.08	.04	.02	-.02	.10	.04	.05	.06	<b>.04</b>

Note: Average  $r$  on-diagonal, Traditional = .23, Online = .15.

Average  $r$  off-diagonal, Traditional = .04 Online = .02.

Ns for Traditional and Online Courses = 2,215 to 2,301 and = 4,771 to 4,932, respectively.

See Table 10 for item descriptions.

### **Are the correlations between students' ratings of progress on learning objectives and their ratings of the instructor's teaching methods similar between types of courses?**

Table 19 presents correlations between students' ratings of progress on the 12 learning objectives ("Obj 1" to "Obj 12"), the 20 teaching methods ("TM 1" to "TM 20"), and TM 47 (instructor's use of educational technology). The samples for these correlations included only instructors who rated a given objective as either important or essential. The pattern of correlations was very consistent across type of course. Furthermore, the teaching methods that were highly correlated with learning objectives ( $r \geq .60$ ) closely followed the findings in Hoyt and Lee (2002a). One notable exception was found in the correlation between TM 47 (use of educational technology to promote learning) and Objective 7 (broad liberal education), which was slightly higher in online ( $r = .43$ ) than traditional ( $r = .26$ ) courses. Because of the high number of comparisons made among correlation coefficients, this difference was not considered meaningful. This demonstrates support for the use of IDEA as a diagnostic to guide improvement in online learning environments.

Table 19

*Correlations between Student Ratings on Learning Outcomes and Teaching Methods for Traditional and Online Courses*

Traditional												
Item	Obj1	Obj2	Obj3	Obj4	Obj5	Obj6	Obj7	Obj8	Obj9	Obj10	Obj11	Obj12
TM 1	.68	.67	.72	.70	.59	.66	.64	.60	.62	.65	.60	.68
TM 2	.70	.71	.76	.74	.63	.70	.65	.64	.67	.69	.64	.73
TM 3	.66	.65	.69	.68	.56	.65	.54	.55	.63	.62	.59	.62
TM 4	.74	.75	.77	.75	.58	.67	.60	.60	.63	.66	.64	.68
TM 5	.32	.34	.41	.38	.69	.43	.34	.50	.49	.51	.44	.45
TM 6	.75	.75	.77	.75	.62	.67	.63	.62	.65	.66	.64	.68
TM 7	.63	.63	.69	.68	.61	.70	.65	.62	.61	.63	.59	.66
TM 8	.70	.72	.74	.73	.63	.70	.62	.64	.70	.70	.69	.72
TM 9	.55	.55	.61	.60	.55	.55	.40	.61	.74	.63	.63	.64
TM 10	.71	.71	.74	.70	.56	.64	.60	.63	.64	.65	.65	.66
TM 11	.65	.64	.67	.63	.56	.52	.46	.55	.55	.63	.55	.61
TM 12	.70	.68	.69	.65	.49	.50	.39	.52	.59	.55	.56	.57
TM 13	.73	.74	.77	.74	.61	.71	.67	.65	.67	.70	.70	.72
TM 14	.48	.49	.59	.61	.68	.60	.41	.53	.60	.58	.51	.58
TM 15	.67	.69	.76	.75	.70	.76	.64	.67	.74	.72	.68	.74
TM 16	.49	.51	.59	.56	.62	.60	.53	.67	.62	.73	.66	.66
TM 17	.61	.62	.64	.62	.53	.57	.50	.55	.58	.58	.55	.59
TM 18	.55	.57	.63	.60	.65	.58	.54	.59	.63	.67	.61	.66
TM 19	.57	.59	.65	.61	.58	.64	.49	.67	.68	.65	.68	.68
TM 20	.65	.65	.68	.67	.61	.63	.58	.65	.65	.61	.61	.69
TM 47	.46	.45	.50	.47	.38	.36	.26	.39	.54	.44	.43	.48

Online												
Item	Obj1	Obj2	Obj3	Obj4	Obj5	Obj6	Obj7	Obj8	Obj9	Obj10	Obj11	Obj12
TM 1	.63	.64	.68	.67	.59	.63	.54	.61	.62	.64	.65	.67
TM 2	.64	.65	.69	.69	.62	.63	.58	.62	.65	.64	.67	.69
TM 3	.63	.62	.65	.65	.52	.57	.52	.56	.59	.59	.61	.60
TM 4	.68	.68	.72	.72	.60	.60	.58	.62	.64	.65	.67	.66
TM 5	.33	.36	.41	.39	.63	.46	.37	.45	.41	.44	.47	.45
TM 6	.67	.68	.71	.71	.62	.62	.57	.61	.62	.64	.67	.65
TM 7	.57	.58	.63	.62	.60	.60	.56	.63	.59	.61	.62	.62
TM 8	.66	.67	.71	.71	.65	.67	.61	.68	.67	.68	.71	.70
TM 9	.55	.56	.61	.61	.55	.60	.50	.61	.69	.59	.64	.62
TM 10	.68	.68	.71	.71	.57	.61	.59	.62	.63	.63	.67	.64
TM 11	.59	.60	.68	.65	.60	.53	.43	.55	.56	.63	.61	.60
TM 12	.65	.66	.68	.67	.49	.54	.49	.51	.57	.55	.59	.56
TM 13	.67	.69	.72	.71	.62	.65	.62	.65	.64	.68	.71	.67
TM 14	.47	.49	.58	.58	.64	.58	.43	.55	.57	.56	.58	.55
TM 15	.64	.66	.72	.72	.67	.69	.59	.69	.69	.71	.71	.70
TM 16	.46	.49	.56	.55	.62	.57	.52	.59	.55	.61	.62	.60
TM 17	.57	.58	.61	.60	.50	.56	.53	.55	.55	.54	.56	.56
TM 18	.48	.50	.56	.56	.66	.56	.48	.56	.54	.59	.59	.60
TM 19	.58	.60	.68	.66	.61	.67	.59	.67	.65	.65	.71	.64
TM 20	.58	.60	.64	.64	.61	.60	.50	.59	.60	.61	.60	.63
TM47	.57	.56	.58	.57	.47	.48	.43	.49	.56	.52	.53	.53

Note: Ns for Traditional and Online Courses = 3,706 and = 10,833, respectively.

See Table 10 for item descriptions.

**Are the correlations between students' characteristics (e.g., work habits, motivation), overall ratings of the course and the instructor, and perceived progress on relevant objectives similar across types of courses?**

In the IDEA *Diagnostic Form* Report, students' ratings of the instructor, the course, and their progress on relevant objectives (PRO) are adjusted for their correlations with student/course characteristics. Therefore, it is important to investigate the similarity of those correlations across type of course. Table 20 presents correlations among these variables. The pattern of correlations was very similar across course modalities with a few exceptions. First, students' adjusted self-reported progress on relevant objectives (Adjusted TSCORE PRO) was somewhat more highly correlated with the instructor's use of technology (D47) in online ( $r = .50$ ) than traditional ( $r = .35$ ) courses. In both cases, however, the correlation was moderately positive. Second, students' ratings of the excellence of the course was somewhat more highly correlated with their course effort (D37) in traditional ( $r = .42$ ) than online ( $r = .27$ ) courses. However, regardless of course type, the relationship was low to moderate and positive. Third, the correlations between difficulty of the subject matter (D35) and two global measures (D40/S16, D42/S18) were weak and positive in traditional courses. In contrast, those correlations were weak and negative in online courses. However, in both cases the relationships were almost negligible. No other correlations were meaningfully different across types of courses. In general, then, there were more similarities than differences in the magnitude and direction of correlations across online and traditional courses.

Table 20

*Inter-Correlations between Student/Course Characteristics and Summary Judgment Items*

<b>Student Item</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
	<b><u>Traditional Courses</u></b>												
1. Instructor use of technology (D47)	1												
2. Amount of reading in class (D33)	0.20	1											
3. Amount of other work (D34)	0.23	0.30	1										
4. Difficulty of subject (D35)	0.07	0.39	0.58	1									
5. Strong desire to take course (D36)	0.27	0.05	0.16	0.14	1								
6. Work harder on course (D37)	0.27	0.32	0.64	0.63	0.44	1							
7. Wanted to take course from instructor (D38)	0.35	0.10	0.18	0.19	0.55	0.42	1						
8. Wanted to take course regardless (D39/S15)	0.22	0.04	0.18	0.11	0.71	0.37	0.28	1					
9. Put forth more effort in all classes (D43/S13)	0.24	0.15	0.28	0.22	0.29	0.42	0.29	0.29	1				
10. Positive feelings toward field (D40/S16)	0.45	0.10	0.18	0.11	0.71	0.44	0.68	0.52	0.30	1			
11. Excellent Teacher (D41/S17)	0.51	0.10	0.12	0.08	0.44	0.32	0.72	0.29	0.21	0.76	1		
12. Excellent Course (D42/S18)	0.46	0.11	0.16	0.10	0.63	0.42	0.67	0.46	0.27	0.85	0.83	1	
13. Raw TSCORE PRO	0.49	0.19	0.22	0.16	0.49	0.44	0.66	0.35	0.35	0.78	0.79	0.80	1
14. Adjusted TSCORE PRO	0.35	0.13	0.08	0.16	0.24	0.29	0.54	-0.01	-0.06	0.59	0.70	0.64	0.86
	<b><u>Online Courses</u></b>												
1. Instructor use of technology (D47)	1												
2. Amount of reading in class (D33)	0.11	1											
3. Amount of other work (D34)	0.20	0.45	1										
4. Difficulty of subject (D35)	0.08	0.45	0.52	1									
5. Strong desire to take course (D36)	0.30	0.03	0.02	-0.04	1								
6. Work harder on course (D37)	0.28	0.36	0.54	0.53	0.32	1							
7. Wanted to take course from instructor (D38)	0.44	0.05	0.10	0.09	0.49	0.33	1						
8. Wanted to take course regardless (D39/S15)	0.18	0.03	0.04	-0.02	0.66	0.24	0.17	1					
9. Put forth more effort in all classes (D43/S13)	0.25	0.14	0.23	0.16	0.24	0.33	0.25	0.18	1				
10. Positive feelings toward field (D40/S16)	0.51	0.05	0.04	-0.05	0.66	0.31	0.60	0.47	0.24	1			
11. Excellent Teacher (D41/S17)	0.65	0.03	0.06	0.01	0.40	0.26	0.65	0.26	0.17	0.71	1		
12. Excellent Course (D42/S18)	0.58	0.03	0.03	-0.05	0.56	0.27	0.61	0.39	0.21	0.81	0.85	1	
13. Raw TSCORE PRO	0.60	0.09	0.13	0.02	0.45	0.33	0.58	0.29	0.25	0.74	0.77	0.78	1
14. Adjusted TSCORE PRO	0.50	0.04	0.03	0.06	0.21	0.24	0.48	-0.05	-0.13	0.55	0.67	0.64	0.87

Note: Ns for Traditional and Online Courses = 3,704 to 5,272 and = 10,833 to 13,365, respectively.

The letter and number in parentheses indicates the number of item on the Diagnostic (D) and Short (S) Forms respectively.

**Are the correlations between student ratings of teaching methods and overall measures of effectiveness similar in online and traditional courses?**

Table 21 presents correlations between student ratings of how frequently the instructor used each of 20 teaching methods, three global ratings of teaching effectiveness, and progress on relevant objectives (Raw PRO, Adj PRO). The three global ratings of teaching effectiveness were: “As a result of taking this course, I have more positive feelings toward this field of study” (D40/S16); “Overall, I rate this instructor an excellent teacher” (D41/S17); “Overall, I rate this course as excellent” (D42/S18). The pattern of correlations in Table 21 is very consistent across traditional and online courses.

Table 21  
*Inter-Correlations between Student Ratings of Teaching Methods and Summary Judgment Items for Traditional and Online Courses*

Item	Traditional Courses					Online Courses				
	D40/ S16	D41/ S17	D42/ S18	Raw PRO	Adj PRO	D40 /S16	D41 /S17	D42 /S18	Raw PRO	Adj PRO
TM 1	.67	.83	.69	.73	.62	.62	.85	.72	.72	.62
TM 2	.70	.85	.73	.77	.66	.62	.83	.71	.73	.64
TM 3	.62	.77	.69	.70	.60	.57	.75	.68	.68	.59
TM 4	.73	.83	.76	.77	.66	.67	.82	.75	.74	.63
TM 5	.35	.41	.34	.42	.31	.36	.43	.39	.42	.33
TM 6	.71	.82	.75	.77	.67	.66	.79	.74	.73	.62
TM 7	.64	.76	.66	.71	.60	.54	.72	.63	.65	.55
TM 8	.68	.79	.71	.77	.67	.62	.78	.70	.75	.63
TM 9	.54	.62	.56	.63	.50	.54	.67	.60	.64	.53
TM 10	.70	.87	.76	.75	.66	.66	.85	.77	.74	.65
TM 11	.64	.68	.61	.66	.55	.63	.69	.66	.66	.53
TM 12	.58	.71	.64	.67	.57	.60	.74	.70	.69	.60
TM 13	.75	.84	.76	.78	.67	.69	.79	.74	.74	.62
TM 14	.52	.54	.51	.57	.41	.52	.56	.55	.58	.44
TM 15	.70	.78	.71	.78	.63	.64	.77	.71	.75	.63
TM 16	.57	.63	.56	.61	.48	.51	.59	.55	.58	.46
TM 17	.57	.74	.63	.66	.57	.52	.77	.65	.64	.58
TM 18	.58	.67	.58	.66	.54	.48	.61	.55	.58	.50
TM 19	.60	.67	.62	.66	.52	.59	.69	.66	.69	.57
TM 20	.63	.75	.65	.71	.60	.56	.76	.65	.67	.58
TM 47	.45	.51	.46	.49	.35	.51	.65	.58	.60	.50

Note: Correlations between traditional and online courses that were  $\geq .15$  are bolded.

Ns for Traditional and Online Courses = 3,706 and = 10,833, respectively.

The letter and number in parentheses indicates the number of item on the Diagnostic (D) and Short (S) Forms respectively. See Table 20 for item detail.

RAW PRO = Raw Score PRO, Adj PRO = Adjusted Score PRO.

See Table 10 for item descriptions.

The 20 teaching methods on the *Form* are combined to form five scales for describing teaching approaches: Stimulating Student Interest, Fostering Student Collaboration, Establishing Rapport, Encouraging Student Involvement, and Structuring Classroom Experiences. In IDEA Research Note #1 (The IDEA Center, 2003), the five teaching approaches served as explanatory variables in regression analyses performed individually on

the three global ratings. Students' ratings on the five scales were more highly correlated with ratings on the "excellent teacher" item ( $R^2 = .85$ ) than on "increased positive feeling" ( $R^2 = .64$ ) and "excellent course" ( $R^2 = .73$ ). For the current report, we conducted the analyses reported in Research Note #1 separately for traditional and online courses. For traditional courses, the five scales explained more variance in the "excellent teacher" item ( $R^2 = .83$ ) than in the "increased positive feeling" ( $R^2 = .60$ ) and "excellent course" ( $R^2 = .66$ ) items. For online courses, the pattern was the same: "excellent teacher" ( $R^2 = .82$ ), "increased positive feeling" ( $R^2 = .52$ ), and "excellent course" ( $R^2 = .67$ ). So, in both traditional and online courses, the extent to which students regard the instructor as "excellent" has much to do with teaching approaches.

In Research Report #4, Hoyt and Lee (2002b) reported the results of multiple regression analyses conducted on the 12 learning objectives with the five teaching approaches as explanatory variables. From those analyses, the authors proposed six teaching styles (A through F), each of which places different emphasis on the five teaching approaches, depending upon the specific learning objective. We investigated whether these teaching styles would be similar across different course modalities. The samples for these regression analyses included only instructors who rated a given objective as either important or essential.

*Teaching Style A.* Appropriate for helping students to pursue cognitive learning objectives (Obj. 1 and 2) and to make applications of learning (Obj. 3 and 4), Teaching Style A emphasizes stimulating student interest. The standardized beta coefficients presented in Table 22 confirm the consistency in this style across traditional and online courses, as the coefficients are high for stimulating student interest. In addition, structuring the classroom experience is associated with progress on these objectives.

Table 22

*Standardized Beta Coefficients for Explanatory Variables in Teaching Style A Objectives*

Objectives for Teaching Style A	Stimulating Student Interest		Foster Collaboration		Establish Rapport		Encourage Involvement		Structure Classroom	
	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online
1. Gaining factual knowledge	0.45	0.40	-0.19	-0.14	0.02	-0.02	0.10	0.03	0.40	0.45
2. Learn principles, theories	0.54	0.45	-0.14	-0.10	-0.06	-0.02	0.05	0.02	0.37	0.41
3. Apply course material	0.41	0.32	-0.09	-0.09	0.07	0.01	0.17	0.22	0.29	0.35
4. Professional skills, attitudes	0.42	0.42	-0.16	-0.09	0.15	0.02	0.18	0.12	0.22	0.32

*Teaching Style B.* Table 23 shows the results of multiple regression analyses performed on Teaching Style B objectives, which emphasize in-depth analysis and thought (Obj. 11) as well as values development (Obj. 10). As in Teaching Style A, this style highlights stimulating student interest in both modalities and, to some extent, fostering student collaboration in traditional courses. Encouraging involvement (e.g., encouraging students to use multiple resources, involving students in "hands-on" activities) is moderately helpful in both types of courses when attempting to foster critical analysis and evaluation.

Table 23

*Standardized Beta Coefficients for Explanatory Variables in Teaching Style B Objectives*

Objectives for Teaching Style B	Stimulating Student Interest		Foster Collaboration		Establish Rapport		Encourage Involvement		Structure Classroom	
	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online
10. Values development	0.45	0.52	0.26	0.04	-0.02	0.10	0.08	0.11	0.07	-0.02
11. Critical analysis, evaluation	0.49	0.44	0.18	0.06	-0.15	-0.01	0.14	0.19	0.16	0.11

*Teaching Style C.* This teaching style stresses helping students to achieve “general education” objectives, such as gaining a broad liberal education (Obj. 7) and increasing interest in learning (Obj. 12). The style is similar to Style B, except that establishing rapport becomes somewhat more important. The standardized beta coefficients in Table 24 indicate this is the case for both traditional and online courses with respect to increasing interest in learning. Moreover, in online courses, structuring the classroom experience is associated with greater student progress in achieving a broad liberal education.

Table 24

*Standardized Beta Coefficients for Explanatory Variables in Teaching Style C Objectives*

Objectives for Teaching Style C	Stimulating Student Interest		Foster Collaboration		Establish Rapport		Encourage Involvement		Structure Classroom	
	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online
7. Broad liberal education	0.49	0.56	0.07	0.06	0.40	0.01	-0.20	-0.16	-0.06	0.20
12. Increased interest in learning	0.38	0.39	0.05	0.05	0.23	0.23	0.18	0.09	-0.01	0.03

*Teaching Style D.* Progress on objectives related to self-expression - developing creative capacities (Obj. 6) and gaining communication skills (Obj. 8) – is associated with Style D teaching. Stimulating student interest is most helpful, followed by establishing rapport and encouraging involvement. Table 25 indicates this was true for both traditional and online courses.

Table 25

*Standardized Beta Coefficients for Explanatory Variables in Teaching Style D Objectives*

Objectives for Teaching Style D	Stimulating Student Interest		Foster Collaboration		Establish Rapport		Encourage Involvement		Structure Classroom	
	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online
6. Creative capacities	0.53	0.31	-0.01	0.04	0.23	0.18	0.10	0.20	-0.06	0.02
8. Communication skill	0.16	0.39	0.19	0.06	0.17	0.15	0.21	0.17	0.06	-0.02

*Teaching Style E.* This teaching style is especially helpful when students need to acquire team skills (Obj. 5). Instructors foster collaboration, which is supported by stimulating student interest and encouraging involvement. This pattern is consistent across course modalities, as indicated in Table 26. Establishing rapport is also moderately important for building team skills when teaching an online course.

Table 26

*Standardized Beta Coefficients for Explanatory Variables in Teaching Style E Objectives*

Objectives for Teaching Style E	Stimulating Student Interest		Foster Collaboration		Establish Rapport		Encourage Involvement		Structure Classroom	
	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online
5. Team skills	0.17	0.22	0.52	0.39	0.03	0.18	0.09	0.16	-0.01	-0.17

*Teaching Style F.* This teaching style is most closely associated with courses that stress helping students to learn how to find and use resources (Obj. 9). Encouraging involvement is most essential, along with placing some emphasis on stimulating student interest. The results of the regression analyses were, for the most part, consistent across traditional and online courses, as indicated in Table 27. The only noticeable difference is that establishing rapport may be somewhat more important when teaching an online course.

Table 27

*Standardized Beta Coefficients for Explanatory Variables in Teaching Style F Objectives*

Objectives for Teaching Style F	Stimulating Student Interest		Foster Collaboration		Establish Rapport		Encourage Involvement		Structure Classroom	
	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online	Trad.	Online
9. Finding and using resources	0.26	0.26	0.11	-0.07	-0.07	0.13	0.35	0.33	0.18	0.10

## CONCLUSIONS

The results of this study reveal more similarities than meaningful differences between IDEA student ratings in traditional and online courses. First, instructors' ratings of the importance of the 12 IDEA learning objectives did not vary much between the types of course. Average instructor ratings and the percent rating each objective as essential or important were very similar. Second, the pattern of inter-correlations among the learning objectives is remarkably similar across course modalities. Third, student's progress on relevant objectives and global ratings of instructor/course effectiveness are similar in online and traditional courses. Students identify good teaching when they see it, whether it occurs online or face to face. Fourth, students consistently report greater progress on objectives the instructor rates as important or essential no matter which instructional format is used. Moreover, the highest correlations between instructor ratings of importance and students' ratings of progress are found in their ratings of the same objectives. This holds true after removing *Short Form* users, novice users, and classes with fewer than 10 students responding. Student ratings of progress, therefore, are valid in both course settings. Fifth, students' ratings of how frequently the instructor used 20 teaching methods do not vary meaningfully between course formats. Online and on-campus instructors are perceived to use the methods with similar frequency. Sixth, the pattern of correlations between students' ratings of progress on the learning objectives and their ratings of the instructor's use of 20 teaching methods are highly similar between both types of courses. Suggestions for improving teaching effectiveness, based on these relationships, are supported in both online and face-to-face formats. Furthermore, those correlations are, for the most part, comparable to those reported in Hoyt and Lee (2002a). Eighth, the correlations between student/course characteristics and global measures of effectiveness are very similar for students in online and traditional courses with only a few minor exceptions. Evidence for the validity of adjustments to raw scores, based on these relationships, can therefore be found in both course formats. Finally, the six teaching styles reported in Hoyt and Lee (2002b) are quite comparable across traditional and online courses.



However, there are some minor differences worth noting. First, moderate differences are found in response rate, as students in traditional courses are somewhat more likely to complete ratings. Second, students in online courses report their instructors use educational technology more frequently than do those in traditional courses. Third, the correlation between instructor use of educational technology and students' self-reported progress on relevant objectives is slightly higher in online courses than traditional courses. So, as one might expect, using educational technology with greater frequency is slightly more important in online courses. Fourth, students in online courses report somewhat more reading (Item 33) and somewhat less motivation to take the course from the instructor, although these differences are small. Fifth, fostering student collaboration is more helpful in traditional courses when the focus is on values development and critical analysis/evaluation. Sixth, structuring the classroom environment 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.

Overall, then, the current findings indicate the IDEA Student Ratings System is appropriate for both online and traditional courses. The minor differences observed between online and traditional courses ultimately may help guide instructors for improving student learning experiences in both teaching environments.

However, The IDEA Center recognizes that no single survey can anticipate the unique needs of every learning environment. 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. Appendix B contains the handout, *Using Additional Questions for Online Learning Environments*, which can serve as a guide to maximizing the feedback obtained through the IDEA Student Ratings of Instruction System.

## REFERENCES

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**Appendix A**

**Faculty Information Form  
Diagnostic Form  
Short Form**



# Faculty Information Form

## IMPORTANT!

See Directions to Faculty:  
[www.theideacenter.org/directions](http://www.theideacenter.org/directions)



Institution: \_\_\_\_\_ Instructor: \_\_\_\_\_

Course Number: \_\_\_\_\_ Time and Days Class Meets: \_\_\_\_\_

**Objectives:** Using the scale provided, identify the relevance of each of the twelve objectives to this course. As a general rule, prioritize what you want students to learn by selecting no more than 3-5 objectives as either Important or Essential. The weighting system used to generate the IDEA report weighs Essential objectives "2," important objectives "1," and Minor objectives "0."  
(Scale - M = Minor or No Importance, I = Important, E = Essential)

- M I E
- Gaining factual knowledge (terminology, classifications, methods, trends)
  - Learning fundamental principles, generalizations, or theories
  - Learning to *apply* course material (to improve thinking, problem solving, and decisions)
  - Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course
  - Acquiring skills in working with others as a member of a team
  - Developing creative capacities (writing, inventing, designing, performing in art, music, drama, etc.)
  - Gaining a broader understanding and appreciation of intellectual/cultural activity (music, science, literature, etc.)
  - Developing skill in expressing oneself orally or in writing
  - Learning how to find and use resources for answering questions or solving problems
  - Developing a clearer understanding of, and commitment to, personal values
  - Learning to *analyze* and *critically evaluate* ideas, arguments, and points of view
  - Acquiring an interest in learning more by asking questions and seeking answers

Last Name (Up to 11 letters)											Init.
A	A	A	A	A	A	A	A	A	A	A	A
B	B	B	B	B	B	B	B	B	B	B	B
C	C	C	C	C	C	C	C	C	C	C	C
D	D	D	D	D	D	D	D	D	D	D	D
E	E	E	E	E	E	E	E	E	E	E	E
F	F	F	F	F	F	F	F	F	F	F	F
G	G	G	G	G	G	G	G	G	G	G	G
H	H	H	H	H	H	H	H	H	H	H	H
I	I	I	I	I	I	I	I	I	I	I	I
J	J	J	J	J	J	J	J	J	J	J	J
K	K	K	K	K	K	K	K	K	K	K	K
L	L	L	L	L	L	L	L	L	L	L	L
M	M	M	M	M	M	M	M	M	M	M	M
N	N	N	N	N	N	N	N	N	N	N	N
O	O	O	O	O	O	O	O	O	O	O	O
P	P	P	P	P	P	P	P	P	P	P	P
Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q
R	R	R	R	R	R	R	R	R	R	R	R
S	S	S	S	S	S	S	S	S	S	S	S
T	T	T	T	T	T	T	T	T	T	T	T
U	U	U	U	U	U	U	U	U	U	U	U
V	V	V	V	V	V	V	V	V	V	V	V
W	W	W	W	W	W	W	W	W	W	W	W
X	X	X	X	X	X	X	X	X	X	X	X
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z

Days Class Meets	Discipline Code	Time Class Begins	Course Number	Number Enrolled	Local Codes:							
					A	B	C	D	E	F	G	H
<input type="radio"/> Mon	0 0 0 0	0 0 0 0	0 0 0 0 0 0	0 0 0	0 0 0 0 0 0 0 0							
<input type="radio"/> Tues	1 1 1 1	1 1 1 1	1 1 1 1 1 1	1 1 1	1 1 1 1 1 1 1 1							
<input type="radio"/> Wed	2 2 2 2	2 2 2 2	2 2 2 2 2 2	2 2 2	2 2 2 2 2 2 2 2							
<input type="radio"/> Thu	3 3 3 3	3 3 3 3	3 3 3 3 3 3	3 3 3	3 3 3 3 3 3 3 3							
<input type="radio"/> Fri	4 4 4 4	4 4 4 4	4 4 4 4 4 4	4 4 4	4 4 4 4 4 4 4 4							
<input type="radio"/> Sat	5 5 5 5	5 5 5 5	5 5 5 5 5 5	5 5 5	5 5 5 5 5 5 5 5							
<input type="radio"/> Sun	6 6 6 6	6 6 6 6	6 6 6 6 6 6	6 6 6	6 6 6 6 6 6 6 6							
	7 7 7 7	7 7 7 7	7 7 7 7 7 7	7 7 7	7 7 7 7 7 7 7 7							
	8 8 8 8	8 8 8 8	8 8 8 8 8 8	8 8 8	8 8 8 8 8 8 8 8							
	9 9 9 9	9 9 9 9	9 9 9 9 9 9	9 9 9	9 9 9 9 9 9 9 9							

### Contextual Questions (Research Purposes):

The IDEA Center will conduct research on these optional questions in order to improve the interpretation of student ratings.

- Which of the following represents the primary approach to this course? (Mark only one)
  - 1 = Lecture
  - 2 = Discussion/recitation
  - 3 = Seminar
  - 4 = Skill/activity
  - 5 = Laboratory
  - 6 = Field Experience
  - 7 = Studio
  - 8 = Multi-Media
  - 9 = Practicum/clinic
  - 0 = Other
- If multiple approaches are used, which one represents the secondary approach? (Mark only one)
  - 1 = Lecture
  - 2 = Discussion/recitation
  - 3 = Seminar
  - 4 = Skill/activity
  - 5 = Laboratory
  - 6 = Field Experience
  - 7 = Studio
  - 8 = Multi-Media
  - 9 = Practicum/clinic
  - 0 = Other
- Describe this course in terms of its requirements with respect to the features listed below. Use the following code to make your responses:  
 N = None (or little) required  
 S = Some required  
 M = Much required  
 N S M  
   A. Writing  
   B. Oral communication  
   C. Computer applications  
   D. Group work  
   E. Mathematical/quantitative work  
   F. Critical thinking  
   G. Creative/artistic/design endeavor  
   H. Reading  
   I. Memorization

## Contextual Questions Continued:

4. Rate each of the circumstances listed below, using the following code to respond:

**P** = Had a positive impact on learning  
**I** = Neither a positive nor a negative impact  
**N** = Had a negative impact on learning  
**?** = Can't judge

- P I N ?**
- A. Physical facilities and/or equipment
- B. Your previous experience in teaching this course
- C. Substantial changes in teaching approach, course assignments, content, etc.
- D. Your desire to teach this course
- E. Your control over course management decisions (objectives, texts, exams, etc.)
- F. Adequacy of students' background and preparation for the course
- G. Student enthusiasm for the course
- H. Student effort to learn
- I. Technical/instructional support

5. Please identify the **principal** type of student enrolling in this course (Mark only one)

- 1 = First-year students/sophomores seeking to meet a "general education" or "distribution" requirement
- 2 = First-year students/sophomores seeking to develop background needed for their intended specialization
- 3 = Upper level non-majors taking the course as a "general education" or "distribution" requirement
- 4 = Upper level majors (in this or a related field of study) seeking competence or expertise in their academic/professional specialty
- 5 = Graduate or professional school students
- 6 = Combination of two or more of the above types

6. Is this class:

- a. Team taught?  Yes  No
- b. Taught through distance learning?  Yes  No

### Discipline Codes (Modified CIP Codes)

0100 Agricultural Business and Production	9902 Developmental Reading	2700 Mathematics and Statistics
0200 Agricultural Sciences	9903 Developmental Writing	5009 Music (Performing, Composing, Theory)
0300 Conservation and Renewable Natural Resources	9904 Developmental Natural Sciences	5116 Nursing
0400 Agricultural and Related Programs	4506 Economics	3100 Parks, Recreation, Leisure, and Fitness Studies
0500 Area Ethnic and Cultural Studies	1300 Education	3801 Philosophy
5007 Art (Painting, Drawing, Sculpture)	1400 Engineering	4000 Physical Science (EXCEPT Physics and Chemistry)
3201 Basic Skills	1500 Engineering-Related Technologies	4008 Physics
2600 Biological Sciences/Life Sciences	9910 English as Second Language	4510 Political Science and Government
5201 Business, General	2301 English Language and Literature	4200 Psychology
5202 Business Administration and Management	5000 Fine and Applied Arts (EXCEPT Art, Music, and Design and Applied Arts)	4400 Public Administration and Services (EXCEPT Social Work)
5203 Business - Accounting	1600 Foreign Languages and Literatures	3900 Religion and Theological Studies
5208 Business - Finance	3105 Health and Physical Education/Fitness	4500 Social Sciences (EXCEPT Economics, History, Political Science, and Sociology)
5212 Business Information and Data Processing Services	5100 Health Professions and Related Sciences (EXCEPT Nursing)	4407 Social Work and Service
5214 Business - Marketing	5199 Health Professions and Related Sciences (2-year program)	4511 Sociology
4005 Chemistry	4508 History	2310 Speech and Rhetorical Studies
0900 Communications	1900 Human Sciences/Family and Consumer Sciences	<b>Vocational/Technical Programs</b> (see Website: Department codes 4600-4900)
1100 Computer and Information Sciences	2400 Liberal Arts & Sciences, General Studies and Humanities	9900 Other (to be used when none of the above codes apply)
4301 Criminal Justice and Corrections	2200 General Legal Studies (Undergraduate)	
1205 Culinary Arts and Related Services	2500 Library Science	
1103 Data Processing Technology (2-year program)		
5004 Design and Applied Arts		
9901 Developmental Math		

To see an expanded list of discipline codes go to: [www.theideacenter.org/DisciplineCodes](http://www.theideacenter.org/DisciplineCodes)





# SURVEY FORM - STUDENT REACTIONS TO INSTRUCTION AND COURSES

## IMPORTANT!



Institution:	Instructor:
Course Number:	Time and Days Class Meets:
<p>Your thoughtful answers to these questions will provide helpful information to your instructor.</p> <p>Describe the frequency of your instructor's teaching procedures, using the following code:</p> <p>1=Hardly Ever      2=Occasionally      3=Sometimes      4=Frequently      5=Almost Always</p>	

**The Instructor:**

1.  1  2  3  4  5 Displayed a personal interest in students and their learning
2.  1  2  3  4  5 Found ways to help students answer their own questions
3.  1  2  3  4  5 Scheduled course work (class activities, tests, projects) in ways which encouraged students to stay up-to-date in their work
4.  1  2  3  4  5 Demonstrated the importance and significance of the subject matter
5.  1  2  3  4  5 Formed "teams" or "discussion groups" to facilitate learning
6.  1  2  3  4  5 Made it clear how each topic fit into the course
7.  1  2  3  4  5 Explained the reasons for criticisms of students' academic performance
8.  1  2  3  4  5 Stimulated students to intellectual effort beyond that required by most courses
9.  1  2  3  4  5 Encouraged students to use multiple resources (e.g. data banks, library holdings, outside experts) to improve understanding
10.  1  2  3  4  5 Explained course material clearly and concisely
11.  1  2  3  4  5 Related course material to real life situations
12.  1  2  3  4  5 Gave tests, projects, etc. that covered the most important points of the course
13.  1  2  3  4  5 Introduced stimulating ideas about the subject
14.  1  2  3  4  5 Involved students in "hands on" projects such as research, case studies, or "real life" activities
15.  1  2  3  4  5 Inspired students to set and achieve goals which really challenged them
16.  1  2  3  4  5 Asked students to share ideas and experiences with others whose backgrounds and viewpoints differ from their own
17.  1  2  3  4  5 Provided timely and frequent feedback on tests, reports, projects, etc. to help students improve
18.  1  2  3  4  5 Asked students to help each other understand ideas or concepts
19.  1  2  3  4  5 Gave projects, tests, or assignments that required original or creative thinking
20.  1  2  3  4  5 Encouraged student-faculty interaction outside of class (office visits, phone calls, e-mail, etc.)

Twelve possible learning objectives are listed below, not all of which will be relevant in this class. Describe the amount of progress you made on each (even those not pursued in this class) by using the following scale:

- 1-No apparent progress
- 2-Slight progress; I made small gains on this objective.
- 3-Moderate progress; I made some gains on this objective.
- 4-Substantial progress; I made large gains on this objective.
- 5-Exceptional progress; I made outstanding gains on this objective.

**Progress on:**

21.  1  2  3  4  5 Gaining factual knowledge (terminology, classifications, methods, trends)
22.  1  2  3  4  5 Learning fundamental principles, generalizations, or theories
23.  1  2  3  4  5 Learning to *apply* course material (to improve thinking, problem solving, and decisions)
24.  1  2  3  4  5 Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course
25.  1  2  3  4  5 Acquiring skills in working with others as a member of a team
26.  1  2  3  4  5 Developing creative capacities (writing, inventing, designing, performing in art, music, drama, etc.)
27.  1  2  3  4  5 Gaining a broader understanding and appreciation of intellectual/cultural activity (music, science, literature, etc.)
28.  1  2  3  4  5 Developing skill in expressing myself orally or in writing
29.  1  2  3  4  5 Learning how to find and use resources for answering questions or solving problems
30.  1  2  3  4  5 Developing a clearer understanding of, and commitment to, personal values
31.  1  2  3  4  5 Learning to *analyze* and *critically evaluate* ideas, arguments, and points of view
32.  1  2  3  4  5 Acquiring an interest in learning more by asking my own questions and seeking answers

On the next three items, compare this course with others you have taken at this institution, using the following code:

1=Much Less than Most Courses

2=Less than Most Courses

3=About Average

4=More than Most Courses

5=Much More than Most Courses

The Course:

33. (1) (2) (3) (4) (5) Amount of reading

34. (1) (2) (3) (4) (5) Amount of work in other (non-reading) assignments

35. (1) (2) (3) (4) (5) Difficulty of subject matter

Describe your attitudes and behavior in this course, using the following code:

1=Definitely False

2=More False Than True

3=In Between

4=More True Than False

5=Definitely True

36. (1) (2) (3) (4) (5) I had a strong desire to take this course.

37. (1) (2) (3) (4) (5) I worked harder on this course than on most courses I have taken.

38. (1) (2) (3) (4) (5) I really wanted to take a course from this instructor.

39. (1) (2) (3) (4) (5) I really wanted to take this course regardless of who taught it.

40. (1) (2) (3) (4) (5) As a result of taking this course, I have more positive feelings toward this field of study.

41. (1) (2) (3) (4) (5) Overall, I rate this instructor an excellent teacher.

42. (1) (2) (3) (4) (5) Overall, I rate this course as excellent.

For the following items, blacken the space which best corresponds to your judgment:

1=Definitely False

2=More False Than True

3=In Between

4=More True Than False

5=Definitely True

43. (1) (2) (3) (4) (5) As a rule, I put forth more effort than other students on academic work.

44. (1) (2) (3) (4) (5) The instructor used a variety of methods--not only tests--to evaluate student progress on course objectives.

45. (1) (2) (3) (4) (5) The instructor expected students to take their share of responsibility for learning.

46. (1) (2) (3) (4) (5) The instructor had high achievement standards in this class.

47. (1) (2) (3) (4) (5) The instructor used educational technology (e.g., Internet, e-mail, computer exercises, multi-media presentations, etc.) to promote learning.

#### EXTRA QUESTIONS

If your instructor has extra questions, answer them in the space designated below (questions 48-67):

48. (1) (2) (3) (4) (5)

49. (1) (2) (3) (4) (5)

50. (1) (2) (3) (4) (5)

51. (1) (2) (3) (4) (5)

52. (1) (2) (3) (4) (5)

53. (1) (2) (3) (4) (5)

54. (1) (2) (3) (4) (5)

55. (1) (2) (3) (4) (5)

56. (1) (2) (3) (4) (5)

57. (1) (2) (3) (4) (5)

58. (1) (2) (3) (4) (5)

59. (1) (2) (3) (4) (5)

60. (1) (2) (3) (4) (5)

61. (1) (2) (3) (4) (5)

62. (1) (2) (3) (4) (5)

63. (1) (2) (3) (4) (5)

64. (1) (2) (3) (4) (5)

65. (1) (2) (3) (4) (5)

66. (1) (2) (3) (4) (5)

67. (1) (2) (3) (4) (5)

Use the space below for comments (unless otherwise directed).

Note: Your written comments may be returned to the instructor. You may want to PRINT to protect your anonymity.

Comments: \_\_\_\_\_

# SHORT FORM - STUDENT REACTIONS TO INSTRUCTION AND COURSES



Institution:	Instructor:
Course Number:	Time and Days Class Meets:

## IMPORTANT!



Twelve possible learning objectives are listed below, not all of which will be relevant in this class. Describe the amount of progress you made on each (even those not pursued in this class) by using the following scale:

- 1-No apparent progress
- 2-Slight progress; I made small gains on this objective.
- 3-Moderate progress; I made some gains on this objective.
- 4-Substantial progress; I made large gains on this objective.
- 5-Exceptional progress; I made outstanding gains on this objective.

### Progress on:

- |     |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|
| 1.  | ① | ② | ③ | ④ | ⑤ | Gaining factual knowledge (terminology, classifications, methods, trends)   |
| 2.  | ① | ② | ③ | ④ | ⑤ | Learning fundamental principles, generalizations, or theories   |
| 3.  | ① | ② | ③ | ④ | ⑤ | Learning to <i>apply</i> course material (to improve thinking, problem solving, and decisions)  |
| 4.  | ① | ② | ③ | ④ | ⑤ | Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course |
| 5.  | ① | ② | ③ | ④ | ⑤ | Acquiring skills in working with others as a member of a team   |
| 6.  | ① | ② | ③ | ④ | ⑤ | Developing creative capacities (writing, inventing, designing, performing in art, music, drama, etc.)                                 |
| 7.  | ① | ② | ③ | ④ | ⑤ | Gaining a broader understanding and appreciation of intellectual/cultural activity (music, science, literature, etc.)                 |
| 8.  | ① | ② | ③ | ④ | ⑤ | Developing skill in expressing myself orally or in writing  |
| 9.  | ① | ② | ③ | ④ | ⑤ | Learning how to find and use resources for answering questions or solving problems  |
| 10. | ① | ② | ③ | ④ | ⑤ | Developing a clearer understanding of, and commitment to, personal values   |
| 11. | ① | ② | ③ | ④ | ⑤ | Learning to <i>analyze</i> and <i>critically evaluate</i> ideas, arguments, and points of view  |
| 12. | ① | ② | ③ | ④ | ⑤ | Acquiring an interest in learning more by asking my own questions and seeking answers   |

For the remaining questions, use the following code:

- |                    |                        |              |                        |                   |
|--------------------|------------------------|--------------|------------------------|-------------------|
| 1=Definitely False | 2=More False Than True | 3=In Between | 4=More True Than False | 5=Definitely True |
|--------------------|------------------------|--------------|------------------------|-------------------|

- |     |   |   |   |   |   |  |
|-----|---|---|---|---|---|--|
| 13. | ① | ② | ③ | ④ | ⑤ | As a rule, I put forth more effort than other students on academic work.                     |
| 14. | ① | ② | ③ | ④ | ⑤ | My background prepared me well for this course's requirements.                               |
| 15. | ① | ② | ③ | ④ | ⑤ | I really wanted to take this course regardless of who taught it.                             |
| 16. | ① | ② | ③ | ④ | ⑤ | As a result of taking this course, I have more positive feelings toward this field of study. |
| 17. | ① | ② | ③ | ④ | ⑤ | Overall, I rate this instructor an excellent teacher.  |
| 18. | ① | ② | ③ | ④ | ⑤ | Overall, I rate this course as excellent.  |

### EXTRA QUESTIONS

If your instructor has extra questions, answer them in the space designated below (questions 19-38).

- |     |   |   |   |   |   |     |   |   |   |   |   |     |   |   |   |   |   |     |   |   |   |   |   |
|-----|---|---|---|---|---|-----|---|---|---|---|---|-----|---|---|---|---|---|-----|---|---|---|---|---|
| 19. | ① | ② | ③ | ④ | ⑤ | 24. | ① | ② | ③ | ④ | ⑤ | 29. | ① | ② | ③ | ④ | ⑤ | 34. | ① | ② | ③ | ④ | ⑤ |
| 20. | ① | ② | ③ | ④ | ⑤ | 25. | ① | ② | ③ | ④ | ⑤ | 30. | ① | ② | ③ | ④ | ⑤ | 35. | ① | ② | ③ | ④ | ⑤ |
| 21. | ① | ② | ③ | ④ | ⑤ | 26. | ① | ② | ③ | ④ | ⑤ | 31. | ① | ② | ③ | ④ | ⑤ | 36. | ① | ② | ③ | ④ | ⑤ |
| 22. | ① | ② | ③ | ④ | ⑤ | 27. | ① | ② | ③ | ④ | ⑤ | 32. | ① | ② | ③ | ④ | ⑤ | 37. | ① | ② | ③ | ④ | ⑤ |
| 23. | ① | ② | ③ | ④ | ⑤ | 28. | ① | ② | ③ | ④ | ⑤ | 33. | ① | ② | ③ | ④ | ⑤ | 38. | ① | ② | ③ | ④ | ⑤ |



Comments:

**DO NOT  
WRITE  
IN THE  
SHADED  
AREA**

## **Appendix B**

### **Using Additional Questions for Online Courses**

# Using Additional Questions for Online Courses



No single survey form can anticipate the needs of all instructors or learning environments. The IDEA system, which asks students to (a) rate their progress on 12 different course objectives, and (b) rate the frequency with which their instructor employs each of 20 teaching "methods," offers the instructor the option of asking up to 20 additional questions on either the Diagnostic Form or Short Form. The instructor may wish to ask questions that pertain to the special characteristics of his/her course which were not asked by any of the standard items. The following provides suggestions for areas that might be important to online learning environments but not addressed in the standard IDEA instrument. There is no one correct way to address these areas, so in many cases, multiple options are provided for your use or adaptation. The class report will provide the frequencies of student responses and the average (mean) for each additional question.

Please keep a record of the questions you included.

Unless specifically noted, you might use one of the following sets of response options for the items in these lists .

## OPTION A

- 1 = Hardly Ever
- 2 = Occasionally
- 3 = Sometimes
- 4 = Frequently
- 5 = Almost Always

## OPTION B

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neither Agree nor Disagree
- 4 = Agree
- 5 = Strongly Agree

## OPTION C

- 1 = Definitely False
- 2 = More False than True
- 3 = In Between
- 4 = More True than False
- 5 = Definitely True

### Question Areas

Course Design/ Course Materials	1
Online Activities	2
Interactions with Instructor	2
Student Interactions	2
Student Characteristics	2
Instructor Use of Technology	3
Technology and Learning	3
Technology Support	3
Overall Satisfaction	4
Learning Outcomes	4
Open-ended/Free Response	4

## Managing Additional Questions in IDEA Online

Instructors can only add additional questions to a course before the start date of the student surveys. When the Faculty Information Form is emailed to the instructor, a link to "Manage Additional Questions" is provided at the bottom of the welcome screen. Twenty **total** additional questions can be added (e.g., if 5 institutional questions are used, an instructor can add 15). The tutorial for [Adding Additional Questions in IDEA Online](#) illustrates the steps for faculty to add their own courses into IDEA Online.

### Course Design/Course Materials

The expectations for this course were clearly outlined at the beginning of the course. \*\*\*

The course materials are easily accessible. \*

I was able to understand and follow the course navigation structure. \*

The instructions for accessing resource materials were understandable. \*

Overall, the course materials were easy to use.

The [insert course component] was easy to use.

The [insert course component] supported my learning.

**Tutorial:  
Adding Questions  
in IDEA Online**

## On-line Activities\*\*

### RESPONSES

- 1 = None
- 2 = A Little (1-25%)
- 3 = Some (25-50%)
- 4 = Very Much (50-95%)
- 5 = All (95-100%)

How much of your interaction with the instructor occurred online?

How much of your work involved online group activities (including discussion boards and chat)?

How much of the required work – your assignments – had to be completed online?

## Interactions with the Instructor

The instructor in this course really knew me.

The instructor was active and engaged with the students.

There was adequate opportunity to interact online with the instructor. \*\*

There was adequate opportunity to interact online with professionals in the field.

## Student Interactions

I discussed course content with other students.

Learning activities included meaningful interactions between students in the course.\*

There was adequate opportunity to interact online with other students. \*\*

The instructor assigned group projects that required collaborative thinking.

The instructor connected students with learners from different generations and cultures.

The instructor inspired students to create virtual learning communities.

The instructor engaged students in critically analyzing the work of others.

The instructor provided opportunities for students to create knowledge together.

Forming an online learning/study group with other students is important to me. \*\*\*

## Student Characteristics

I believe the online experience was well-suited to the way I like to learn.

Getting to know other students is important to me. \*\*\*

I believe my course work and grades are secure and private. \*\*\*

I adhere to the university policies and codes of academic honesty as it relates to my assignments, discussions, tests, and assessments. \*\*\*

---

## Instructor Use of Technology

The instructor used the technology effectively to communicate the learning objectives.

The instructor used the technology effectively to engage the students.

The instructor used the technology effectively to facilitate achievement of the learning objectives.

---

## Technology and Learning

I felt I had individualized instruction tailored to my learning needs (able to work at my own pace and get help when I needed it).

I believe the online components for this class were extremely valuable in helping me learn.\*\*

As a rule, I work best in self-directed and self-paced course formats.

The instructional approaches used in this course motivated me to learn.\*\*\*

The use of [insert technology] helped me learn the [insert course material].

[Insert teaching method or technology] was a strength of this course.

Time spent using [insert technology] was productive.

*Many of the technology items are not under the direct control of the instructor, but might provide useful feedback about the learning experience.*

---

## Technology Support

The [insert resource or technology] was very helpful to me.

I was able to get technology support when needed.

Adequate training opportunities were provided to use the technology for this course.

The technologies [or insert specific technology] used in this course worked the way it was supposed to.

I was able to understand and follow the course supporting materials (e.g., [insert examples]).

The communication tools were easy to use (chatroom, message board, e-mail, etc.).

I had some problems getting into the course with my assigned password.

---

## Overall Satisfaction

I would like to take another course that uses *[insert technology]*.

I liked the *[insert]* format of this course.

I would recommend this kind of class to other students. \*\*

All factors considered, the advantages of including online components outweigh the limitations. \*\*

---

## Learning Outcomes

Using the Internet for answering questions or solving problems

Summarizing information to guide the learning of others

Collaboratively creating knowledge with other students

Learning on my own

Evaluating the work of other students

Writing in a public arena

Guiding and managing my own learning

### INSTRUCTIONS

Using the response options provided, please indicate how much progress you made on each of the following:

### RESPONSES

- 1 = No apparent progress
- 2 = Slight progress
- 3 = Moderate progress
- 4 = Substantial progress
- 5 = Exceptional progress

---

## Open-ended/Free Response

What aspects of this course contributed most to your learning?

How could this course be changed to better support your learning?

What are the advantages and disadvantages of the online environment [*or insert specific technologies*] for your learning in this course? \*\*

What suggestions would you offer to the instructor for improvement of this course?

Tutorial:

Adding Questions  
in IDEA Online

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