Administrators' Attitudes Toward Web-based Instruction Across the UT System

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Abstract

Academic administrators play a critical role in supporting and otherwise encouraging faculty to participate in web-based learning. In the fall of 2000, administrators at five academic institutions in the University of Texas System were surveyed concerning their attitudes on web-based learning. Administrators were defined as Chairs, Deans, and Vice Presidents for Academic Affairs/Provosts of academic units. In fall 2006 the survey was repeated at the same academic institutions who participated in the first survey in order to determine what changes have occurred. Overall the administrator's perceptions are positively inclined toward Web-based instruction. They believe that high quality learning can take place in Web-based courses and they are interested in increasing Web-based instruction. The majority of administrators agreed that students were genuinely interested in Web-based courses, and they almost unanimously agreed that Web-based instruction can overcome students' traveling and scheduling barriers. On the other hand, administrators were concerned about the amount of time Web-based courses demand of faculty, as well as issues of academic dishonesty and students' self-discipline. Suggestions for the future were offered.

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The standard view of Web-based learning is of a system of instruction involving a faculty member teaching and students learning with the World Wide Web as the principle means of content delivery and faculty-student interaction. In fact, however, the success of distance learning education relies upon several important human factors beyond the students and the instructors, for example, technical staff, instructional technicians, and, of course, administrators.

Academic administrators play a critical role in supporting and otherwise encouraging faculty to participate in Web-based learning. However, despite the apparent increasing support for distance education nationwide, the resources necessary to support such endeavors is substantial for each institution. Clearly such support in terms of resources is broad and goes beyond the baseline support needed to assist faculty in designing and sustaining Web-based courses, solve technical problems for students and faculty alike, and provide faculty incentives, for each campus must also provide computer access and technical assistance for its students—and the infrastructure and maintenance capabilities to at least sustain distance learning activities, and preferably to keep pace with technical advances.

Six years ago (fall of 2000), administrators at five academic institutions in the University of Texas System were surveyed concerning their attitudes on Web-based learning. Over the last six years, the growth in the number of Web-based courses and programs has been explosive so that significant number of students and faculty are involved and, at least for students, Web-based learning experiences have become commonplace. In fall 2006 the survey was repeated at the same five academic institutions who participated in the first survey in order to determine what changes had occurred, if any. Answers were

sought to the following general questions: (1) How do administrators view Web-based course delivery and how do they perceive faculty and student interest and skill levels?; (2) What do administrators perceive to be the major advantages of Web-based instruction?; (3) What do administrators perceive to be the major disadvantages of Web-based instruction; (4) How do administrators view their institution's contributions to the success of Web-based instruction?; (5) What do administrators believe to be the impact of, and future of, Web-based instruction for their campus, and for themselves; and (6) What incentives are available for faculty to undertake Web-based instruction at their institution? Information received from these administrators regarding their attitudes and the challenges of Web-based instruction may be useful for improving the quality, magnitude and support of Web-based education initiatives

Method

Participants

The participants were administrators at five participating University of Texas universities. Administrators were defined as Chairs, Deans, and Vice Presidents for Academic Affairs/Provosts of academic units. The five UT universities were: The University of Texas at Arlington; The University of Texas at Brownsville; The University of Texas at Pan American; The University of Texas of the Permian Basin; and The University of Texas at San Antonio.

In the 2000 survey, the names and addresses of the administrators were provided by the Human Resources Personnel of each of the participating institutions. However, in the 2006 survey, Human Resources Personnel from only UT Arlington and UT Permian Basin provided the names of their administrators. The implication from the other three campuses was that they were heavily involved with internal assessment surveys and reports (e.g., from SACS, the Southern Association of Colleges and Schools accrediting agency, and/or institutional effectiveness) and that they did not want their administrators burdened further with the present survey. Consequently, the names and addresses of administrators at these three campuses were derived from the campus' web-pages and through follow-up telephone calls with unit secretarial staff. Questionnaires were mailed with a postage paid return envelope. The participants received no compensation for participating and were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychological Association, 2002).

A total of 51 usable surveys were returned in 2000. It was a 39.2% response rate. Twenty-five usable surveys were returned in 2006, a 25.2% response rate.

Materials

The survey instrument used in this study was developed by Cheurprakobkit and Olson in 2000 (unpublished). In 2006 it was expanded slightly by the present authors. The present survey consisted of five parts: (1) basic demographic information (four items); (2) their views on Web-based instruction generally, their impressions concerning the interest and skill levels of faculty and students involved, and their perception of the advantages and disadvantages of Web-based instruction (33 items); (3) their institutional support for Web-based courses (13 items); (4) the impact of Web-based instruction in general (13 items); and (5) incentives available for Web-based instruction (one item). Web-based instruction was defined on the survey instrument as "education where instructors and learners are at different geographical locations and communicate to each other through the use of more than one form of technology, i.e., the internet, e-mail and computer conferencing.

In Part 2 the administrators were asked the extent to which they agreed or disagreed with 33 declarative sentences such as, "I prefer that our campus offer Web-based courses over non-Web-based courses." A "1" to "5" Likert scale was used, where a "1" represented "Strongly Disagree", a "2" meant "Disagree", a "3 meant "Neither Agree or Disagree", a "4" meant "Agree", and a "5" meant "Strongly Agree".

In Part 3, the administrators read a series of 13 open-ended statements regarding their university's contribution to, and support for, Web-based courses, such as, "The number of faculty who are involved in Web-based instruction……" They were asked to rate their level of satisfaction with the statements on a 5-point Likert scale. A "1" represented "Very Dissatisfied", a "2" meant "Dissatisfied", a "3" meant "Neutral, a "4" meant "Satisfied", and a "5" meant "Very Satisfied."

Part 4 consisted of a set 13 items. Nine were questions asking the administrators to respond generally "Yes" or "No". For example, "Would you like to have more of your faculty involved in Web-based instruction?" The remaining four items were requests for Student Credit Hour (SCH) information. For example, "Please estimate Web-based SCHs from 5 years ago, Fall 2001."

Results

Statistical analyses using SPSS were employed on all of the responses. In Parts 2, 3, 4 and 5, independent t-tests were employed on the mean response for each survey item for the year 2000 versus the year 2006. For the most part, there were not significant differences. Those that were found significant are described below, and indicated with asterisks (*) in each table.

The Participants (Part 1)

The demographic questions about the administrators included age, gender, current position, and length of service at present institution. These data are presented in Table 1. The differences in the characteristics of the administrators between 2000 and 2006 were not remarkable. However, it is worthy to note that the percentage of administrators with five or more years of experience increased from 38.6% in 2000 to 52.1% in 2006.

Table 1. Administrators' Characteristics (N = 51 in 2000, and N = 25 in 2006)

Characteristics	2000 Survey Frequency (Percent in Parentheses)	2006 Survey Frequency (Percent in Parentheses)
Age		
Under 35 years……	---	---
36-40 years……..	2 (4.5)	1 (4.3)
41-45 years……..	4 (9.1)	1 (4.3)
46-50 years……..	4 (9.1)	3 (13.0)
51 years or older…….	34 (77.3)	18 (78.3)
Gender		
Male…….	30 (69.8)	17 (73.9)
Female…….	13 (30.2)	6 (26.1)
Current Position		
Chairperson……..	23 (54.8)	16 (69.6)
Dean…….	16 (38.1)	5 (21.7)
Vice President for Academic Affairs/Provost…….	3 (7.1)	2 (8.7)
Number of Years at Current Position		
Less than 2 years…….	15 (34.1)	10 (43.5)
3-4 years……..	12 (27.3)	1 (4.3)
5-6 years……..	6 (13.6)	3 (13.0)
7-8 years……..	4 (9.1)	4 (17.4)
9 years or more…….	7 (15.9)	5 (21.7)

General View of Web-based Instruction (Part 2)

Table 2 displays data relevant to the administrators' general perceptions of Web-based instruction. For each statement, none of the differences between pairs of means for 2000 vs. 2006 were significant at the .05 level. Some views that administrators hold are described below, but differences between the survey years are only reported as potential trends, at best.

Table 2 reveals that although 64% of the administrators in 2000 report that they encourage faculty to become involved Web-based instruction, this decreased to 52% in 2006 (Statement 17). Nevertheless, at least half encourage their faculty to be involved with Web-based instruction. The same trend continues in

terms of their “genuine interest in increasing” Web-based instruction, with 62% responding favorably in 2000 and 56% in 2006 (Statement 9). Furthermore, slightly more than half of the administrators (54% in 2000 and 52% in 2006) agreed that Web-based education is a good alternative way of offering education (Statement 1). Not surprisingly, the vast majority want both Web-based courses and traditional classroom courses to have the same curricular requirements (90% in 2000 and 84% in 2006; Statement 5).

Regardless of the year of the survey, less than half of the administrators thought most of their undergraduate or graduate courses are appropriate for Web-based instruction (Statements 2 and 3), and only about 10% of them wanted to see half of all the courses in their discipline offered on the Web (Statement 11). In the 2006 survey, only 12% thought it would be good to offer more undergraduate Web-based degree programs (Statement 12), and 24% thought it would be good to have more graduate degree programs Web-based (Statement 13). This same preference toward offering entire graduate versus undergraduate degree programs Web-based was reflected in the preference for offering more graduate Web-based courses (about 40% across 2000 and 2006; Statement 3) than undergraduate Web-based courses (about 30% across 2000 and 2006; Statement 2). Overall, however, only 6% in 2000 and 12% in 2006 preferred Web-based courses over the traditional course format (Statement 4).

Table 2. Administrators' General View of Web-based Instruction and Faculty/Student Interest and Skill Levels by Year of Survey (in percentage).

Statements	Year	Agree & Strongly Agree (5) (4)	Neutral (3)	Disagree & Strongly Disagree (2) (1)	Mean Score by Year	Grand Mean
1. Web-based instruction is a good alternative way of delivering education as compared to the traditional classroom.	2000 2006	54.0 52.0	18.0 16.0	28.0 32.0	3.32 3.36	3.33
2. Generally, most *undergraduate* courses can be offered Web-based.	2000 2006	36.7 24.0	10.2 16.0	53.1 60.0	2.69 2.52	2.64
3. Generally, most *graduate* courses can be offered Web-based.	2000 2006	42.9 40.0	12.2 4.0	44.9 56.0	2.84 2.64	2.77
4. I prefer that our campus offer Web-based courses over non-Web-based courses.	2000 2006	6.0 12.0	32.0 28.0	62.0 60.0	2.14 2.08	2.12
5. Web-based and traditional classroom courses should have the same curricular requirements.	2000 2006	90.0 84.0	2.0 12.0	8.0 4.0	4.26 4.16	4.23
6. Most students I have had contact with seem genuinely interested in taking a Web-based course	2000 2006	29.8 44.0	27.7 32.0	42.5 24.0	2.83 3.12	2.97
7. Students will take a Web-based course if and only if they know that course will not be offered in the traditional classroom format.	2000 2006	20.0 12.0	26.7 32.0	53.3 56.0	2.56 2.36	2.49
8. A grant from the UT TeleCampus is sufficient incentive for faculty to consider developing a Web-based course.	2000 2006	29.2 48.0	22.9 16.0	47.9 36.0	2.83 3.00	2.93
9. As an administrator, I have a genuine interest in increasing the number of courses delivered Web-based.	2000 2006	62.0 56.0	24.0 24.0	14.0 20.0	3.62 3.52	3.59
10. Most faculty members I have had contact with seem genuinely interested in teaching a Web-based course.	2000 2006	14.3 12.5	22.4 20.8	63.3 66.7	2.31 2.33	2.32
11. In each discipline, I think it would be good to offer about half of all the courses	2000 2006	8.4 12.0	20.8 28.0	8.4 12.0	2.00 2.20	2.07

Web-based, and the other half in the traditional classroom.						
12. I think it would be good to offer more *undergraduate degree* programs entirely Web-based degree programs, not just Web-based courses *per se*.	2000 2006	--- 12.0	--- 16.0	--- 72.0	--- 2.04(1)	NA
13. I think it would be good to offer more *graduate degree* programs entirely Web-based degree programs, not just Web-based courses *per se*.	2000 2006	--- 24.0	--- 16.0	--- 60.0	--- 2.361	NA
14. My campus provides sufficient technical assistance for faculty involved in delivering Web-based courses.	2000 2006	48.9 60.0	10.7 20.0	40.7 20.0	3.00 3.44	3.15
15. My campus provides sufficient training for faculty involved in delivering Web-based courses.	2000 2006	44.9 56.0	16.4 24.0	38.7 20.0	2.94 3.36(2)	3.08
16. My campus provides sufficient training for faculty involved in delivering traditionally taught courses.	2000 2006	--- 44.0	--- 16.0	--- 40.0	--- 2.882	NA
17. I encourage faculty to become involved in Web-based instruction.	2000 2006	64.0 52.0	20.0 28.0	16.0 20.0	3.64 3.48	3.59
18. There are sufficient incentives provided for faculty to consider developing a Web-based course.	2000 2006	25.0 25.0	16.7 33.3	58.3 41.7	2.48 2.71	2.56

(1) Question 12 vs. question 13 means were not significant for 2006, $t(24) = 1.496$, $p > .05$
(2) Question 15 vs. question 16 means were not significant for 2006, $t(24) = 2.295$, $p > .05$

In terms of faculty, the data in Table 2 reveal that in 2000, 45% of the administrators reported that their campus provides sufficient training for faculty (Statement 16), and 49% stated that they have sufficient technical assistance for faculty (Statement 14). Both of these percentages increased by over 10% in the six year interval, such that in 2006, 60% of the administrators reported that their campus provides sufficient training for faculty, and 56% reported sufficient technical assistance for faculty. Interestingly, administrators in 2006 note that training provided faculty for traditional courses was less than that for Web-based courses (Statement 16). With regard to faculty interest in teaching Web-based courses, only 14% and 12% of the administrators in 2000 and 2006, respectively, stated that faculty seem genuinely interested in teaching a Web-based course (Statement 10). The perception of the incentive value of obtaining a grant from the U.T. TeleCampus grew from 29% in 2000 to 44% in 2006 (Statement 8).

In terms of students, as seen in Table 2, only 30% of the administrators in 2000 stated that students seem genuinely interested in taking a Web-based course as compared to 44% in 2006 (Statement 6). This trend is paralleled with the finding that in 2000, where 20% of the administrators reported that students will take a Web-based course if and only if they know that course will not be offered in a traditional classroom, as compared to only 12% in 2006 (Statement 7).

Table 3 presents administrators' attitudes regarding advantages of Web-based courses, and Table 4 presents their views about the disadvantages. Overall, as seen in Table 3, roughly half (54% in 2000 and 48% in 2006) reported that high quality learning can take place in Web-based courses without face-to-face interaction (Statement 3). The three primary advantages were: (1) overcoming travel barriers (100% each year of the survey; Statement 6); (2) overcoming scheduling problems (92% in 2000 and 96% in 2006; Statement 5); and (3) sharpening students' computer handling skills (84% in 2000 and 76% in 2006; Statement 7). The least advantageous aspect of Web-based courses was a "focus on students'

needs" (8% each year; Statement 4).

Table 3. Administrators' Perceptions Regarding Advantages of Web-based Courses by Year of Survey (in percentage)

Statements	Year	Agree & Strongly Agree (5) (4)	Neutral (3)	Disagree & Strongly Disagree (2) (1)	Mean Score by Year	Grand Mean
1. Web-based instruction helps to neutralize personality conflicts/differences that may occur in the traditional classroom	2000 2006	26.0 25.0	40.0 54.2	34.0 20.8	2.88 3.00	2.92
2. The absence of face-to-face, student-instructor interactions does not compromise the quality of Web-based courses.	2000 2006	32.0 28.0	12.0 12.0	56.0 60.0	2.74 2.52	2.67
3. High-quality learning can take place without interacting face-to-face between instructors and students.	2000 2006	54.0 48.0	16.0 16.0	30.0 36.0	3.30 3.20	3.27
4. Web-based courses focus on the students' needs more than the traditional classroom.	2000 2006	8.3 8.3	25.0 50.0	66.7 47.4	2.25 2.54	2.35
5. Web-based courses can help students overcome scheduling barriers.	2000 2006	92.0 96.0	6.0 0.0	2.0 4.0	4.36 4.32	4.35
6. Web-based courses can help students overcome travel barriers.	2000 2006	100.0 100.0	0.0 0.0	0.0 0.0	4.48 4.48	4.48
7. Online communication enhances students' computer-related information handling skills.	2000 2006	83.7 76.0	12.2 16.0	4.1 8.0	4.04 3.76	3.95
8. I believe that the quality of education students receive in a Web-based course is just as good as that in the traditional classroom.	2000 2006	30.7 28.0	26.5 24.0	42.8 48.0	2.88 2.72	2.82

Regarding the disadvantages of Web-based courses, Table 4 reveals that the majority of administrators across the survey years remained consistent in their concern for two main issues: (1) controlling academic honesty (63% in 2000 and 64% in 2006; Statement 6); and (2) lack of students' self-discipline or time management skills which may hinder their success (62% in 2000 and 56% in 2006; Statement 2). The majority of administrators in 2000 (68%) was also concerned about the amount of time faculty needed for preparing a Web-based course, but this decreased in 2006 to 44% (Statement 5); this decrease, measured with the mean rating scores, 3.7 vs. 3.2 for 2000 and 2006, respectively, was significant, $t(73) = 2.17$, $p < .05$.

Table 4. Administrators' Perceptions Regarding Disadvantages of Web-based Courses by Year of Survey (in percentage)

Disadvantages	Year	Agree & Strongly Agree (5) (4)	Neutral (3)	Disagree & Strongly Disagree (2) (1)	Mean Score by Year	Grand Mean
1. Communication online is not conducive to the learning process.	2000 2006	14.0 12.0	16.0 20.0	70.0 64.0	2.26 2.12	2.21
2. Many students who lack self-discipline or time-management skills set themselves up for failure by enrolling in a Web-based course.	2000 2006	62.5 56.0	29.2 36.0	8.3 8.0	3.69 3.68	3.68

3. The technical requirements of Web-based instruction are too complicated for faculty to instruct a Web-based course.	2000 2006	14.3 16.0	14.3 24.0	71.4 60.0	2.27 2.56	2.36
4. Too much computer knowledge is needed for faculty to be able to develop a Web-based course.	2000 2006	16..3 4.0	16.3 28.0	67.4 68.0	2.37 2.24	2.32
5. Too much time is needed for preparing a Web-based course.	2000 2006	68.0 44.0	16.0 28.0	16.0 28.0	3.70* 3.20	Not applic-able
6. I am more concerned about controlling academic honesty in Web-based courses than in the traditional classroom.	2000 2006	63.3 64.0	14.3 20.0	22.4 16.0	3.47 3.64	3.53

* The difference between the means of 2000 vs. 2006 was significant beyond the .05 level using a two-tailed independent t test

Support of Web-based Instruction (Part 3)

The findings in Table 5 reveal how the administrators view support for Web-based education on their campus. The dimension rated most positively revolved around the technical staff. For example, 43% in 2000 were satisfied with the amount of technical staff available for assistance, and this percentage increased to 52% in 2006 (Statement 5). In addition, 38% in 2000 were satisfied with the promptness of the technical staff in assisting faculty, and 48% in 2006 (Statement 6). By contrast, only about one-third of administrators each year were satisfied with the promptness with which the technical staff assisted students (Statement 7). In addition, a relatively small percentage of administrators were satisfied with the qualifications of technical staff who are involved in Web-based instruction (29% in 2000 and 17% in 2006; Statement10)), and who assist in Web-based instruction (18% in 2000 and 22% in 2006; Statement 9).

Table 5. Administrators' Perceptions of Contributions to the Success of Web-based Instruction at their Institution (in percentage)

Items	Year	Very Satisfied & Satisfied (5) (4)	Neutral (3)	Dissatisfied & Very Dissatisfied (2) (1)	Mean Score by Year	Grand Mean
1. The *amount* of training needed for faculty to develop a Web-based course.	2000 2006	22.7 21.7	34.1 34.8	43.2 43.5	2.80 2.74(1)	2.78
2. The *amount* of training needed for faculty to develop a traditional classroom curse.	2000 2006	--- 12.0	--- 48.0	--- 40.0	--- 2.72(1)	NA
3. The *depth* of training available for faculty to develop a Web-based course.	2000 2006	29.5 21.8	25.0 34.7	45.5 43.5	2.82 2.74(2)	2.79
4. The *depth* of training available for faculty to develop a traditional classroom course.	2000 2006	--- 8.0	--- 40.0	--- 52.0	--- 2.44(2)	NA
5. The amount of technical assistance available to develop a Web-based course.	2000 2006	43.2 52.2	15.9 17.4	40.9 30.4	3.11 3.30	3.18
6. The promptness of technical assistance provided *faculty* teaching a Web-based course who have technical	2000 2006	38.1 47.8	26.2 34.8	35.7 17.4	3.05 3.39	3.17

difficulties.						
7. The promptness of technical assistance provided *students* enrolled in a Web-based course who have technical problems.	2000 2006	30.7 34.8	35.8 52.2	33.3 13.0	3.05 3.26	3.13
8. The number of faculty who are involved in Web-based instruction.	2000 2006	28.6 16.7	28.6 58.3	42.8 25.0	2.88 2.92	2.89
9. The *number* of technicians who assist in the Web-based instruction program.	2000 2006	17.9 21.7	38.5 43.5	43.6 34.8	2.59 2.83	2.68
10. The *qualifications* of technicians who assist in the Web-based instruction program.	2000 2006	29.3 31.8	60.9 50.0	9.8 18.2	3.27 3.27	3.27
11. The annual budget earmarked for the Web-based education program.	2000 2006	24.4 17.4	36.6 39.1	39.0 43.5	2.78 2.65	2.73
12. The helpfulness of an orientation session for students who enroll in Web-based courses.	2000 2006	7.8 22.7	71.1 45.5	21.1 31.8	2.76 2.91	2.82
13. The maximum number of students allowed to enroll in a Web-based course.	2000 2006	31.6 30.4	57.9 43.5	10.5 26.1	3.26 3.00	3.16

(1) Question 1 vs. question 2 means were not significant for 2006, $t(22) = .22$, $p > .05$
(2) Question 3 vs. question 4 means were not significant for 2006, $t(22) = 1.57$, $p > .05$

Table 5 also reveals the items that received the most consistent dissatisfaction across the years were: (1) the annual budget for Web-based instruction (39% in 2000 and 44% in 2006; Statement 11); (2) the amount of training needed for faculty to develop Web-based courses (43% each year; Statement 1); and (3) the depth of training available for faculty (approximately 44%; Statement 3). In the 2006 survey it was considered appropriate to inquire about the amount and depth of training faculty receive to develop a traditional classroom course. For the amount of training (Statement 2), there was no difference in the administrators' estimates versus that for Web-based courses; the mean level of satisfaction was 2.74 for Web-based courses and 2.72 for traditional courses. For depth of training (Statement 4), although there was no significant difference, the mean satisfaction rating was lower for traditional courses (2.44) than for Web-based courses (2.74), and the percentage of those dissatisfied was also higher for traditional courses (52%) than for Web-based courses (43.5%).

Worthy of some note was the finding that the grand mean of 2.82 for administrators' perception of the helpfulness of an orientation session for students who enroll in Web-based courses was essentially at the midpoint of 3 for the Likert scale, and the majority of the responses were "neutral" each year (Statement 12).

The Impact and Future of Web-based Instruction (Part 4)

Table 6 shows administrators' estimates of the impact Web-based courses have had on the growth in undergraduate and graduate SCHs (Student Credit Hours) generated. For both undergraduate and graduate courses, approximately 4% of administrators estimated that in the fall of 2000 over 6% of their SCHs were generated by Web-based courses, whereas approximately 17% of the administrators estimated that over 6% of the SCHs came from Web-based courses in the fall of 2006. These differences, however, could not be analyzed using Chi Square analysis because the samples of frequencies here were too small.

Table 6. Administrators' Estimates of Fall Enrollments 2005 Versus 2000 Regarding Changes in Enrollment of Web-based Instruction (in percentage) Over this Five Year Interval.

		Less than 1%				Over 6%

Item	Fall Estimate		1-2%	3-4%	5-6%	
1. Relative to the academic unit(s) you supervise, estimate the percent of the total undergraduate SCHs generated in the Fall 2005 semester that were generated through Web-based education. Now, please estimate Web-based SCHs from 5 years ago, Fall 2000	2000 2006	77.3 43.5	13.6 13.0	4.5 8.7	--- 17.4	4.5 14.4
2. Relative to the academic unit(s) you supervise, estimate the percent of the total graduate SCHs generated in the Fall 2005 semester that were generated through Web-based education. Now, please estimate Web-based SCHs from 5 years ago, Fall 2000	2000 2006	78.3 69.6	13.0 ---	4.3 13.0	--- ---	4.3 17.4

The data in Table 7 speaks to entire undergraduate and graduate degree programs (or professional certification programs) offered Web-based. Over 18% of the administrators reported that there was no growth in students in such programs as a result of offering the programs entirely Web-based. More reported that the Web-based format helped a little or a lot. When the administrators who reported that they had no such "entire" degree or professional certification programs offered Web-based (those who responded, "Not Applicable") were deleted, the data indicate that for undergraduate programs, 36% reported that there was no boost to enrollment, whereas 64% reported a little boost or a lot (due to the small sample sizes remaining after removing those who responded "Not Applicable" this difference could not be tested for statistical significance). For graduate programs, 50% reported that the Web-based format hurt enrollment or was no boost, and 50% responded that the Web-based format contributed a little or a lot to enrollment growth. Interestingly, as seen in Table 8, whereas 49% of the administrators in 2000 reported that they would like to see more degree programs online, 10% fewer (39%) in 2006 reported that they would like to have more degree programs or professional certification programs offered Web-based (Question 4). In other words, in 2000, 51% responded that they do not want any more entirely Web-based programs, and in 2006 this increased to 61%.

Table 7. Administrators' Estimates of Growth in Undergraduate and Graduate Degree Programs or Professional Certification.

Item	It has hurt enrollment	No boost	Yes, a little	Yes, a lot	Not applicable
1. In areas with entire undergraduate degree programs or professional certification programs offered Web-based, has the program(s) grown in the number of students enrolled of Web-based instruction?	---	18.2	9.1	22.7	50.0
2. In areas with entire graduate degree programs or professional certification programs offered Web-based, has the program(s) grown in the number of students enrolled of Web-based instruction?	4.5	18.2	4.5	18.2	54.5

Table 8. Forced-Choice Questions Regarding Administrators' Preference for Web-based Instruction (in percentage)

		Yes	No	I do not	Mean Score	Grand

Questions	Year	(1)	(2)	know(1)	by Year	Mean
1. Would you like to have more Web-based courses offered than your institution offers now?	2000 2006	81.8 62.5	18.2 37.5	---. ---	1.18 1.38	1.25
2. Would you like to have more of your faculty involved in Web-based education?	2000 2006	86.0 41.7	14.0 58.3	--- ---	1.14* 1.42	1.24
3. Do you think the incentives currently available at your campus are sufficient for faculty to offer a Web-based course?	2000 2006	19.0 29.2	81.0 70.8	--- ---	1.81 1.71	1.77
4. Would you like to have more entire degree programs offered online than your institution now offers?	2000 2006	48.8 ---	51.2 ---	--- ---	1.51(2) ---	NA
5. Would you like to have more entire degree programs or professional certification programs offered Web-based than your institution now offers?.	2000 2006	--- 39.2	--- 60.8	--- ---	--- 1.61(2)	NA
6. Have you taught a Web-based course?	2000 2006	--- 30.4	--- 69.6	--- ---	--- 1.70	NA
7. Will you continue to get involved in Web-based courses in the future?	2000 2006	62.7 ---	4.7 ---	32.6 ---	1.07(3) ---	NA
8. Will you continue to get involved in Web-based education by teaching a Web-based course in the future?	2000 2006	--- 26.1	--- 8.7	--- 65.2	--- 1.25(3)	NA
9. Will you continue to support Web-based education in the future?	2000 2006	68.2 63.6	6.8 13.6	25.0 22.8	1.06 1.22	1.12

* The difference between the means of 2000 vs. 2006 was significant beyond the .05 level using a two-tailed independent t test.
(1) Responses of "I do not know" were not employed in the calculation of the mean scores by year or the grand means
(2) Question 4 for 2000 vs. question 5 for 2006 was not significant $t(64) = .746$, $p > .05$
(3) Question 7 for 2000 vs. question 8 for 2006 was not significant $t(35) = 1.46$, $p > .05$

Table 8 displays the responses to questions about the future of Web-based instruction. In 2000, 86% of the administrators reported that they would like more faculty involved in Web-based instruction (Question 2), and 82% reported that they would like to have more Web-based courses offered (Question 1). By contrast, however, in 2006, 42% responded that they would like to have more faculty involved in the delivery of Web-based education, and 63% said that they would like more Web-based courses offered. The difference in the mean scores of the question of having more faculty involved (1.14 in 2000 vs. 1.42 in 2006) was significant, $t(65) = 2.64$, $p < .05$. The data also reveal that in 2006, 30% of the administrators had taught a Web-based course (Question 6), and that for both 2000 and 2006, approximately two-thirds of the administrators reported that they will continue to support Web-based instruction (Question 9).

Incentives Available for Faculty (Part 5)

The results from Question 3 in Table 8 sets the stage for a discussion of the data in Table 9. That is, 81% of the administrators in 2000 considered the faculty incentives to be insufficient, and 71% considered them insufficient in 2006. In terms of the incentives to offer Web-based courses, Table 9 reveals that for both the 2000 and 2006 surveys, release time (54% and 41%, respectively) and a grant (44% and 42%, respectively) were the two most available incentives for faculty to engage in Web-based activities. On the other hand, in 2006, extra pay and stipends became more available (27% in 2000 as compared to 41% in 2006). In 2006, student assistants were also more available than in 2000 (17% in 2000 to 32% in 2006). Of interest, whereas in 2000, 2% of the administrators reported that it was department/divisional policy to teach a Web-based course, 18% reported that it was policy in 2006. Twenty-three percent considered annual merit and tenure/promotion as incentives in 2006.

Table 9. Incentives Available for Faculty to Undertake Web-based Courses at Their Institution (given as percentages, N = 51 in 2000 and N = 25 in 2006)

Incentives Available	Year	Available	Unavailable
A grant	2000	43.9	56.1
	2006	40.9	59.1
Release time	2000	53.7	46.3
	2006	40.9	59.1
Summer support	2000	19.5	80.5
	2006	22.7	77.3
Guaranteed summer teaching	2000	2.4	97.6
	2006	9.1	90.9
Extra pay or stipend	2000	26.8	73.2
	2006	40.9	59.1
Student assistants	2000	17.1	82.9
	2006	31.8	68.2
New computer and software programs	2000	34.1	65.9
	2006	18.2	81.8
It is departmental/division policy	2000	2.4	97.6
	2006	18.2	81.8
It is college/school policy	2000	7.3	92.7
	2006	4.5	95.5
It is university policy	2000	19.5	80.5
	2006	9.1	90.9
Professional advancement	2000	7.3	92.7
	2006	---	---
Annual Merit	2000	---	---
	2006	22.7	77.3
Tenure & Promotion	2000	---	---
	2006	22.7	77.3

Discussion

Overall the administrator's perceptions are positively inclined toward Web-based instruction. Roughly 50% or a little more reported that (1) they encourage their faculty to be involved in Web-based instruction; (2) they are interested in increasing Web-based instruction; and (3) they believe it is a good alternative; (4) high quality learning can take place in Web-based courses; (5) they would like to offer more Web-based courses at the institution; (6) they will continue to support Web-based education in the future; and (7) there has been an increase in the number of undergraduate and graduate credit hours generated with Web-based instruction from the fall of 2000 to the fall of 2005. The majority of administrators agreed that students were genuinely interested in Web-based courses, and they almost unanimously agreed that Web-based instruction can overcome students' traveling and scheduling barriers. Relatively speaking, administrators believed that Web-based courses are more conducive to graduate instruction than to undergraduate instruction. On the other hand, only about 10% of administrators, across both survey years, preferred the Web-based course format over the traditional course format, and the quality of Web-based instruction was not considered as good as face-to-face traditional classroom instruction. There appears to be an inconsistency between attitudes here. Namely, on the one hand, about half or more of the administrators appear to be very positive and "approach" Web-based instruction, yet the vast majority prefers the traditional classroom format and hence "avoid" Web-based instruction. One might speculate as to the basis of this seeming approach-avoidance conflict, and there may be several potential explanations: (1) administrators are generally unfamiliar with Web-based courses, and though they are positively inclined, they remain skeptical; (2) faculty, although encouraged, are just not as interested in teaching Web-based courses; (3) Web-based classes are generally more of an administrative hassle than traditionally taught classes; and (4) their concerns about

academic honesty and student self-discipline outweigh the benefits of Web-based instruction. Each of these potential interpretations will be discussed below. (See Miller, 1959, who is generally credited with having developed the approach-avoidance model of conflict).

In order to assess the "familiarity" interpretation of the approach-avoidance conflict, post hoc analyses were conducted to determine if there were any differences in general attitudes of Web-based instruction for those administrators who had taught a course using the Web-based format versus those who had not. The results of these analyses are presented in Table 10 for the 2006 survey. As seen in Table 10, for each of nine statements on the survey measuring one's general disposition toward Web-based instruction, administrators who had taught a Web-based course were more favorably disposed. Although none of the differences between the means was statistically significant (perhaps because of the limited sample size where only 7 administrators had taught a Web-based course), the consistency in these results is revealing. Namely, those administrators who have actually taught a Web-based course appear to be more favorably disposed. Perhaps what these data imply is that there remains a general naiveté among administrators, and hence there is a need for better orientation of administrators in Web-based learning. It is likely that those who have participated in Web-based learning would have a more positive view of this mode of instruction vis-à-vis face to face instruction.

Table 10. Administrators in the 2006 Survey Who Have Taught a Web-based Course (n = 7) versus those Who Had Not (n = 16) and Their General Attitudes Toward Web-based Instruction.

Statements	Previously Taught a Web-based Course	Mean Score
1. Web-based instruction is a good alternative way of delivering education as compared to the traditional classroom. [A *larger* mean indicates more agreement with the statement.]	Yes No	3.57 3.19
2. I believe that the quality of education students receive in a Web-based course is just as good as that in the traditional classroom. [A *larger* mean indicates more agreement with the statement.]	Yes No	3.14 2.44
3. As an administrator, I have a genuine interest in increasing the number of courses delivered Web-based. [A *larger* mean indicates more agreement with the statement.]	Yes No	3.29 3.56
4. I encourage faculty to become involved in Web-based instruction. [A *larger* mean indicates more agreement with the statement.]	Yes No	3.71 3.31
5. I prefer that our campus offer Web-based courses over non-Web-based courses. [A *larger* mean indicates more agreement with the statement.]	Yes No	2.57 1.94
7. Would you like to have more Web-based courses offered than your institution offers now? [A *smaller* mean indicates more agreement with the statement.]	Yes No	1.29 1.38
8. Would you like to have more of your faculty involved in Web-based education? [A *smaller* mean indicates more agreement with the statement.]	Yes No	1.29 1.44
9. Will you continue to support Web-based education in the future? [A *smaller* mean indicates more agreement with the statement.]	Yes No	1.43 1.67

The second explanation of the approach-avoidance conflict has to do with faculty interest. Yes, over 50% of administrators reported that they encourage faculty to become involved in Web-based instruction, and they don't believe that Web-based instruction is too complicated for faculty to learn, but administrators are also reporting that it takes too much time for faculty to develop Web-based courses and the incentives for doing so are clearly inadequate. Sutherland (2003) found a similar result with his survey of Journalism and mass communication administrators, and these perceptions are empirically supported by Tomei (2006), who found that Web-based instruction demands a minimum of 14% more time than traditional instruction. The time involved in Web-based instruction may take away from other faculty activities, such as scholarly productivity, which is a very important benchmark for any administrator in higher education, particularly the UT System. It is possible that after six years it has become clear to

faculty and administrators that developing a Web-based course will not contribute to one's resume in terms of scholarship and grants acquisition. This may account for the significant decline in the administrators who would like to have more faculty involved in Web-based instruction. Namely, in terms of individual "payoff", developing a Web-based course is "nice", but it will not contribute to tenure or promotion. This may also account for the consistent finding that relatively few faculty were judged to be genuinely interested in teaching Web-based courses.

The third explanation of the approach-avoidance conflict concerns administrative hassles. For one thing, there is often an issue about course capacity. Namely, there is a common conception that the number of students allowed to enroll in a Web-based course should be considerably less than its counterpart taught in the classroom. That is probably true only in cases where the Web-based course is actually taught in a more individualized manner than it might be in a classroom. On the other hand, there may be a feeling shared by some administrators that because a Web-based course relies heavily on technology as the delivery system, the course is somehow "automated" to the point that there can be many more students in such a course than would even fit into a regular classroom. Only about 30% of administrators were satisfied with this issue concerning the maximum number of students allowed to enroll in a Web-based course. When limits are placed on course enrollments, additional sections need to be established, and this costs energy in terms of seeking part-time or full-time faculty to cover extra sections, real dollars in terms of added salary expenditure, and, of course, additional commitments for Web-based hardware and software. In addition, avenues to provide incentives such as release time, extra salary, summer support student assistants, and computer hardware all take their toll in terms of sponsored development budgets and time.

The fourth potential explanation for the approach-avoidance conflict has to with two issues that remained relatively stable across the six years. These were controlling academic dishonesty and students' lack of self-discipline or time management skills. Approximately 60% of the administrators agreed that these were critical issues. Interestingly, Kennedy, Nowak, Raghuraman, and Thomas (2000) found that both faculty and students also believe that it is easier to cheat in Web-based courses. However, contrary to this prevailing subjective perception, Carnes, Awang, and Marlow (2003) and Grijalva, Nowell, and Kerkvliet (2006) obtained data that suggest that academic dishonesty is no more likely in Web-based courses than traditional courses, and Carnes et al. and Heberling (2002) both suggest that it is easier to detect cases of academic dishonesty in Web-based courses. It is worthy of note here that in the authors' previous work with technical staff serving Web-based initiatives (Hale & Olson, 2006), although the percentage of technicians concerned with academic dishonesty was 40%, 68% believed that adequate safeguards are available to prevent or minimize issues related to student honesty.

The results of the present study provide several suggestions for academic institutions to consider which may make Web-based instruction more acceptable and more successful:

1. Web-based courses are not fancy correspondence courses. Efforts should be made such that administrators are familiar with data that support the assertion that instructional methods offered in Web-based courses can provide at least an equal, if not greater, educational quality than in the traditional face-to-face classroom setting (Russell's *No Significant Differences* website is extremely informative in this context, n.d.). Administrators need orientation/tutorials so that they are aware not only of all the resources and pedagogical tools available to their faculty and students, but how such resources and pedagogy are to be employed in Web-based courses.
2. The present authors are not aware of any data which support the assertion that academic dishonesty issues occur more in Web-based instruction than in traditional instruction. In fact, the available data suggest that cases of academic dishonesty are essentially equivocal in Web-based versus traditional courses, and that cheaters may be more easily detected with Web-based instruction. Because an academic dishonesty issue in Web-based courses continues to be a consistent concern, continued efforts should be exerted to train faculty (and apprise administrators) about the existing research on the issue, as well as the many available computer safeguard measures and other techniques that can be used to deal with this issue such as encouraging faculty to consider more "dishonesty-proof" methods of assessment.
3. Because a student's self-discipline is another common issue brought up in discussions about Web-based instruction, some preliminary measures might be employed to screen out those students who are under-prepared in terms of requisite "self" behaviors (e.g., self-discipline, self-

monitoring, self-initiative, and self-management), not to mention reading and writing skills.

4. Incentives might be identified and provided to increase the number of administrators who participate in the delivery of Web-based courses. Administrators who have developed and taught Web-based courses appear to be more favorably disposed to Web-based instruction, which is not surprising. Familiarity is, indeed, educating and, in this case at least, does not breed contempt.
5. An increase in administrative hassles that might arise as a function of Web-based courses, such as course enrollment limits, can be solved in a variety of ways, one of which is to open more sections with a bank of potential part-time faculty assistants with the primary course developer as supervisory in his or her role. Given sufficiently knowledgeable and skilled graduate assistants, for example, there is no reason why a model that look something like the traditional lecture/recitation model could not work in at least some courses.

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