



NATIONAL EDUCATION ASSOCIATION

**A SURVEY OF TRADITIONAL
AND DISTANCE LEARNING
HIGHER EDUCATION
MEMBERS**

Commissioned by

The National Education Association

June 2000

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Faculty teaching distance learning courses and faculty teaching traditional courses hold positive opinions about distance learning, primarily because distance learning courses offer educational opportunities to students who would not otherwise enroll in courses. While, faculty believe they will be hurt financially by distance learning, and financial considerations are very important to them, at the current time, their enthusiasm for offering an education to more students outweighs these concerns.

The picture of distance learning presented in this report is representative of distance learning as it is occurring at traditional public two-year and four-year colleges and universities with NEA members. These distance learning courses are taught by full-time faculty to relatively small classes of students using technologies that are highly interactive. The results presented here, including the positive ratings and high course completion rates, may not apply to distance learning courses at other types of institutions

The Growth Of Distance Learning Courses

Currently, one in 10 higher education NEA members teaches a distance learning course. Furthermore, 90% of NEA members who teach traditional courses tell us that distance learning courses are offered or being considered at their institution. Because increasing numbers of colleges and universities—and more NEA members—are offering distance learning courses, NEA commissioned this study. The conclusions are intended to help NEA shape policies for distance learning courses so that students receive a good education and distance learning faculty receive fair treatment.

Distance Learning Faculty: What Do They Look Like?

Distance learning NEA members and NEA members who teach traditional courses have similar demographic profiles, largely because distance learning faculty spend most of their time teaching traditional courses.

*Similarities
between distance
learning and
traditional faculty*

- Distance learning NEA members resemble traditional faculty in that they are full time (89%), tenured (73%), split evenly between full professors (35%) and lecturers and adjuncts (35%), hold masters' degrees (48%) rather than a Ph.D. (31%).
 - These findings appear to dispel the notion that traditional faculty are being replaced by part-time distance learning faculty who offer one course, with the following caveat. Our survey only includes distance learning faculty who are NEA members. Part-time faculty who teach a single distance learning course would be less likely to be NEA members.
- Both distance learning and traditional faculty are most likely to teach at statewide institutions with multiple campuses (50%) rather than district (23%) or single campus institutions (25%).
- Distance learning courses are not concentrated in a few academic fields. Distance learning and traditional courses are similarly distributed across fields.

*Differences
between distance
learning and
traditional faculty*

- Distance learning and traditional faculty differ somewhat in that distance learning faculty are more likely to teach at a community college (distance learning faculty=68%, traditional faculty = 54%), and slightly less likely to be over the age of 55 (df=25 %, tf=34%).

Distance Learning Technology: Communicating With Students

We see two basic types of distance learning courses: Web-based courses (44%) and those relying primarily on video technologies (54%)

*DL is defined as
courses with more
than half of the
instruction taking
place when
students and
faculty are in
different locations*

- Forty percent (40%) of faculty teaching a Web-based course hold a very positive view, compared to only 25% of those whose distance learning course is not a Web-based course.
- Virtually all of the faculty teaching distance learning courses use an interactive technology to teach their courses.
 - Only 2% of faculty tell us that their distance learning course relies exclusively on one-way pre-recorded videos.
- E-mail is the dominant means of communication employed by faculty and students outside of the normal instruction time.

DL courses with frequent faculty-student interaction are more successful

- Eighty-three percent (83%) of faculty teaching Web-based courses use e-mail to communicate with a typical student in their class once a week or more.
- Almost half (42%) of faculty teaching courses that are not Web-based use e-mail to communicate with a typical student once a week or more.
- A significant proportion of distance learning faculty never see their students in a face-to-face setting.
 - Only 30% of Web-based faculty and 19% of faculty whose distance learning course is not Web-based see their students once a week or more.
- Almost all distance learning faculty (96%) have some type of one-on-one interaction with their students—either through e-mail, telephone, chat rooms, threaded discussion groups, or a face-to-face meeting. Faculty teaching courses with more student interaction are also more likely than their counterparts with less student interaction to hold an overall more positive attitude toward their distance course. Faculty with frequent student interaction also give their distance learning course higher ratings on meeting the goals NEA has determined are essential to a quality education.

Developing The Course: Institutional Support, Faculty Rights, And Compensation

Faculty with technical support give their DL courses better ratings

- Three-fourths (76%) of distance learning faculty rate the technical support, library, and laboratory facilities for their course as excellent or good.
 - Technical support is significantly more important to overall feelings about distance learning than attributes related to the type of institution or the type of student in the course.
- The majority of distance learning faculty (70%) report that workshops and training sessions on teaching distance learning courses are available to them on a regular basis, and a similar majority of faculty have participated in a training session
 - When policy regarding distance learning is included in the collective bargaining agreement, the institution is significantly

more likely to offer distance learning training courses on a regular basis.

Faculty spend more time on their DL course, with no course reduction and no additional compensation

- In considering whether they are the content designer or the manager of information in their courses, 37% say the designer of content, 20% say the manager of information, and 41% say both.
- Over half (53%) of distance learning faculty spend more hours per week preparing and delivering their distance learning course than they do for a comparable traditional course, compared to only 22% who spend fewer hours.
 - Even those faculty who have taught their distance learning course eight times or more spend more hours (48%) rather than fewer hours (21%) on their distance learning course.
- In spite of spending more hours on their distance learning course, most (84%) of faculty get no course reduction, and 63% of distance learning faculty are compensated for their distance learning course as if it were part of their normal course load.
 - Seventy-three percent (73%) of Web-based distance learning faculty are compensated as part of their normal course load.

Distance Learning Students: What Do They Look Like?

Distance learning students at traditional, public higher education institutions do not fit the stereotype

- In contrast to stereotypes of distance learning students as older, part-time students, NEA faculty teach as many younger students as older students and as many full-time students as part-time students.
 - The largest percentage of courses (38%) have an equal mix of students over and under 25 years of age. The remainder are evenly divided between mostly under 25 years of age (27%) and above 25 years of age (27%).
- Since the largest percentage of NEA members teach in undergraduate institutions (78% of distance faculty, 70% of traditional faculty), we also find that distance learning courses are primarily undergraduate courses (82%) rather than graduate courses (16%), and most of the courses fulfill a requirement (70%) rather than being offered as an elective (20%).

- Two-thirds of faculty report that their distance learning course has a limit on the maximum number of students who can enroll. Faculty teaching courses with enrollment limits—regardless of whether the limit is high or low—hold more positive feelings about distance learning.
- Also in contrast with stereotypes, we find that the distance learning classes that NEA members teach are not large, most of the classes are entirely composed of students taking the course for credit and students are nearby.
 - Two-thirds of distance learning faculty teach a course with 40 or fewer students. Only 6 respondents teach a course with over 200 students. Class size is not related to ratings of distance learning courses among courses with under 100 students. We cannot comment on what happens in very large courses.
 - A majority of the distance learning faculty (56%) report that most of their distance learning students live within one hour of campus, and another third (32%) report that their distance learning students live mostly in the state but more than an hour's drive away. Only 4% of the distance learning faculty report that most of their distance learning students are from out of state.
 - The largest percentage of faculty (63%) report that most distance learning students are enrolled on another campus of the same institution offering the course. Relatively few (19%) report that most students are enrolled at another institution.

The Potential And The Concerns: What Faculty Think About Distance Learning

Faculty hold positive opinions toward distance learning courses

- Among distance learning faculty, 72% hold positive feelings, compared to only 14% who hold negative feelings.
- Traditional faculty are somewhat less positive—51% hold positive feelings toward distance learning courses, compared to 22% who hold negative feelings. A significant proportion (28%) of traditional faculty remain undecided and are waiting to see the implications of these courses for students, their institution and themselves.
- Faculty who teach Web-based courses have more positive opinions about distance learning courses. Correlations that exist between

faculty opinions about distance learning and most other factors are greatly reduced when we control for whether the course is a Web-based course or a course that is not dependent upon computer technology.

Regressions indicate that DL shortcomings are outweighed by the possibility of educating more students

- Faculty evaluate distance learning primarily on quality of education considerations and secondarily on more traditional union considerations. In particular, faculty believe that distance learning courses reach students who would not otherwise take a course and allow smaller institutions to offer a richer curriculum.
- Considering the list of 10 possible negative outcomes of distance learning, faculty tell us that three outcomes would concern them the most, if they did in fact occur. Two of these most important outcomes relate to traditional union concerns and faculty think they are *very likely* to occur:
 - Faculty will do more work for the same amount of pay;
 - Faculty will not be fairly compensated for their intellectual property.
- Faculty think the other most important possible outcome is *unlikely* to occur:
 - The quality of education would decline.
- At the current time, faculty believe they will be hurt financially by distance learning, and financial considerations are very important to them. However, the prospect of being able to offer an education to students who could not otherwise enroll in a course outweighs these concerns.
- Traditional and distance learning faculty rank the following concerns as not likely to occur, and somewhat less important to them, even if they do occur:
 - Fewer jobs;
 - Decline in the quality of faculty;
 - Less candidness in the classroom.

Web-based courses fare better against traditional courses than courses not based on the Web

- When we separate Web-based courses from not-Web-based courses, we find that faculty teaching Web-based courses give their distance learning courses a better rating than their traditional courses on meeting these five goals:
 - Giving the students access to information;
 - Providing students with high quality course material;
 - Helping students master the subject matter;
 - Assessing the educational effectiveness of the course;
 - Addressing the variety of student learning styles.
- Faculty teaching Web-based courses give their distance learning course the same rating as their traditional course on meeting the first two of the following goals and a worse rating on the last three goals:
 - Improving quantitative skills;
 - Developing student interactivity;
 - Strengthening students' group problem-solving skills;
 - Improving verbal skills;
 - Helping students deliver better oral presentations.

The Report

Introduction

Purpose. In increasing numbers, colleges and universities—and more NEA members—are offering distance learning courses. Currently, one in 10 higher education NEA members teach a distance learning course. Furthermore, 90% of NEA members who teach traditional courses tell us that distance learning courses are offered or being considered at their institution. In light of how this trend has accelerated in just the last few years, this study meets two goals. First, it offers descriptive information about distance learning courses and the faculty who teach them. Second, it explores opinions about distance learning held by faculty teaching distance learning courses and by faculty teaching traditional courses. The conclusions are intended to help NEA shape policies for distance learning courses so that students receive a good education and distance learning faculty receive fair treatment.

Methodological overview. Interviews were completed with 402 distance learning faculty and 130 traditional faculty between February 11 and March 6, 2000. A respondent was considered a distance learning faculty member if he or she had taught a distance learning course in the last five years, including this year. A distance learning course is defined as one in which more than half of the instruction takes place when faculty and students are at different locations and the instruction is delivered through audio, video or computer technologies. Correspondence courses and traditional courses with a smaller distance learning component are not considered distance learning courses. We estimate that about one in 10 NEA higher education members, or about 5,000 NEA members, have taught a distance learning course in the last five years.

It is important to remember that the picture of distance learning presented in this report applies to NEA faculty members, and it may not be representative of what is happening at institutions not represented by NEA. NEA members teach mostly at traditional, public two and four year colleges and universities with graduate students. Very few teach extension courses or at on-line universities. However, in order to simplify the text, we simply refer to "distance learning faculty" (instead of "distance learning faculty who are NEA members") and "traditional faculty" (instead of "traditional faculty who are NEA members").

Distance Learning Faculty: Who Are They?

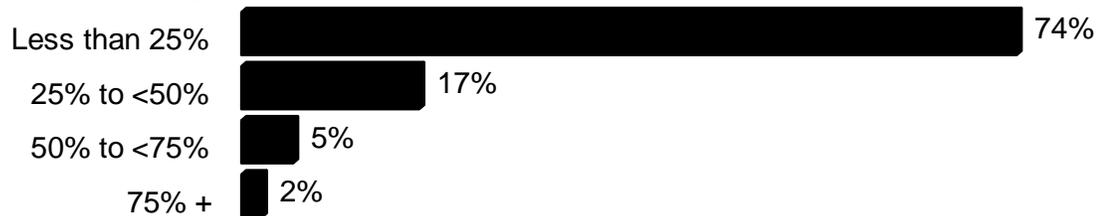
Distance learning faculty spend most of their time teaching traditional courses, which partly explains why distance learning NEA members and NEA members who teach traditional courses have similar demographic profiles. The vast majorities of both faculties are full-time teachers (distance learning faculty =89%, traditional faculty=85%), and for most distance

Figure 1

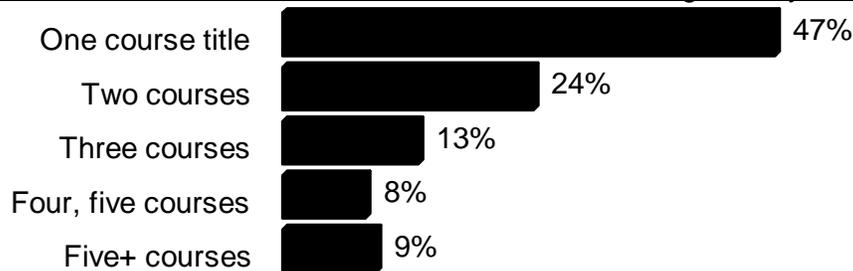
Distance Learning Faculty Are Full-Time Faculty, And Teach Mostly Traditional Courses

89% of distance learning faculty and 85% of traditional faculty are full-time.

Q7 Distance learning courses as proportion of faculty course load



Q1 Number of distance courses with different titles taught in 5 years

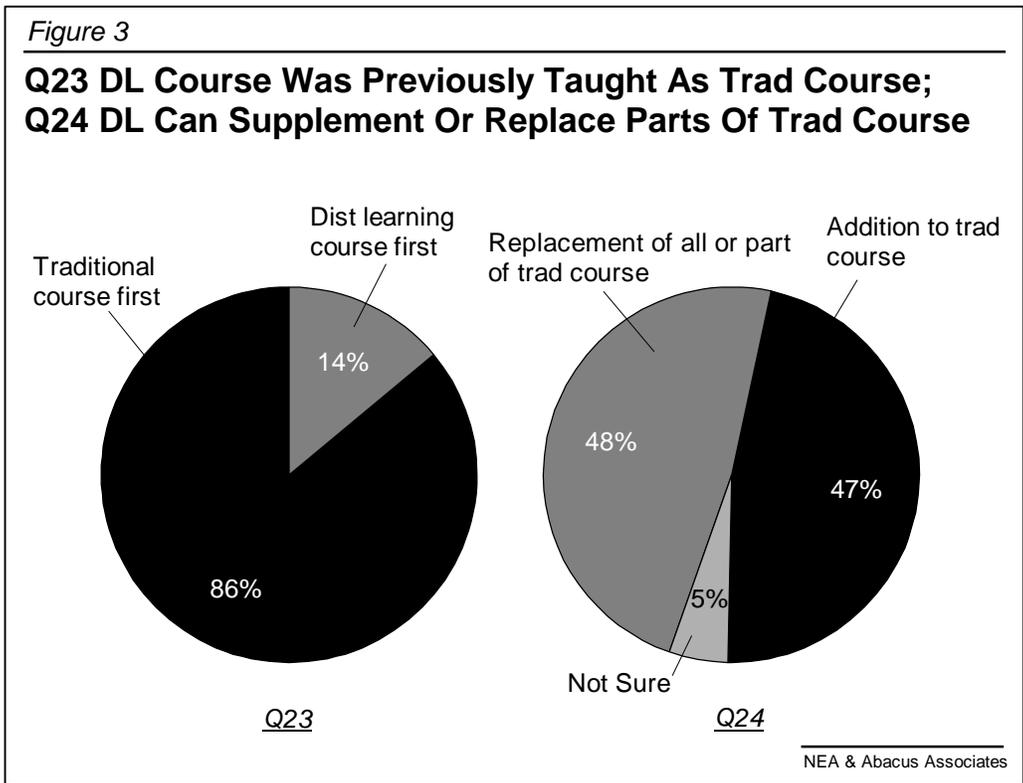
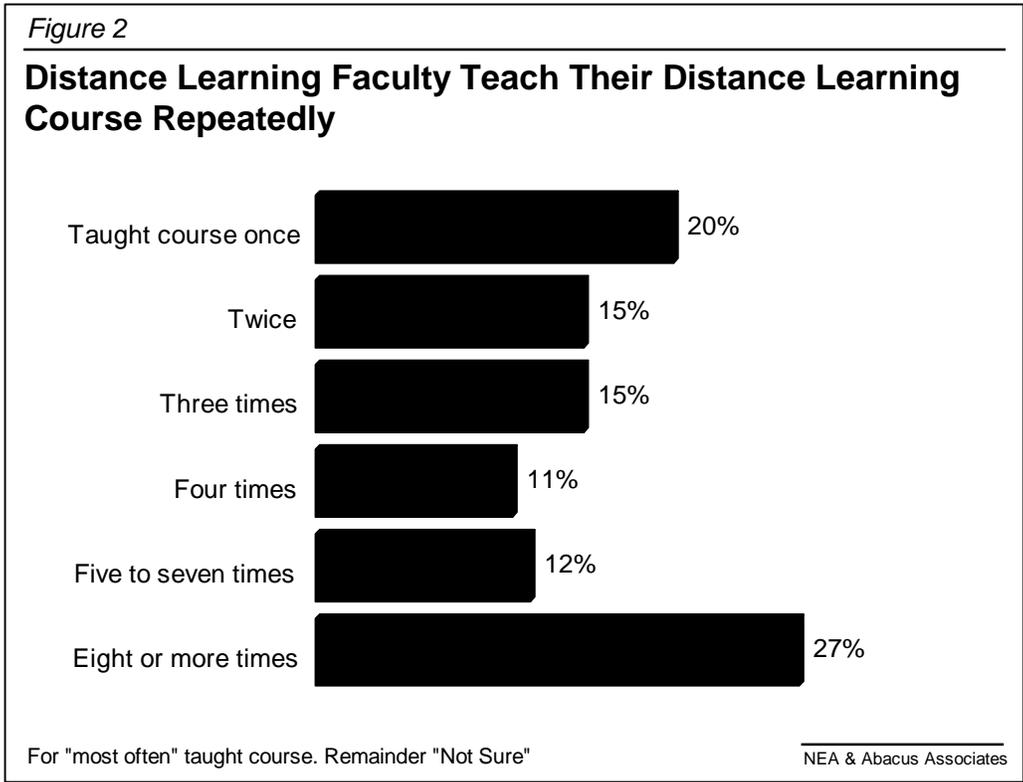


Remainder "Not Sure"

NEA & Abacus Associates

learning faculty (75%), distance learning courses account for less than a quarter of their course load each year (Figure 1). (Distance learning faculty and traditional faculty will be abbreviated as "df" and "tf", respectively, in many places in the report.) Half (47%) of distance learning faculty have taught only one distance learning course title in the last five years, but they teach their one course repeatedly (Figure 2). These distance learning courses have developed from traditional courses (Figure 3). About half of the time the distance learning component is an addition to the traditional course; and about half of the time the distance learning component replaces all or part of the traditional course.

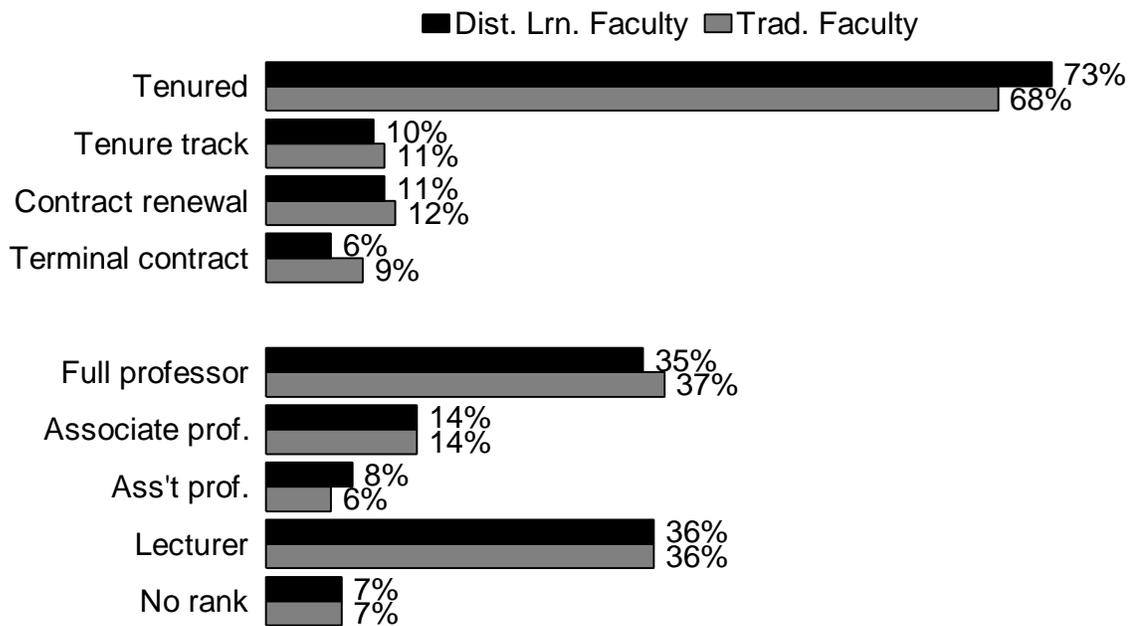
At first glance, these findings appear to dispel the notion that traditional faculty are being replaced by part-time distance learning faculty who offer one course. However, we caution against rushing to this judgement. Our survey only includes distance learning faculty who are NEA members. Part-time faculty who teach a single distance learning course would be less integrated into the college or university community, less likely to join NEA, and, perhaps, less likely to be at a university or college with unionized faculty.



Although these distance learning faculty teach mostly traditional courses, the distance learning courses they do teach are, by definition, genuinely distance learning courses where half or more of the instruction takes place when the instructor and students are in different locations. Therefore, the similarity in the profiles of distance learning faculty and traditional learning faculty is unexpected. Their tenure status is the same, with two-thirds being tenured (df=73%, tf=68%), and relatively fewer being tenure track but not yet tenured (df=10%, tf=11%), non-tenured track with an expectation of continual renewal (df=11%, tf=12%), and terminal contracts (df=6%, tf=9%, Figure 4) Distance learning faculty are as likely as traditional faculty to be full professors (35% for both), associate faculty (14% for both), assistant professors (df=7%, tf=5%), and lecturers, instructors, adjuncts or visiting professors (35% for both). The two groups of faculty also have similar education profiles. The largest percentage of NEA distance learning and traditional faculty members have a master's degree (df=48%, tf=51%), and somewhat fewer have a Ph.D. or Ed.D (df=31%, tf=28%). These similarities suggest that senior faculty are as likely to retool for teaching distance learning courses as recent graduates who are just joining the faculty.

Figure 4

Dist. Lrn. Faculty Are Tenured And Split Evenly Between Full Professor & Lecturer Status (DL Fac Mirror Trad Fac)



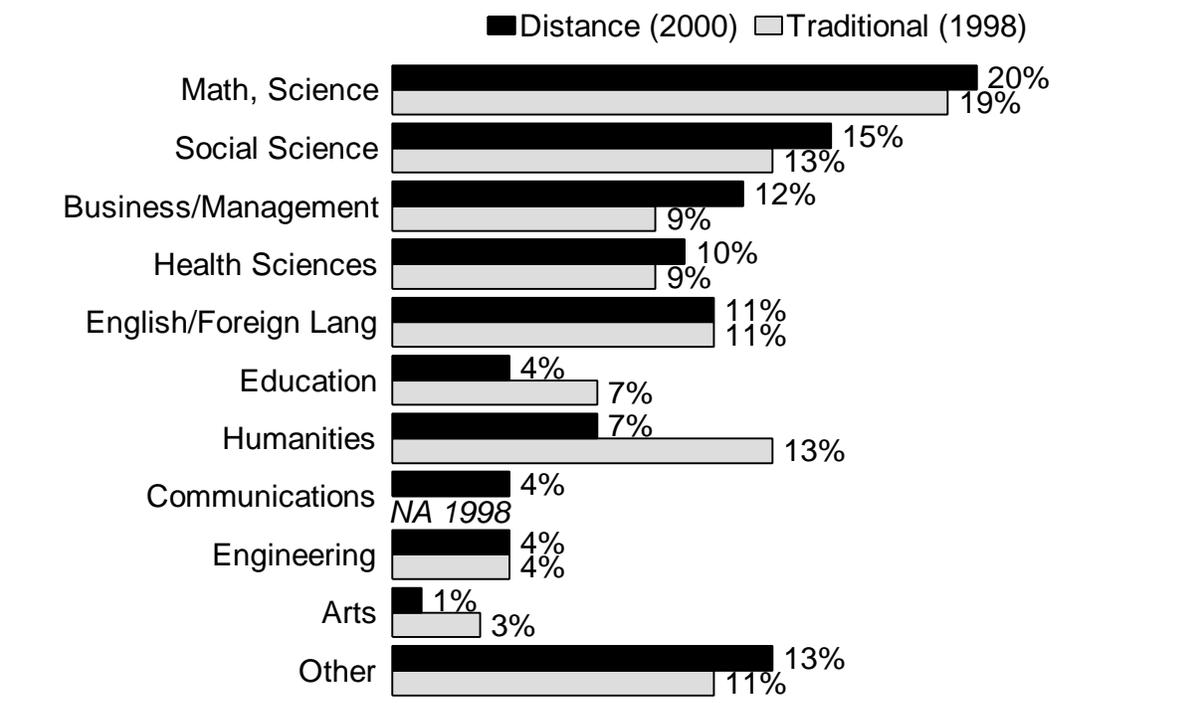
Remainder "Not Sure"

NEA & Abacus Associates

Distance learning faculty and traditional faculty teach courses in the same academic fields, which counters some expectations that distance learning courses are emerging disproportionately in selected areas of study. Traditional faculty were not asked this long question in the current survey, but a similar question was asked of all NEA faculty in 1998. The question asked in 1998 offered fewer response categories and therefore invited more volunteered responses than the question asked of distance learning faculty in 2000. Also the 1998 results are for *all* faculty, which would include the few distance learning faculty. With these caveats in mind, the similarities between distance learning faculty and all faculty is striking (Figure 5). All NEA faculty are slightly more likely to teach the humanities (13%) than distance learning faculty (7%), but even that small difference may not be so large. In 2000, 4% of distance learning faculty chose the field of "communications," whereas respondents in 1998 were not given that response option and would have placed themselves in the humanities, social sciences, or "other" category. For all the other discipline categories, the difference between distance learning and all faculty is within 3%.

Figure 5

Distance Learning Faculty And Traditional Faculty Teach In Same Fields

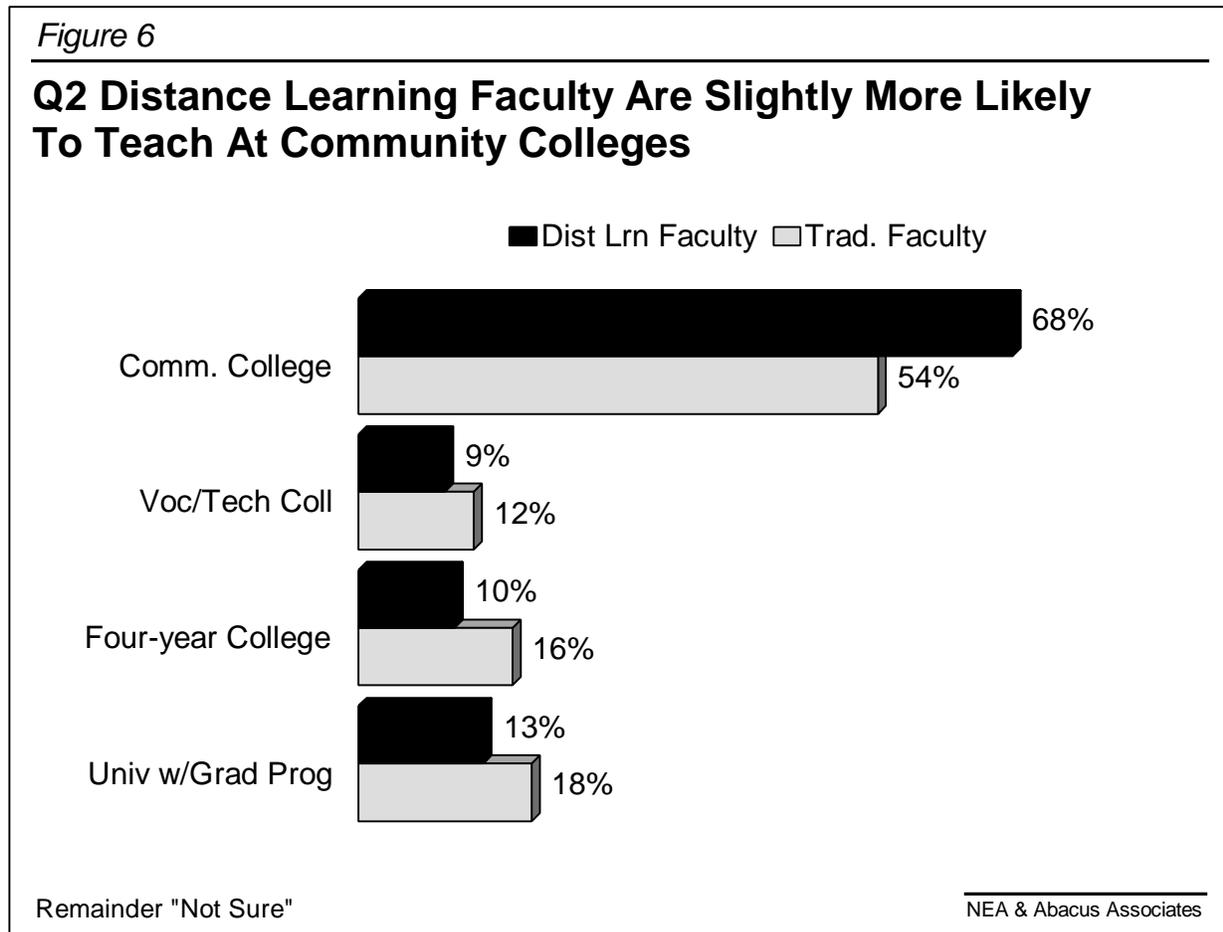


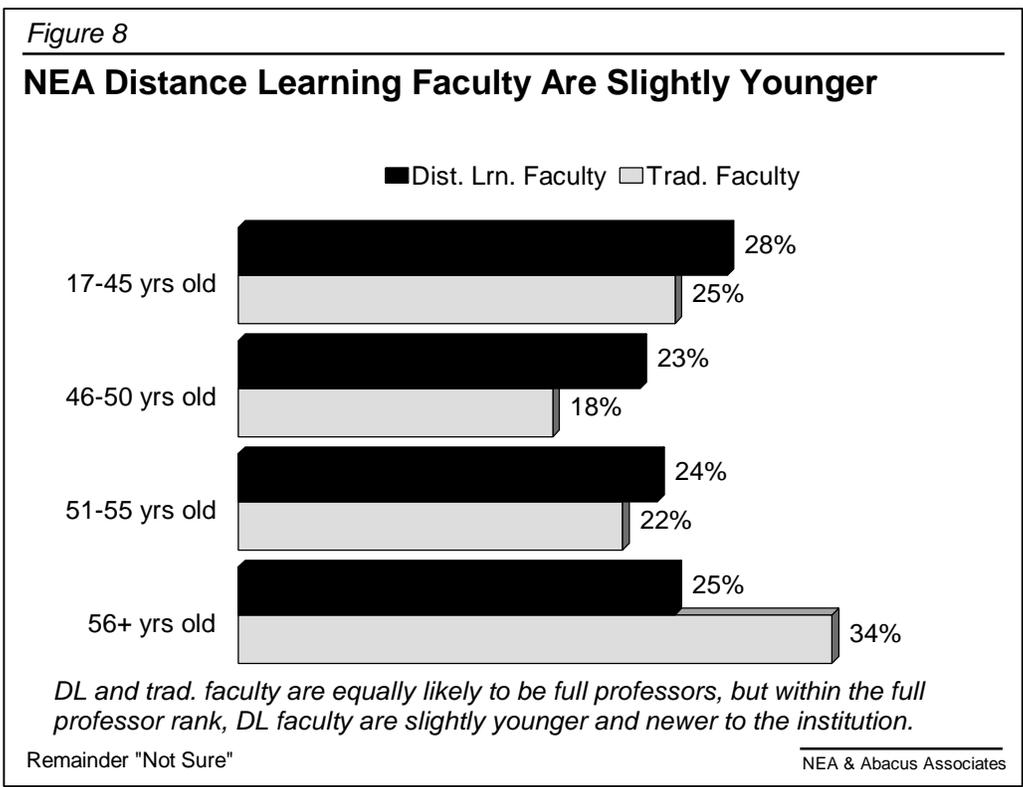
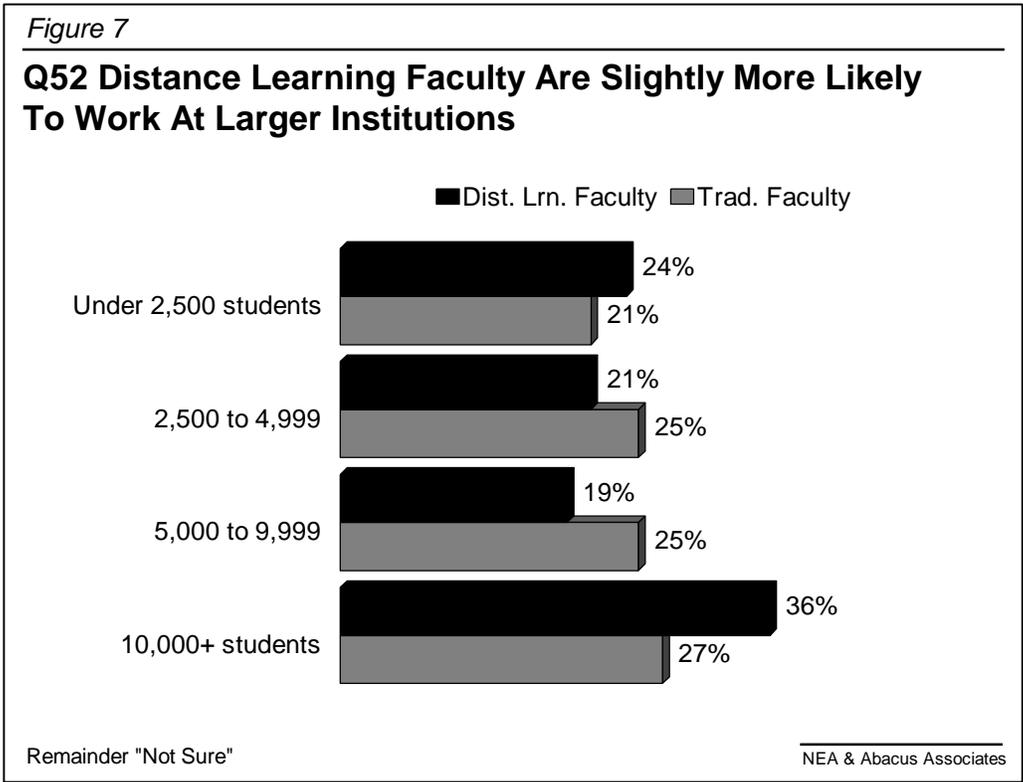
Remainder "Not Sure"

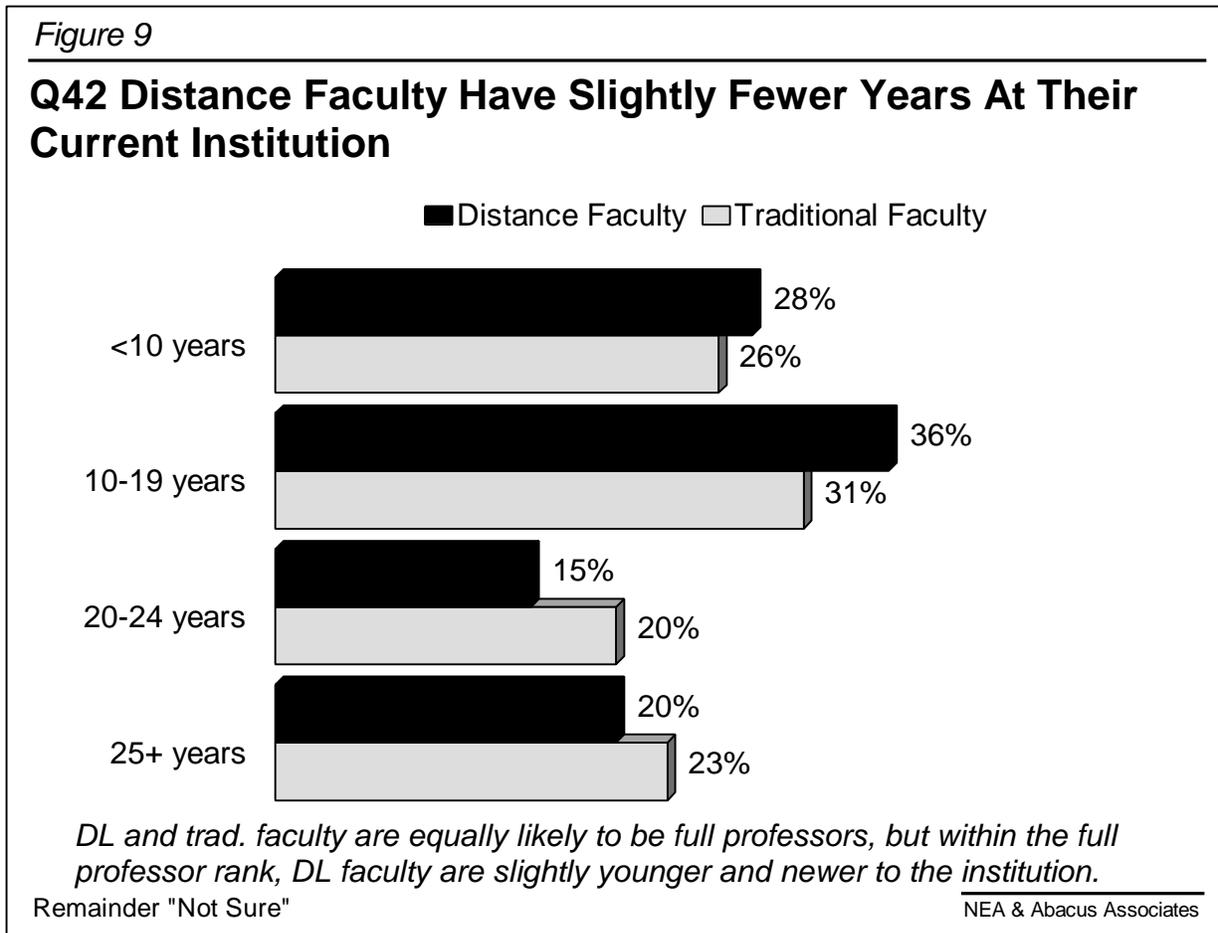
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Both distance learning and traditional faculty come from similar institutional arrangements, with about half (df=50%, tf=52%) in an institution that is part of a statewide system with multiple campuses. The proportion of the remaining faculty are split between an institution in a district system with three or more campuses (df=23%, tf=21%) and an institution that is primarily one campus (df=25%, tf=22%). The community where the college is located is also no different for distance learning faculty than traditional faculty. The same proportion work in cities (df=49%, tf=48%), suburbs (df=16%, tf=18%), and small towns (df=35%, tf=32%).

A few small differences between distance learning faculty and traditional faculty are worth noting. Distance learning faculty are more likely to work at a community college (68%) than traditional faculty (54%) (Figure 6), and they are slightly more likely than traditional faculty to work at an institution with more than 10,000 students (df=36%, tf=27%). (Figure 7)



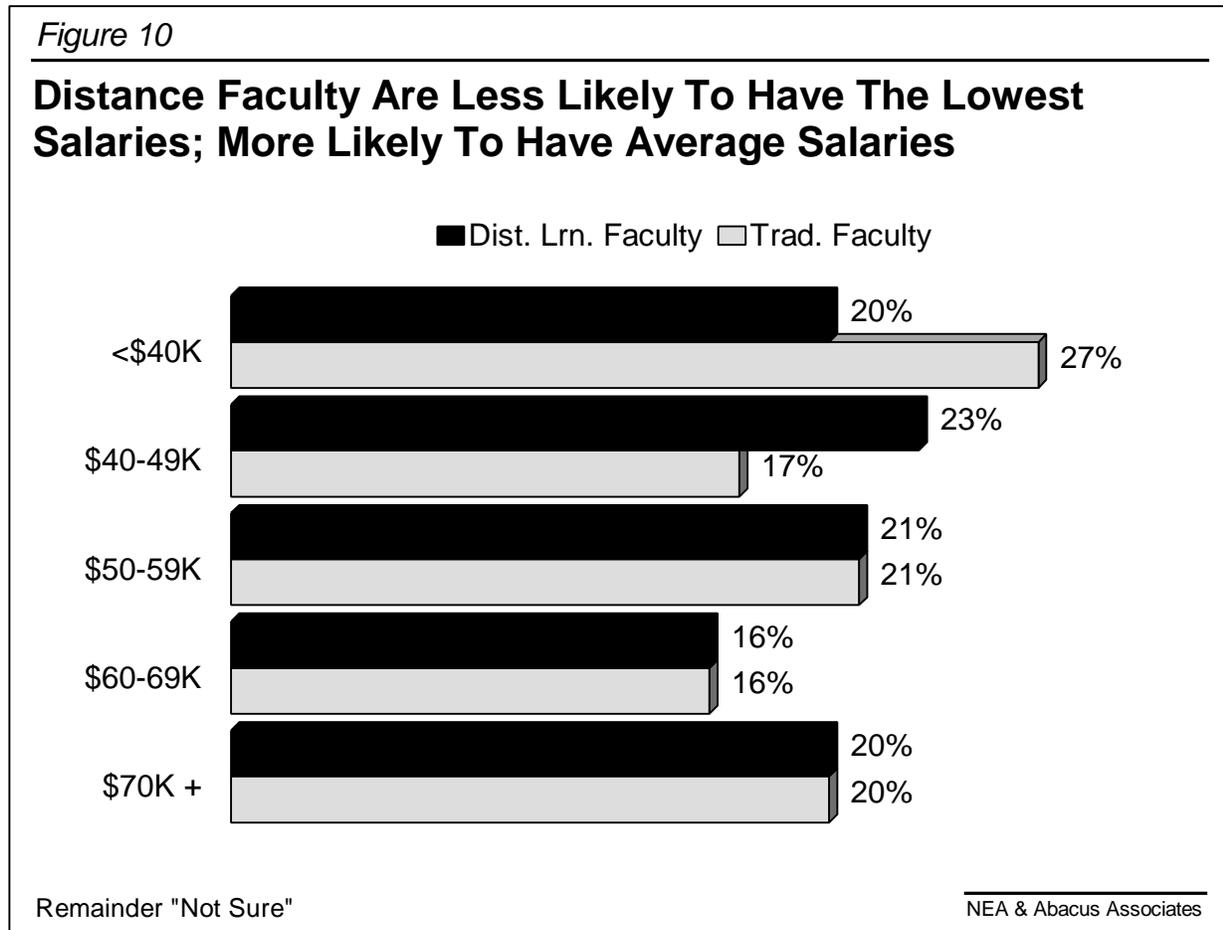




It is unlikely that the small size of the traditional faculty sample is responsible for the above differences in the institutions of distance learning and traditional faculty. Traditional faculty in the current study resemble the sample of 506 NEA faculty interviewed in 1998 in that similar percentages of faculty in both surveys work in a community college (1998=53%, 1999=54%) and four-year colleges (1998=16%, 2000=16%). Slightly more of the 2000 faculty work at vocational or technical colleges (1998=8%, 2000=12%) and slightly fewer work in universities with graduate programs (1998=23%, 2000=18%), but the differences are well within expected margins of error.

Finally, distance learning faculty are younger, with more under 50 years of age (df=51%, tf=44%) and few over the age of 55 (df=25%, tf=34% Figure 8). They are somewhat newer to their institution, with slightly less years of teaching behind them than traditional faculty (Figure 9). These differences in age and length of time at the institution are consistent with the fact that distance learning faculty and traditional faculty are equally likely to be full professors, because within the full professor rank, distance learning faculty are slightly younger and newer to the institution. In spite of being somewhat younger and less

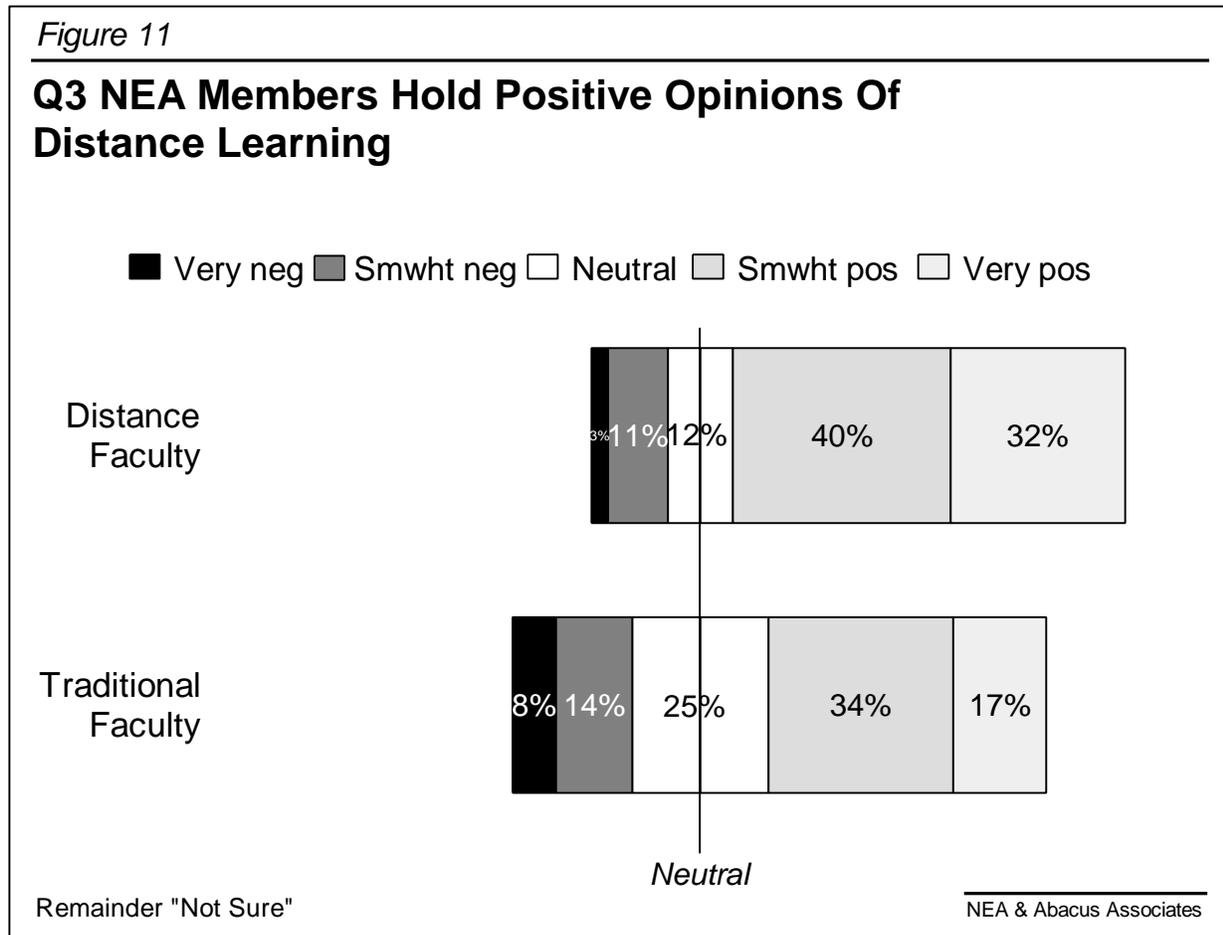
experienced, distance learning faculty are less likely to have the lowest salaries (under \$40,000) and more likely to have average salaries (\$40,000-\$49,000, Figure 10).



NEA Members Hold Positive Opinions Of Distance Learning

At the current time, both distance learning and traditional faculty hold positive opinions toward distance learning courses. Among distance learning faculty, 72% hold positive feelings, compared to only 14% who hold negative feelings (Figure 11). Traditional faculty are somewhat less positive—51% hold positive feelings toward distance learning courses, compared to 22% who hold negative feelings. A significant proportion (28%) of traditional faculty remain neutral or undecided and are waiting to see the implications of these courses for students, their institution and themselves.

After asking distance learning faculty for their general opinion about distance learning, we ask them a series of questions about the specific distance learning course that they teach the most often. In the next section of the report, we describe distance learning courses: (1)



the technology which is used to teach and communicate with students; (2) the role of the faculty member and the institution in the development of the course; (3) the students who choose to enroll in a distance learning course.

We also relate overall faculty feelings toward distance learning to differences in distance learning courses to begin to identify the conditions under which faculty believe distance learning works—works well for them and/or their students. Multivariate regressions indicate that of all the ways that distance learning courses can differ (type of technology used, type of institution, type of student, etc.) the most important factor is whether the course is primarily a Web-based course, as opposed to a course that relies primarily on a variety of video arrangements. ***Faculty who teach Web-based courses have more positive opinions about distance learning courses.*** Correlations that exist between faculty opinions about distance learning and most other factors are greatly reduced when we control for whether the course is a Web-based course or a course that is not dependent upon computer technology.

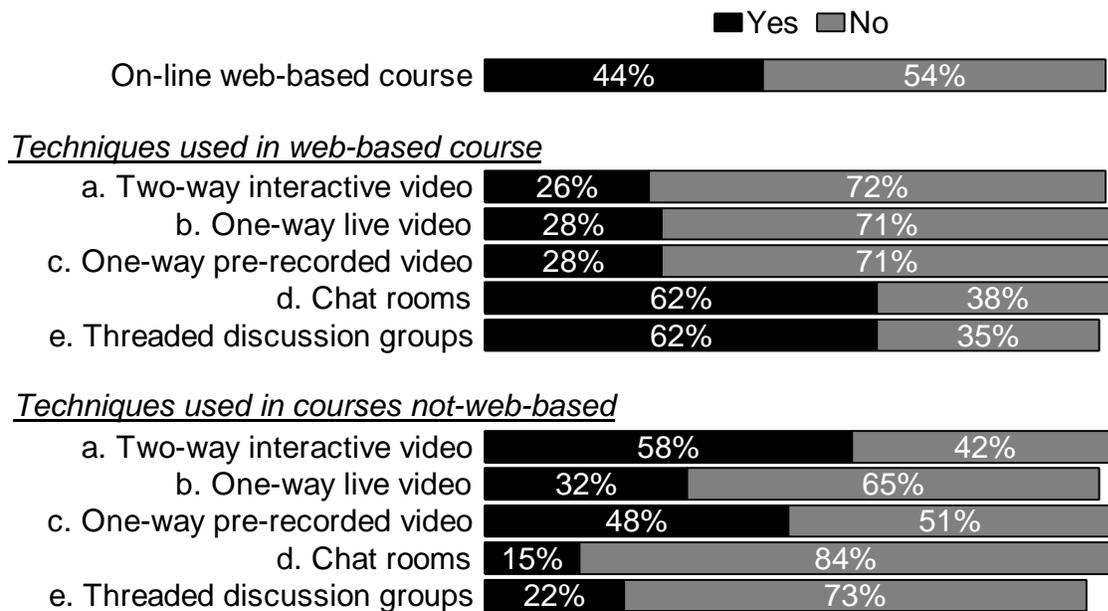
Distance Learning Courses: What They Look Like

Communicating With Students In Distance Learning Courses

Distance learning courses are usually divided into two generic categories: synchronous and asynchronous. Synchronous courses require that all students work at the same time, while in different locations. Asynchronous courses allow students to work on their own schedule. Synchronous courses are more likely to rely on video technology while asynchronous courses are more likely to rely on computer technology. Another related distinction between distance learning courses is whether or not the course is primarily a Web-based course. Forty-four percent (44%) of distance learning faculty tell us their course is primarily Web-based. Web-based courses rely heavily on chat rooms and threaded discussion groups, but a fourth of the Web-based faculty also report using various types of videos (Figure 12). While we are likely to see more video content in Web-based courses as the faster transmissions of cable modems become more common, at the current time Web-based courses do not make extensive use of videos. On the other hand, courses that are not-Web-based rely primarily on a combination of two-way interactive videos and one-way pre-recorded videos. The distinction between the

Figure 12

We See Two Types Of Distance Learning Courses: Web-Based And Not-Web-Based



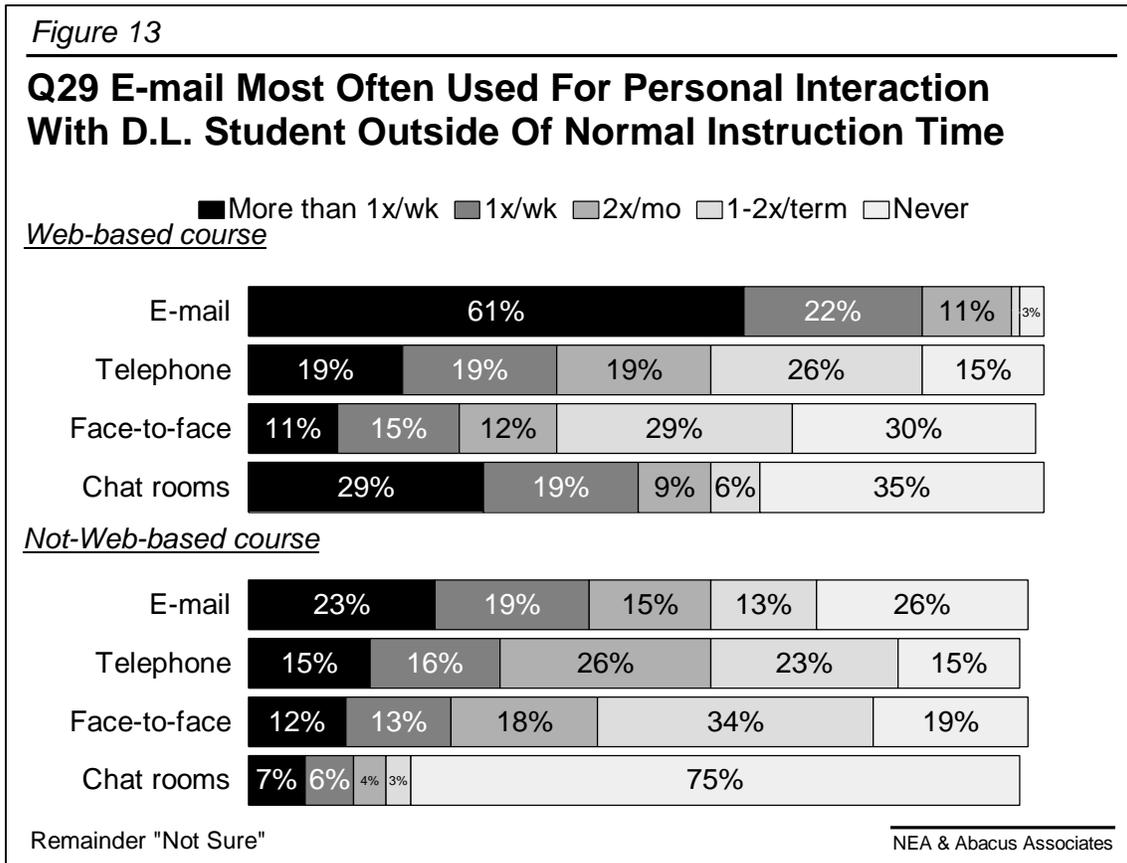
Remainder "Not Sure"

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two types of distance learning courses is almost clear enough to refer to courses as Web-based and video-based courses. However, the use of technologies overlap just enough that we have chosen to refer to the two types of distance learning as Web-based and not-Web-based.

Virtually all of the faculty teaching distance learning courses, as defined where more than half of the instruction takes place when students and faculty are in different locations, use an interactive technology to teach their courses. The least interactive of the technologies is the one-way pre-recorded video. Only 2% of faculty tell us that their distance learning course relies exclusively on one-way pre-recorded videos.

E-mail is the dominate means of communication employed by faculty and students outside of the normal instruction time—both in Web-based courses and in not-Web-based courses. Indeed, there is a tremendous amount of faculty-student contact via e-mail (Figure 13). Eighty-three percent (83%) of faculty teaching Web-based courses use e-mail to communicate with a typical student in their class once a week or more. Almost half (42%) of faculty teaching not-Web-based courses use e-mail to communicate with a typical student once a week or more.



In addition to contact through new technologies, most faculty (about 85%) in both Web-based and not-Web-based courses talk with their students at least once during the semester on the telephone, while about half of faculty in both types of courses talk on the telephone with their students at least twice a month.

However, these courses are genuinely distance learning courses, in that face-to-face contact with students is rare. A significant proportion of the faculty teaching them never see their students (30% of Web-based faculty and 19% of not-Web-based faculty) and only a fourth of faculty teaching both types of courses see their students once a week or more.

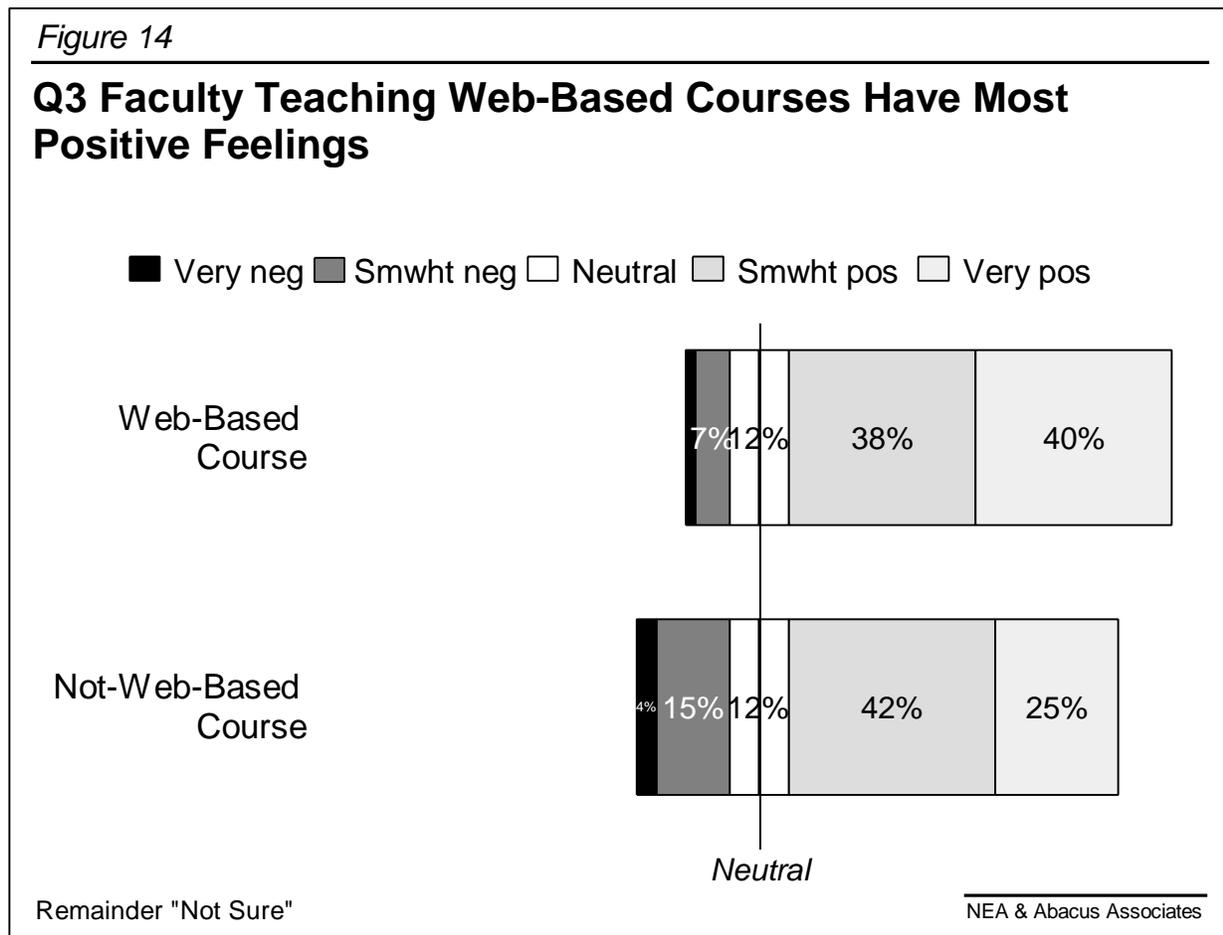
While face-to-face contact is not frequent, virtually all faculty (96%) have some type of one-on-one interaction with their students through one of these means, and for the most part, these interactions are frequent. Correlations indicate that faculty teaching courses with more student interaction are more likely than their counterparts with less student interaction to hold an overall more positive toward their distance course. Faculty with frequent student interaction also give their distance learning course higher ratings on meeting the goals NEA has determined are essential to a quality education. In terms of these benchmarks, distance learning courses with more interaction are more successful.

Smaller institutions (enrollment under 2,500) and institutions in small towns are somewhat less likely to offer Web-based courses, and more likely to offer courses that use two-way interactive videos than are the larger institutions and those in suburban communities and cities. We offer two possible explanations for this relationship. Perhaps smaller institutions and institutions in small towns were among the first to experiment with distance learning in order to expand their offerings, and therefore adopted earlier video technologies. Also, easy access to the Internet may be a more recent phenomenon at smaller institutions and in these less populated areas.

Except for the two differences noted above, Web-based and not-Web-based courses are taught by similar faculty members, at similar places. The distance learning courses taught by lecturers and full professors, tenured and not-tenured faculty, men and women, and faculty in different fields are equally likely to rely mostly on the Web. Distance learning courses taught by younger faculty (under 51 years) are only slightly more likely to rely on the Web (47%) than those taught by their older colleagues (39%). Similarly, distance learning faculty who have been at their institution for less than 10 years are only somewhat more likely to be teaching Web-based distance learning (52%) than distance learning faculty who have been at their institution 25 years or more (42%). Distance learning faculty at statewide institutions,

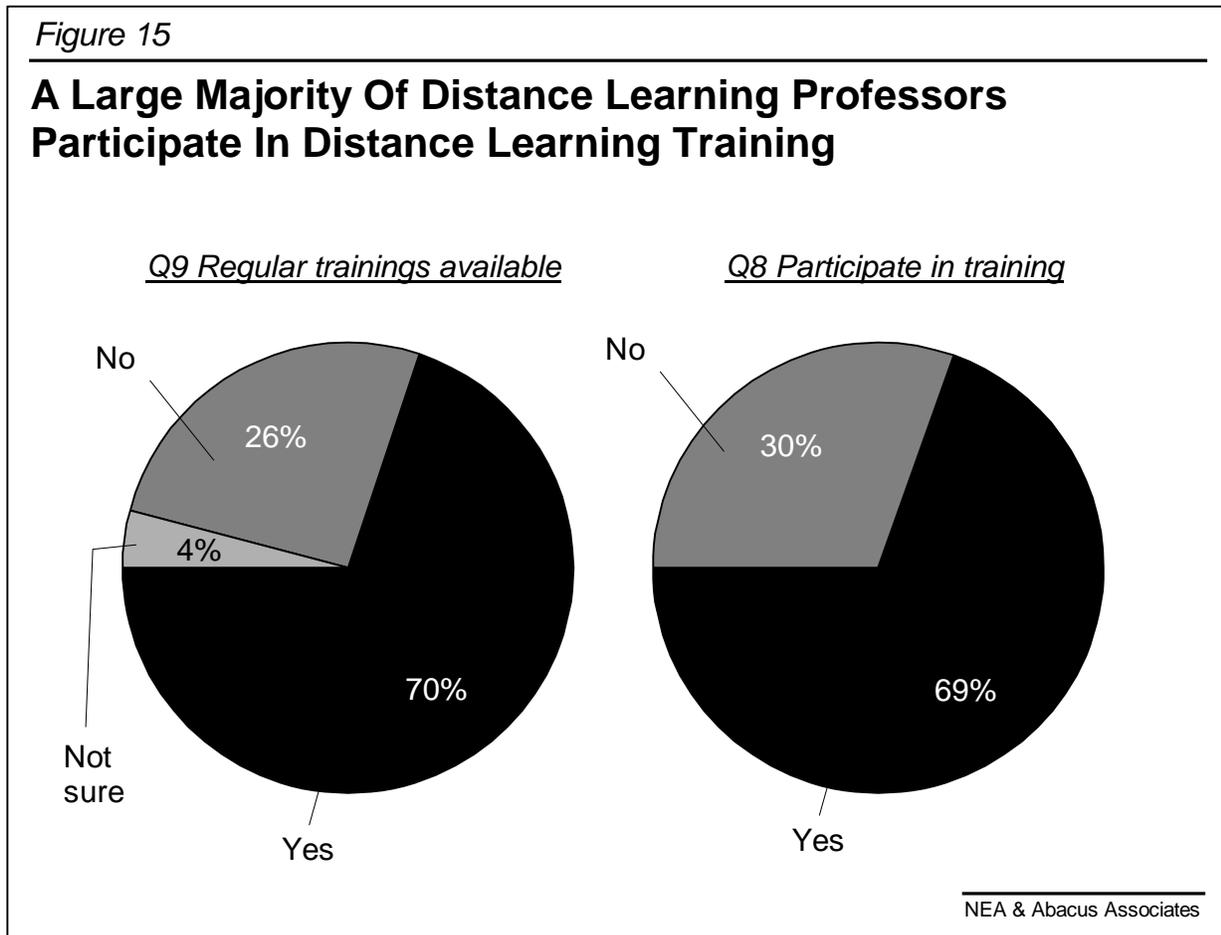
district systems, single-campus institutions, community colleges and four-year colleges and universities are also about equally likely to teach a distance learning course based on the Web.

The most important factor differentiating faculty who are most positive about distance learning from those who are somewhat less positive is whether the faculty member teaches a Web-based course. Among faculty teaching a Web-based course, 40% hold a very positive view, compared to only 25% whose distance learning course is not a Web-based course (Figure 14). This relationship remains important even when combined in multiple regressions with other correlates of teaching a Web-based course.



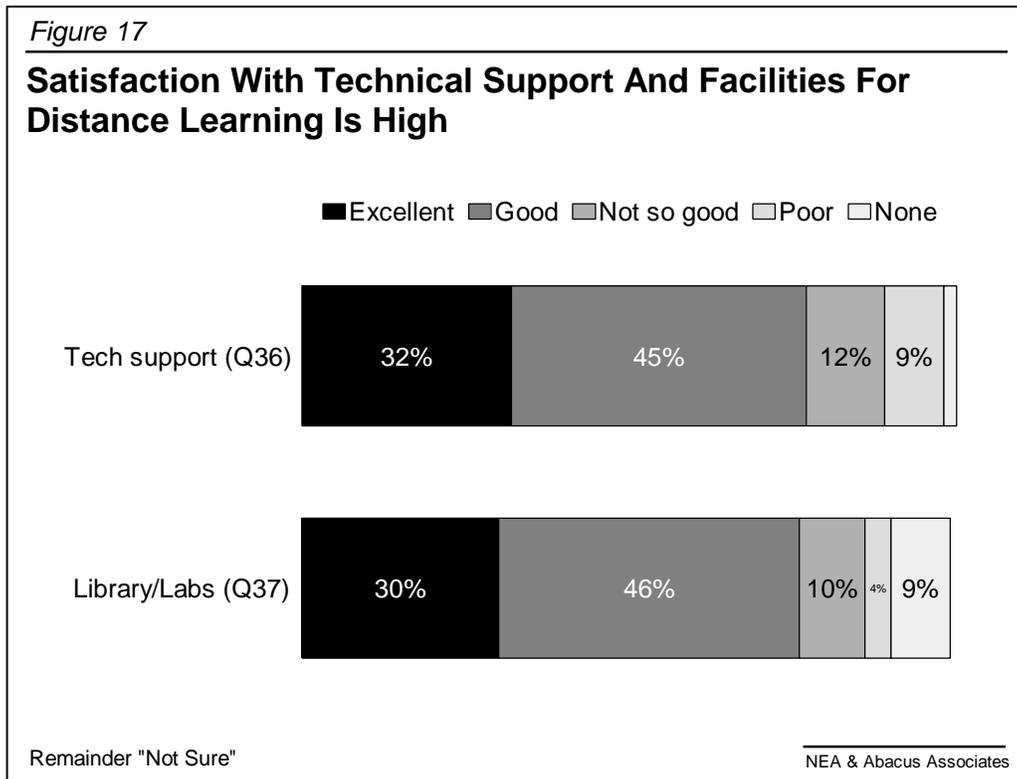
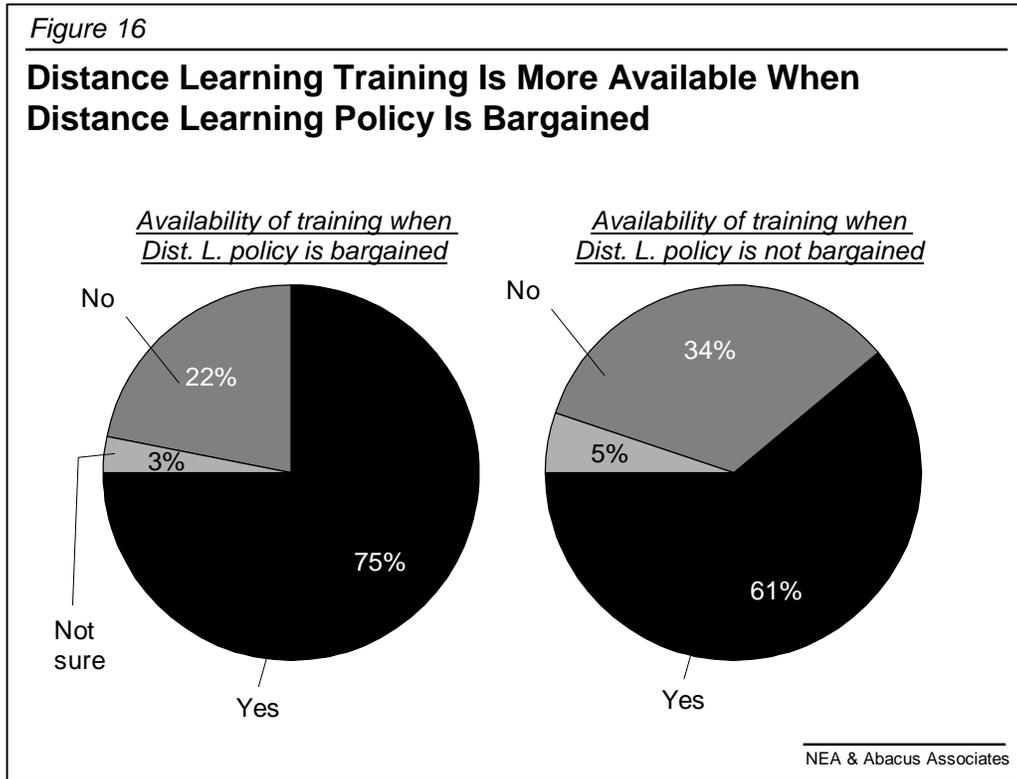
Developing The Course

The majority of distance learning faculty (70%) report that workshops and training sessions on teaching distance learning courses are available to them on a regular basis, and they have participated in a training session (Figure 15). Training is more likely to be available for those teaching Web-based courses (80% say it is available) than those teaching not-Web-



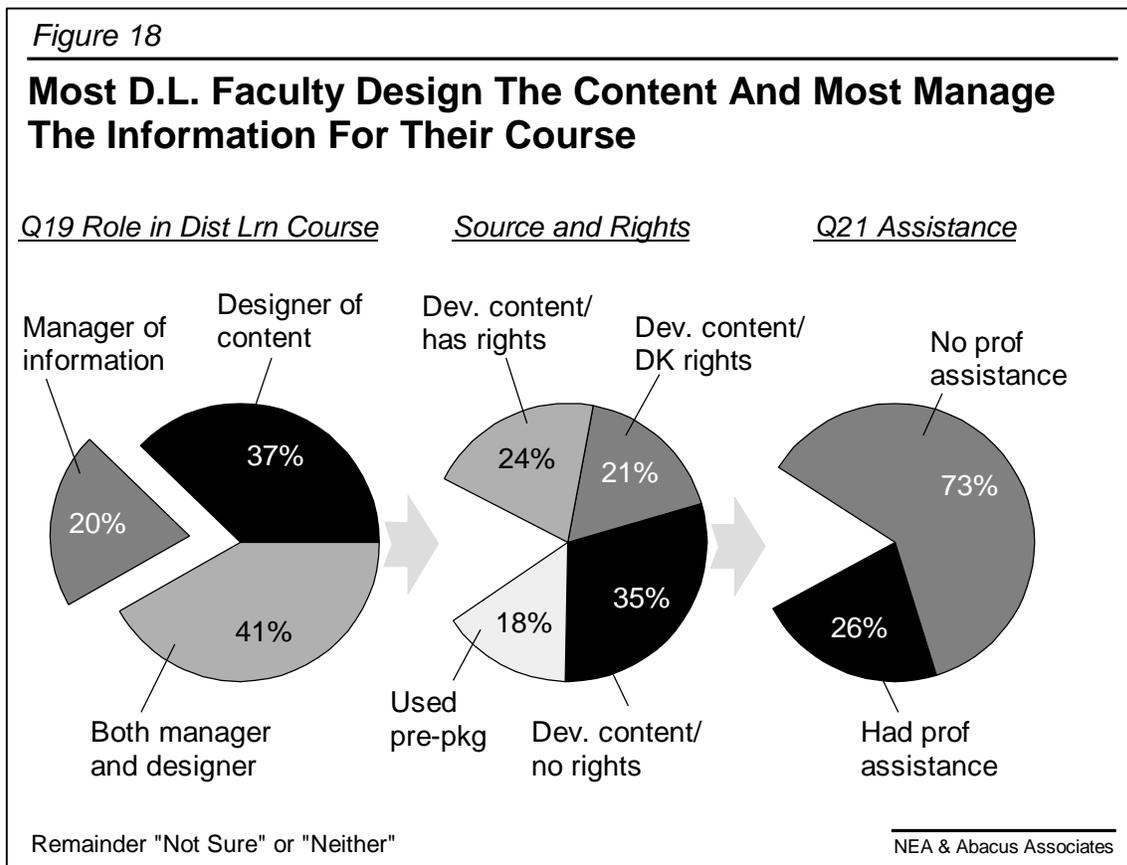
based courses (61% say it is available). Because institutions in small towns and with small enrollments have more not-Web-based courses and less Web-based courses, faculty at these places have less training available to them. Similarly faculty teaching Web-based courses are more likely to participate in a training workshop. Beyond this difference, faculty are about equally likely to participate in a training workshop, regardless of their field, experience, age, and title.

Another important relationship emerges that demonstrates the unions' efforts to improve distance learning courses (Figure 16). When distance learning policy is included in the collective bargaining agreement, the institution is significantly more likely to offer distance learning training courses on a regular basis than when it is not included in the agreement. Seventy-five percent (75%) of faculty at institutions where distance learning policy is bargained tell us training is available, compared to only 61% of faculty at institutions where distance learning is not bargained.



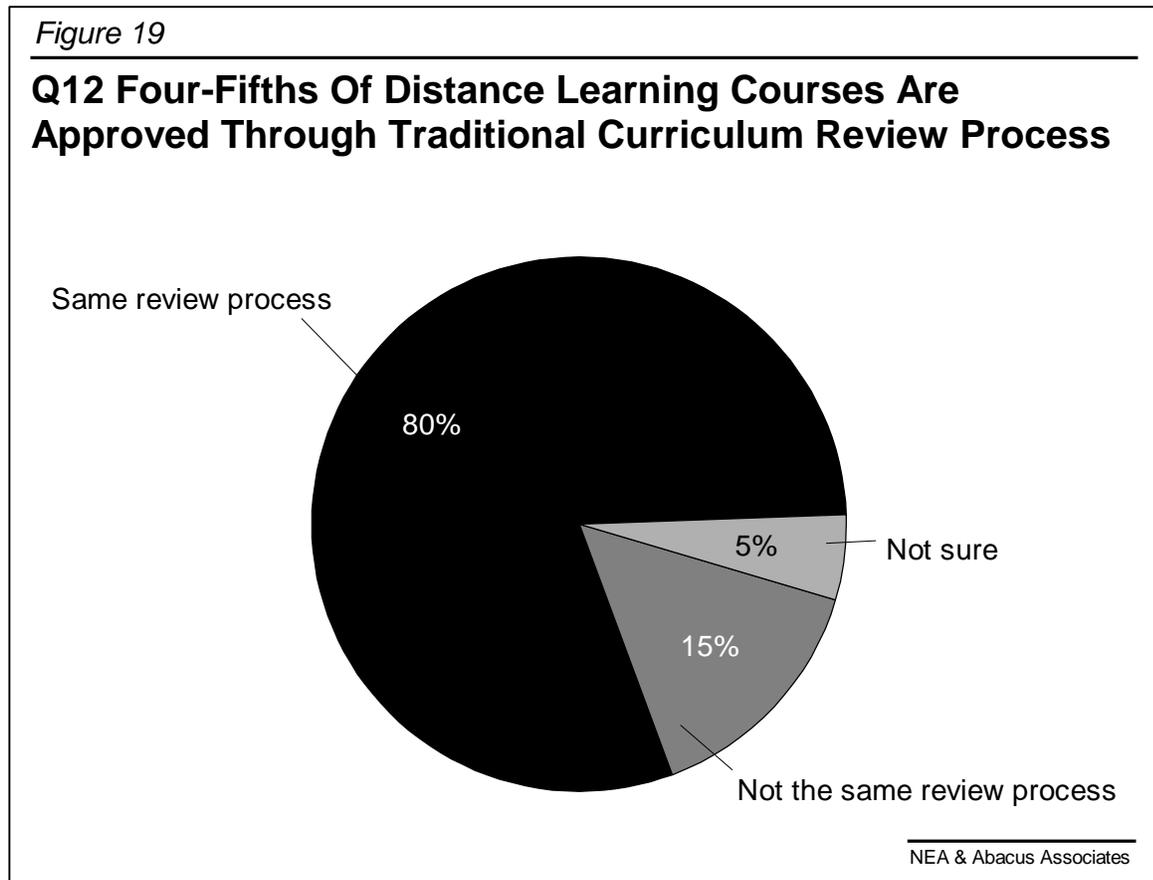
Distance learning faculty give higher ratings to the level of technical support, library and laboratory facilities than expected (Figure 17). Three-fourths of distance learning faculty rate the support and facilities as excellent or good. Whether or not faculty members have positive feelings about distance learning is related to whether they are satisfied with the training available to them, the level of technical support, and the quality of library and laboratory facilities. Web-based courses have the edge in all of these areas, which is part of the reason why faculty who teach Web-based courses are more positive toward distance learning than those who teach not-Web-based courses. ***However, even controlling for whether the course is Web-based or not-Web-based, multiple regressions indicate that the level of technical support is the most important determinant of overall feelings toward distance learning.*** More specifically, technical support is significantly more important to overall feelings about distance learning than attributes related to the type of institution or the type of student in the course.

Currently, most distance learning faculty see themselves as designers of course content, and not simply as managers of information. In considering whether they are more the content designer or the manager of information in the courses, 37% say the designer of content, 20% say the manager of information, and 41% say both (Figure 18). However,



distance learning is still very new. The proportion of faculty who see themselves as designers of content may change as more and more courses are designed and the original designers retire or move on. Of the 78% of the professors who say they design the content of the courses, the largest percentage (80%) develop original course content and only 18% use mostly pre-packaged materials. Of those who develop original course content (247 respondents), less than one-third (30%) say they own the property rights to the materials they create, and 44% say they do not. One-quarter (26%) do not know if they own the property rights or not. Finally, of the 78% of the respondents who are designers of content, one-quarter (26%) have professional assistance in choosing and developing materials.

Faculty who teach Web-based courses (rather than not-Web-based courses) and younger faculty are somewhat more likely to own the property rights to their material, but the differences are not large (34% of Web-based faculty and 34% of faculty under 50 years of age own the property rights to their material, compared to only 28% of those whose course is not Web-based and 26% of those 51 years or older).



Most distance learning courses (80%) are approved through the normal curriculum review process (Figure 19). To the extent that this implies distance learning courses and faculty are given the same status as other courses, this high percentage is probably a positive fact. We cannot assess whether distance learning courses differ in ways that would require a different provisions to the review process.

Characterizing The Student Body

Since the largest percentage of NEA members teach in undergraduate institutions (78% of distance faculty, 70% of traditional faculty), we also find that distance learning courses are primarily undergraduate courses (82%) rather than graduate courses (16%), and most of the courses fulfill a requirement (70%) rather than being offered as an elective (20% Figure 20) At first glance, it may appear that faculty who teach mostly graduate students hold slightly more positive feelings toward distance learning than those who teach undergraduates. However, multiple regressions indicate that this relationship disappears when we control for other factors such as whether the course is a Web-based course or not, and whether the technical support, libraries and laboratory facilities are good. Also, since the percentage of NEA faculty members who teach distance learning to graduate students is small, we are reluctant to suggest that faculty feelings about distance learning are related to the level of the course.

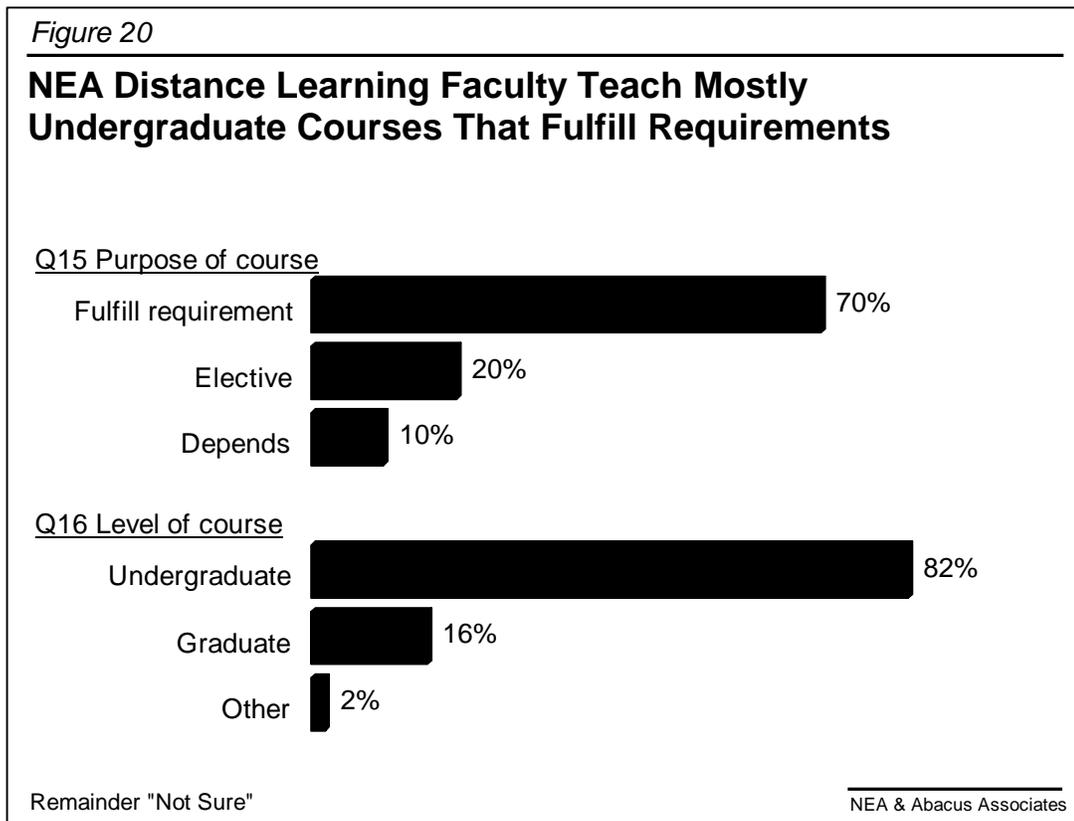


Figure 21

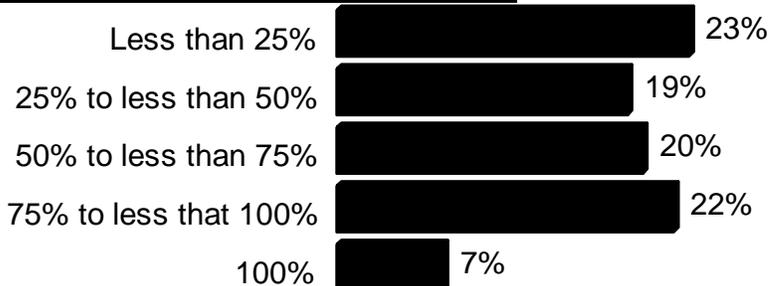
Countering Expectations, DL Members Are Equally Likely To Teach Younger & Older, Full-Time & Part-Time Students

Faculty hold similarly positive opinions of distance learning, regardless of whether they are teaching older or younger students, part time or full-time students.

Q17 Age of students in course



Q18 Percent full-time students in course



Remainder "Not Sure"

NEA & Abacus Associates

The age of students in distance learning courses varies considerably. The largest percentage of courses (38%) have an equal mix of students over and under 25 years of age. The remainder are evenly divided between mostly under 25 years of age (27%) and above 25 years of age (27%, Figure 21). Distance learning courses are similarly diverse with respect to whether students are enrolled as full-time or part-time students. Similar proportions of faculty report teaching courses that have only a few full-time students (23% of courses have less than 25% full-time students) compared to those with mostly full-time students (29% of courses have more than 75% full-time students). In contrast to stereotypes of distance learning students as older, part-time students, NEA faculty teach as many younger students as older students and as many full-time students as part-time students

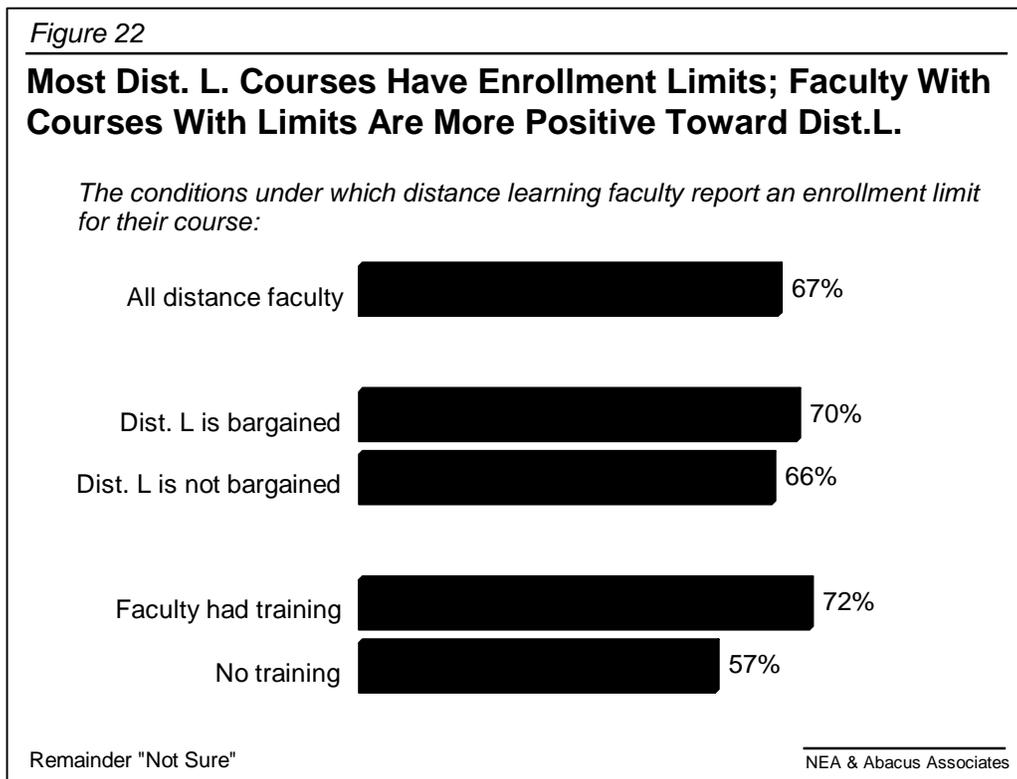
- Faculty whose distance learning course is primarily for students over 25 years of age are somewhat less likely to hold negative opinions about distance learning (74% positive, 9% negative, 17% not sure). Faculty whose distance learning course is for a mix of students or primarily for students under 25 years of age are somewhat more likely to hold negative opinions (71% positive, 16% negative, 13% not sure), but the differences are

small and not significant. Also, faculty teaching older students are more likely to be using a Web-based technology. Consequently, the slightly more positive feelings about distance learning from faculty teaching older students may well be more dependent on feelings toward the technology than toward the students.

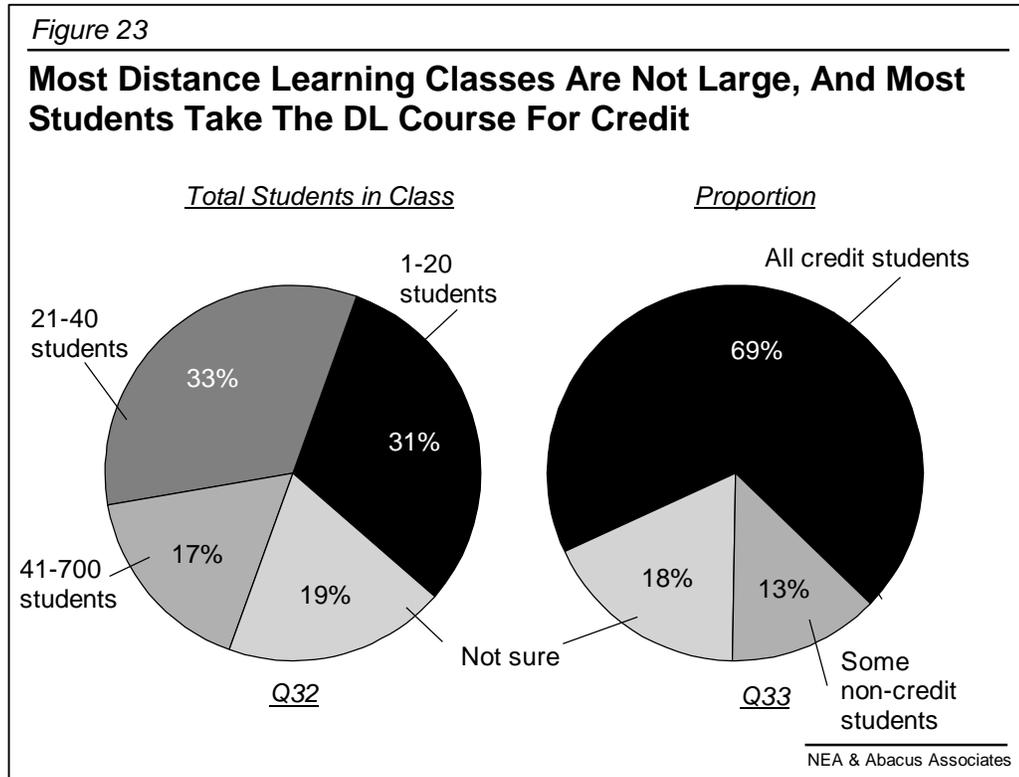
- Faculty who teach mostly full-time students and those who teach mostly part-time students hold similarly positive opinions about distance learning.

Also in contrast with stereotypes, we find that distance learning classes are not large, most of the classes are entirely composed of students taking the course for credit, completion rates are high, and students are nearby.

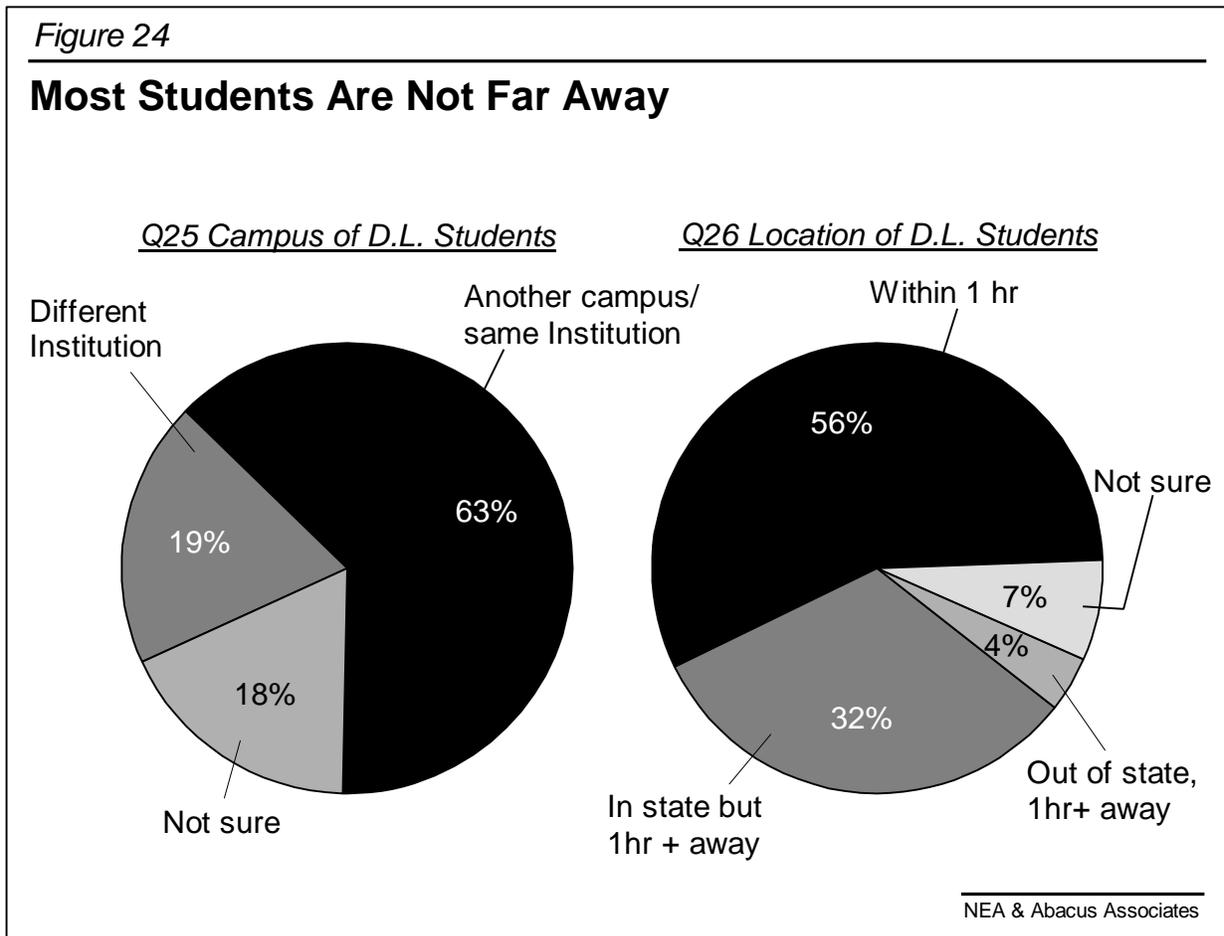
Two-thirds of faculty report that their distance learning course has a limit on the maximum number of students who can enroll. We also know that faculty teaching courses with enrollment limits are much more likely to have attended a training workshop (Figure 22). Either faculty who have had training impose an enrollment on their courses, or the institutions, which care enough about the quality of the distance learning course to encourage faculty to take a training workshop, impose limits on the course size. Whatever the cause of the relationship, faculty teaching courses with enrollment limits have somewhat more positive feelings about distance learning courses, even when controlling for whether or not they have taken a workshop.



Most distance learning courses are small in size. Two-thirds of distance learning faculty teach a course with 40 or fewer students (Figure 23). Only 6 respondents teach a distance learning course with over 200 students. However, contrary to expectations, courses with enrollment limits are not smaller than those without enrollment limits. It may be that different class sizes are appropriate for different courses, in which case some enrollment limits would be high and others would be low.



Furthermore, we find it interesting that the number of students in the faculty member's course is not related to his or her overall feelings about distance learning; this we note is in direct contrast to the above discussion in which we observed that having an enrollment limit is related to more positive feelings about distance learning. Again, it is possible that the ability to limit the size of the course to whatever the faculty member deems appropriate is more important than simply having smaller classes. The ability to limit the size of the class could also be a surrogate for faculty having more control over the course in general, which then leads to a faculty member having more positive feelings about the distance learning experience. Also, class size may be unrelated to ratings of distance learning courses because nearly all courses in this study have under 60 students and a tremendous amount of interaction between faculty and students. Class sizes of over 100 students may in fact impact the quality of the learning experience.



Two-thirds of faculty report that 100% of their students take the course for credit, and only 13% report having some non-credit students in their classes (Figure 23, again). Even when the course has some non-credit students, these students are clearly in the minority.

Finally, students in distance learning courses are not far away (Figure 24). A majority of the distance learning faculty (56%) report that most of their distance learning students live within one hour from campus, and another third (32%) report that most of their distance learning students live in the state but more than an hour's drive away. Only 4% of the distance learning faculty report that most of their distance learning students are from out of state. The largest percentage of faculty (63%) report that most distance learning students are enrolled on another campus of the same institution offering the course. Relatively few (19%) report that most students are enrolled at another institution. Statewide institutions with multiple campuses are more likely than other types of institutions to have students more than an hour away, but the distance between students and the faculty members is not related to faculty

feelings about distance learning nor is it related to how well distance learning courses do on any of the goals of a quality education.

The Potential And The Concerns: What Faculty Think About Distance Learning

Overview

We assess opinions of both traditional and distance learning faculty about the advantages and disadvantages of distance learning course through four sets of questions: (1) How likely is each of five possible positive outcomes of distance learning; (2) How important each positive outcome is to them; (3) How likely is each of 10 positive concerns people have expressed about distance learning; (4) How important is each concern to them, if that outcome did in fact occur. In addition to presenting what members tell us is important to them, we also indirectly investigate what drives their overall feelings about distance learning by looking at the correlations between members' overall feelings about distance learning and how likely they think each advantage and concern is.

Finally, we ask distance learning faculty to compare their distance learning course with similar courses they have taught in a traditional classroom, to help us further determine what faculty think are the potential for and pitfalls of distance learning. These scaled comparisons between traditional and distance learning courses are also correlated with overall feelings about distance learning to give further insight into the more specific opinions that drive overall feelings toward distance learning.

In addition to contrasting faculty opinions on traditional and distance learning, we also highlight differences in expectations and priorities for subgroups of distance learning faculties. More subgroup information can be found in the Appendix.

The following conclusions emerge from the more detailed discussion below.

- *Faculty evaluate distance learning first on quality of education considerations and secondarily on more traditional union considerations. In particular, faculty believe that distance learning courses reach students who would not otherwise take a course and allow smaller institutions to offer a richer curriculum.*
- *Considering the list of 10 possible negative outcomes of distance learning, faculty tell us that three outcomes would concern them the most, if they did in fact occur. Two of these most important outcomes relate to traditional union concerns and faculty think they are very likely to occur: faculty will do more work for the same amount of pay;*

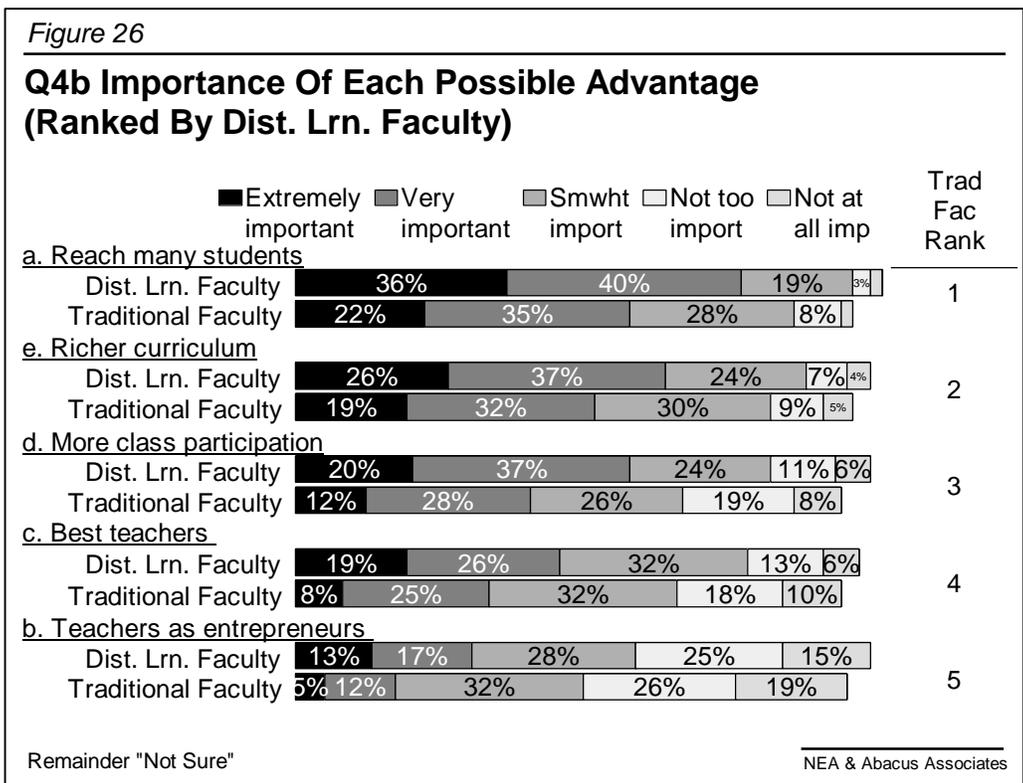
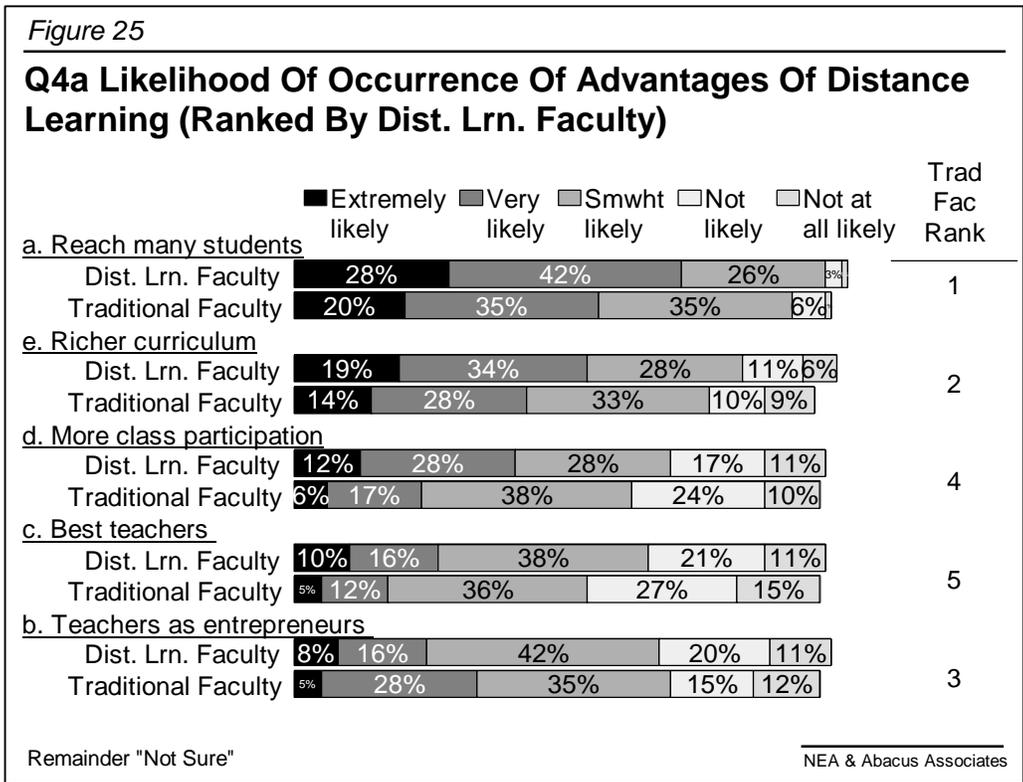
faculty will not be fairly compensated for their intellectual property. The other most important possible outcome is that the quality of education would decline. However, faculty think this outcome is unlikely.

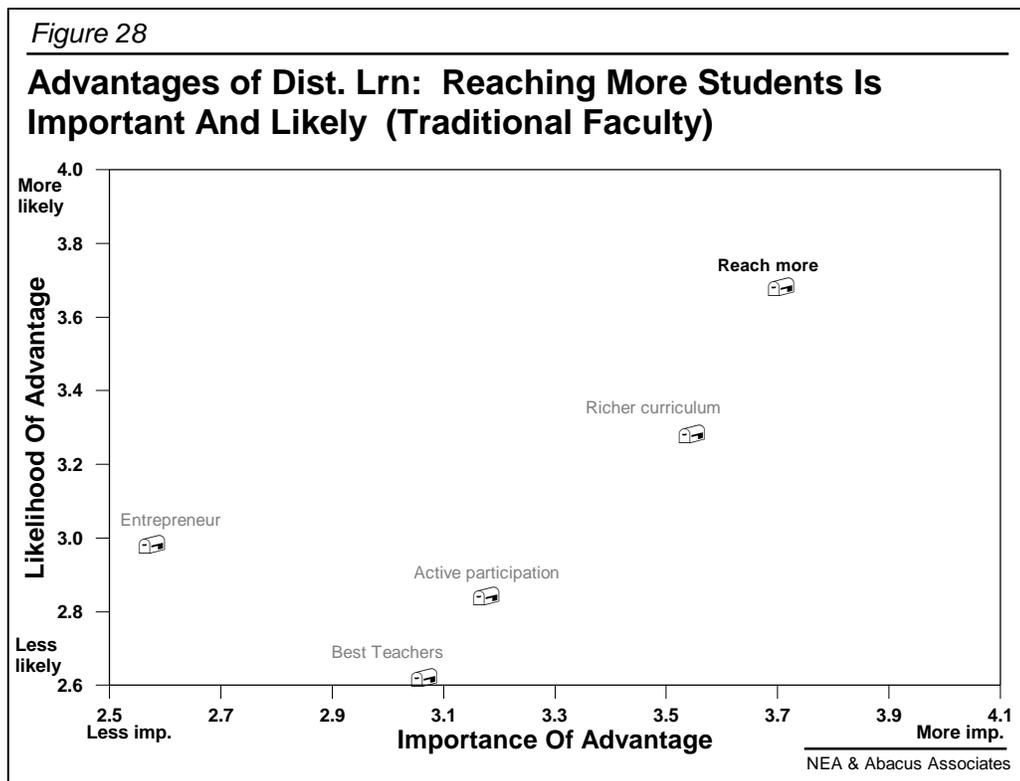
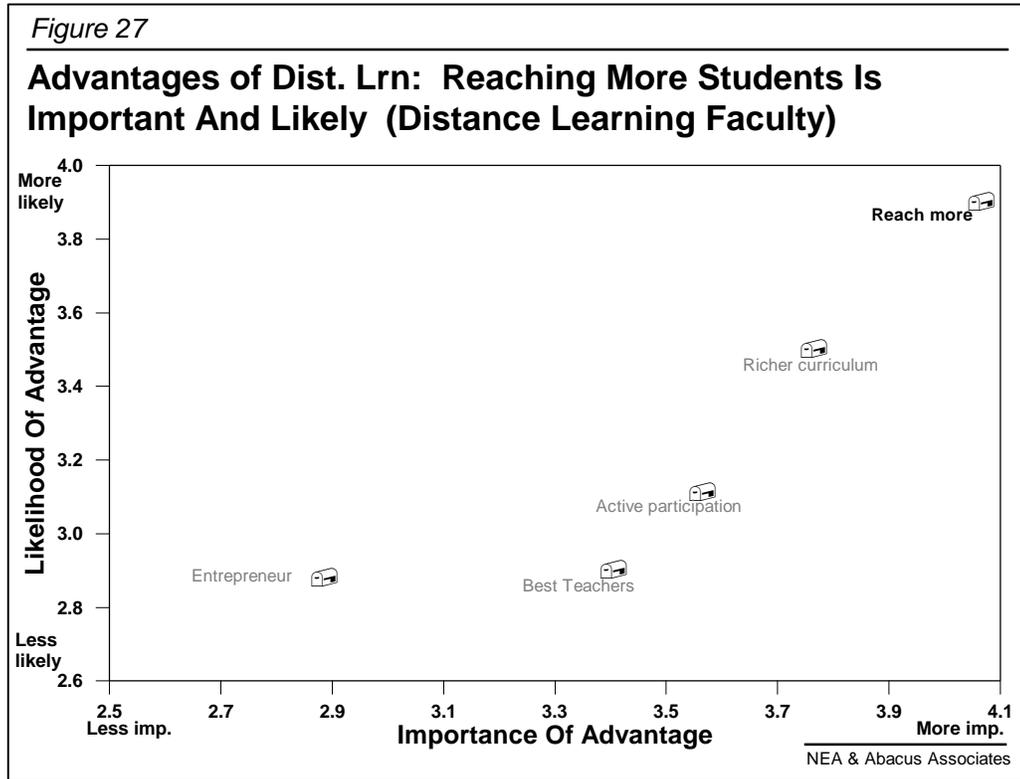
- *At the current time, faculty believe they will be hurt financially by distance learning, and financial considerations are very important to them. However, the prospect of being able to offer an education to students who could not otherwise enroll in a course outweighs these concerns.*
- *Traditional and distance learning faculty rank the following concerns as not likely to occur, and somewhat less important to them, even if they do occur: fewer jobs, decline in the quality of faculty; less candidness in the classroom.*
- *Distance learning faculty (Web-based and not-Web-based distance learning faculty combined) believe that their traditional course does a better job of meeting most of the goals NEA considers essential for a quality education. However, regressions indicate that these shortcomings are outweighed by the potential distance learning offers for educating students who otherwise would not take the course.*
- *Faculty teaching a Web-based course give their distance learning course a better rating than their traditional course on meeting five goals, the same rating on meeting two goals, and a worse rating on meeting three goals.*

Advantages Of Distance Learning Courses

A large percentage of both distance learning and traditional faculty tell us that it is extremely or very likely that distance learning will reach many students who could not take traditional college courses (df 70%; tf 55%, Figure 25). The second most likely advantage is that smaller institutions will be able to offer a richer curriculum. Traditional faculty, distance learning faculty, and all the subgroups of distance learning faculty tell us that these two advantages are the most important advantages of distance learning (Figure 26). As expected, distance learning faculty see the advantages as somewhat more important and more likely to occur, but distance learning and traditional faculty rank the five advantages tested in the same order of importance and likelihood of occurring.

The fact that beliefs about the likelihood of these two advantages are highly correlated with overall feelings about distance learning is consistent with what faculty tell us directly. Faculty have positive opinions about distance learning largely because the advantages that they believe are most likely to occur are also deemed most important to them (Figure 27, 28).

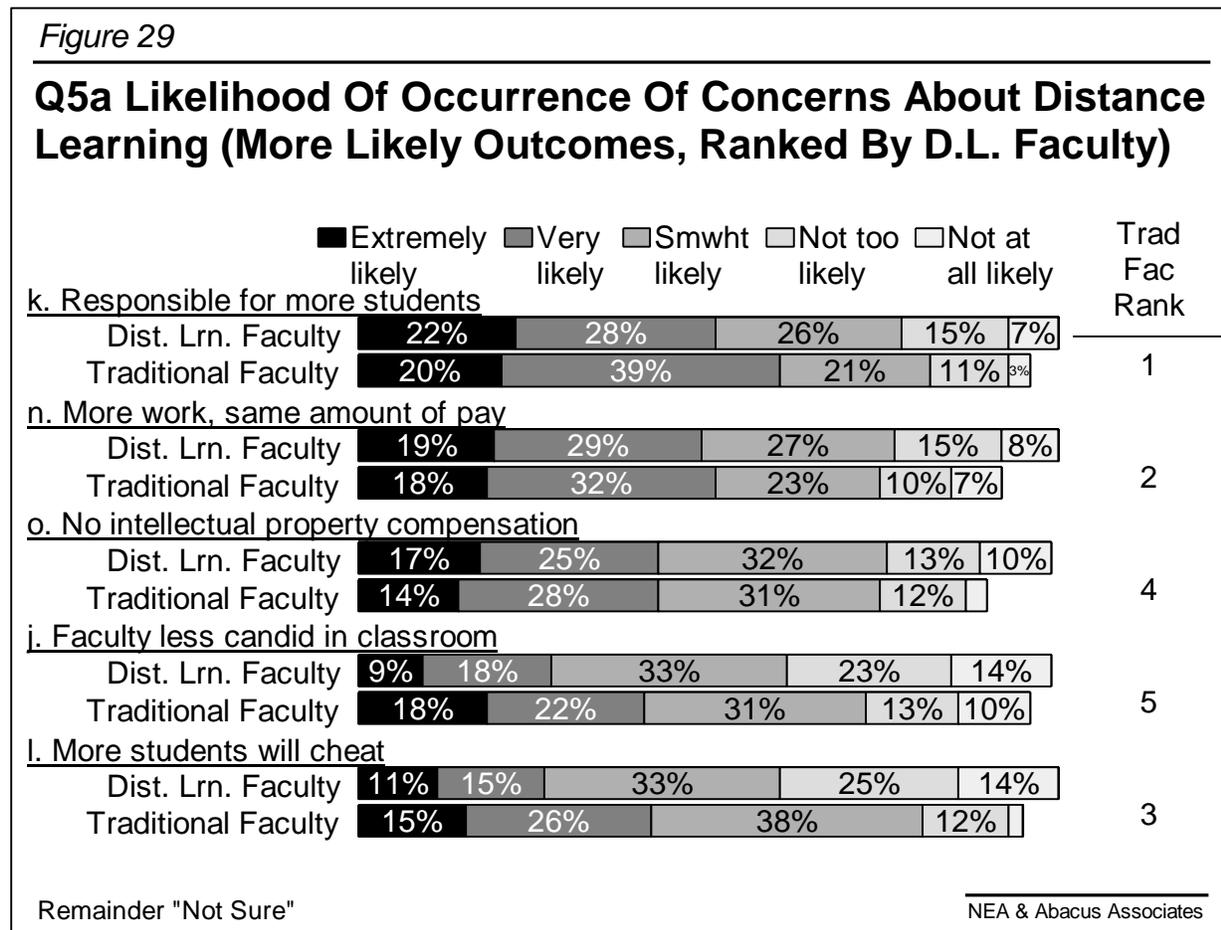


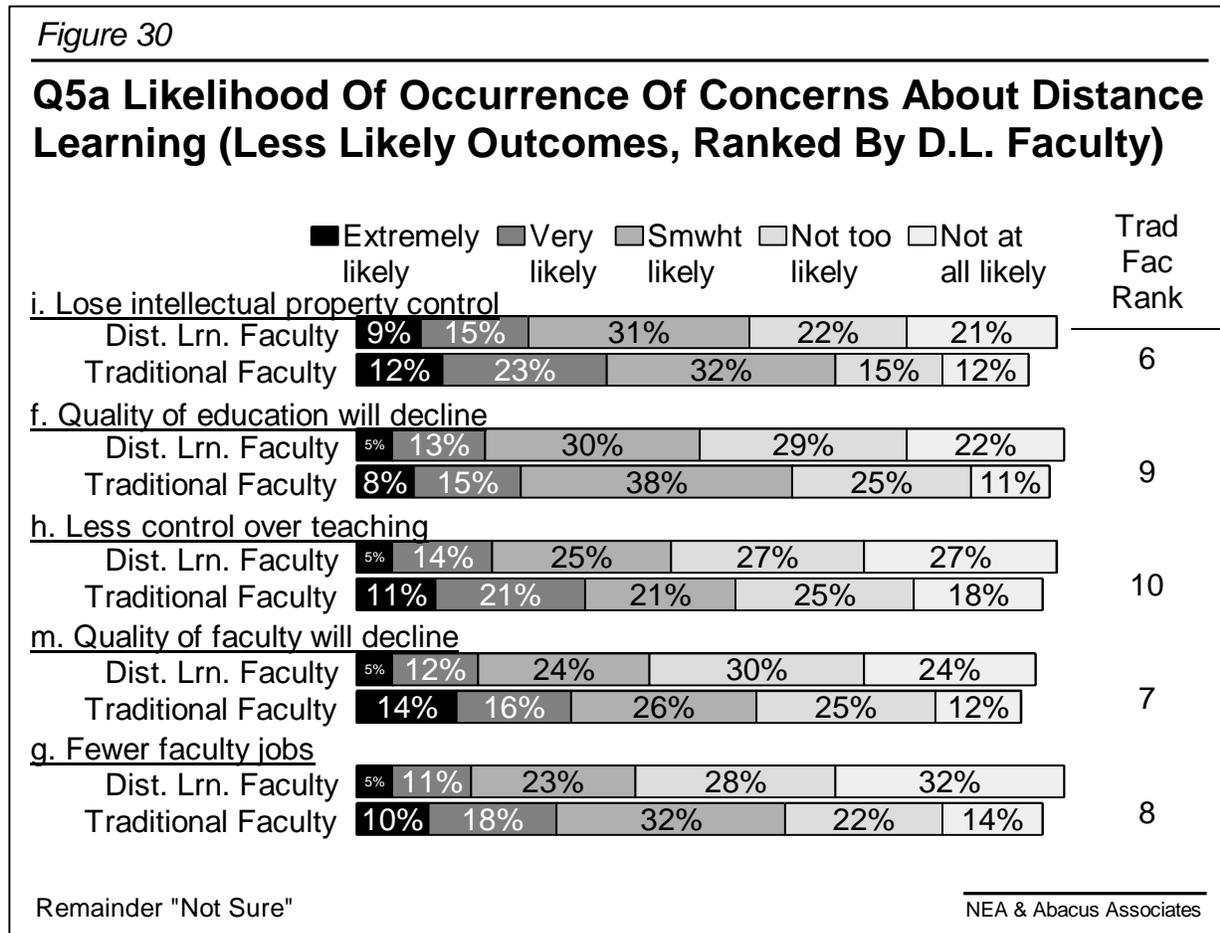


Concerns About Distance Learning Courses

Concerns that are most likely to occur. About two-thirds of traditional and distance learning faculty tell us it is extremely or very likely that in a distance learning course, faculty will be responsible for more students, that there will be more work for the same amount of pay, and that faculty will not be fairly compensated for their intellectual property (Figure 29). Nearly half of traditional faculty (41%) also think it is extremely or very likely that students will cheat, but the percentage of distance learning faculty expecting this outcome is less (26%).

It is also instructive to compare which concerns traditional and distance faculty consider not too likely or not at all likely to occur (Figure 30). A majority (51%) of distance learning faculty think that it is unlikely that the quality of education will decline, 54% think it is unlikely that faculty will have less control over their teaching or that the quality of education will decline, and 60% of distance learning faculty think it is unlikely that there will be fewer faculty jobs. Traditional faculty are less convinced that these concerns will not materialize. Still, a plurality (43%) of traditional faculty think it is unlikely that faculty will





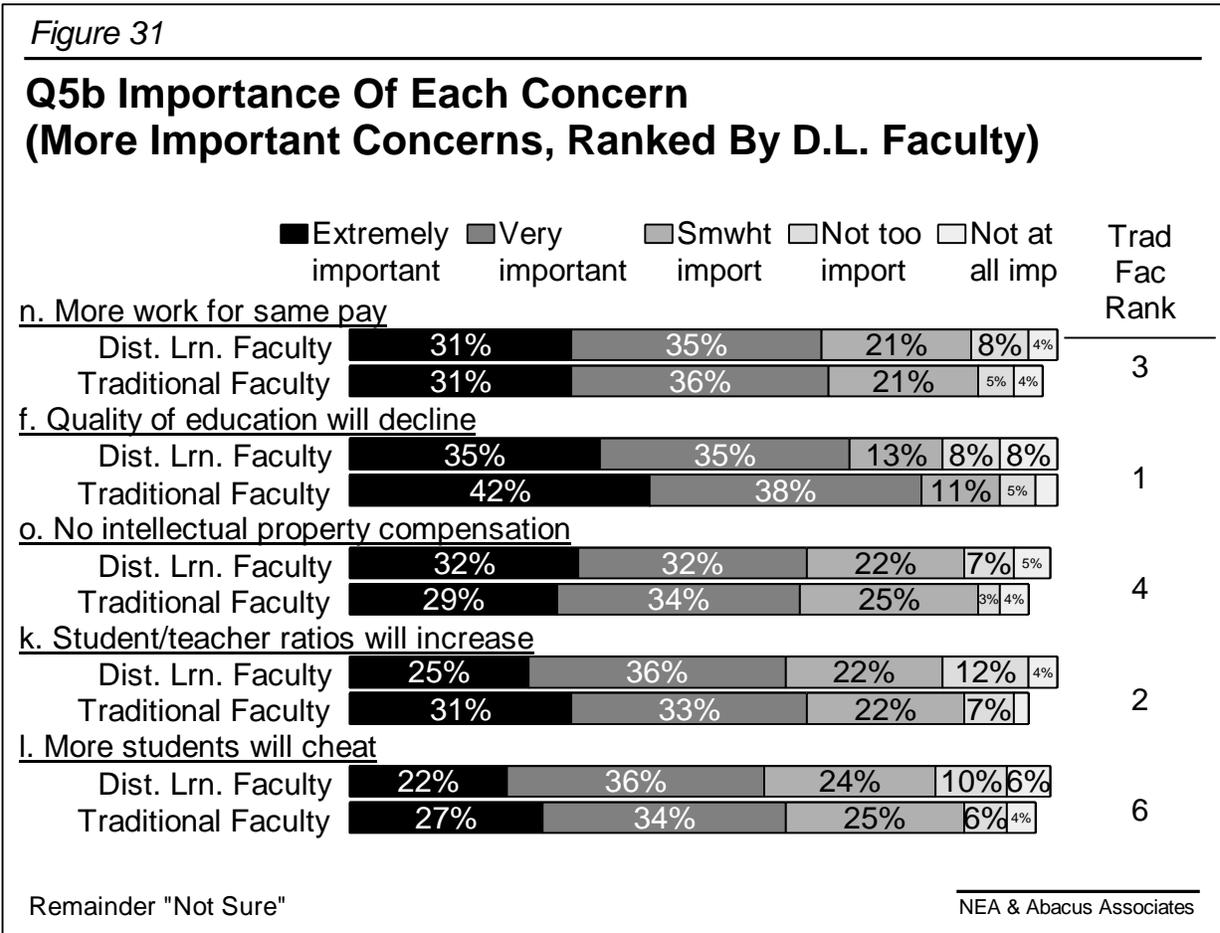
have less control over teaching, and 36% think it is unlikely that the quality of education or the quality of faculty will decline, or that there will be fewer jobs.

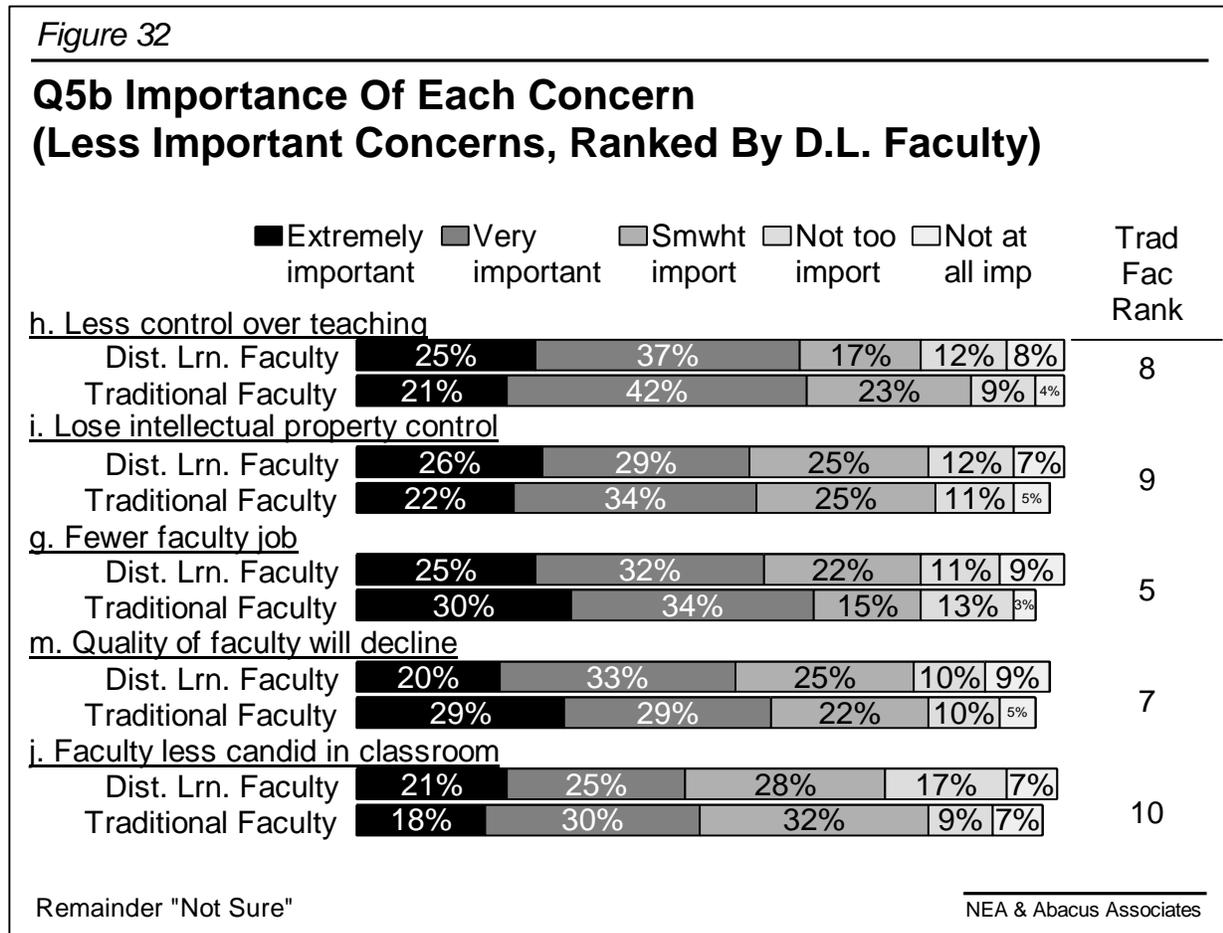
Fewer faculty jobs ranks as the least likely outcome among all subgroups of distance learning faculty. Faculty teaching not-Web-based courses, and those at institutions where the administration is the primary proponent of distance learning, consider all of these concerns more likely to occur than faculty teaching Web-based courses and those at institutions where the faculty is the primary proponent of distance learning.

- More specifically, 46% of faculty at institutions where the administration is promoting distance learning think less jobs is at least somewhat likely (but the majority of 54% still think it is unlikely). Only 31% of faculty at institutions where the faculty is promoting distance learning think less jobs is at least somewhat likely (the large majority of 69% think less jobs is unlikely).
- Almost half (45%) of faculty teaching not-Web-based courses think that fewer jobs is at least somewhat likely (but a majority of 53% still think it is unlikely). Only 33% of

faculty teaching Web-based courses think less jobs is at least somewhat likely (the large majority of 66% think less jobs is unlikely).

Concerns that are most important to faculty. Faculty assessment as to whether a concern is likely is different from how important each concern is to faculty, should that concern, in fact, occur. We use two approaches to uncover what concerns are most important to faculty. First, we ask them directly how important each concern is, should that concern occur. Second, we correlate the above question about faculty assessment as to whether a concern is likely with overall opinions of distance learning, to determine which expectations drive overall feelings toward distance learning. The two approaches give us somewhat different results and suggest that feelings toward distance learning are complex. Also, we see some interesting differences between distance learning and traditional faculty.





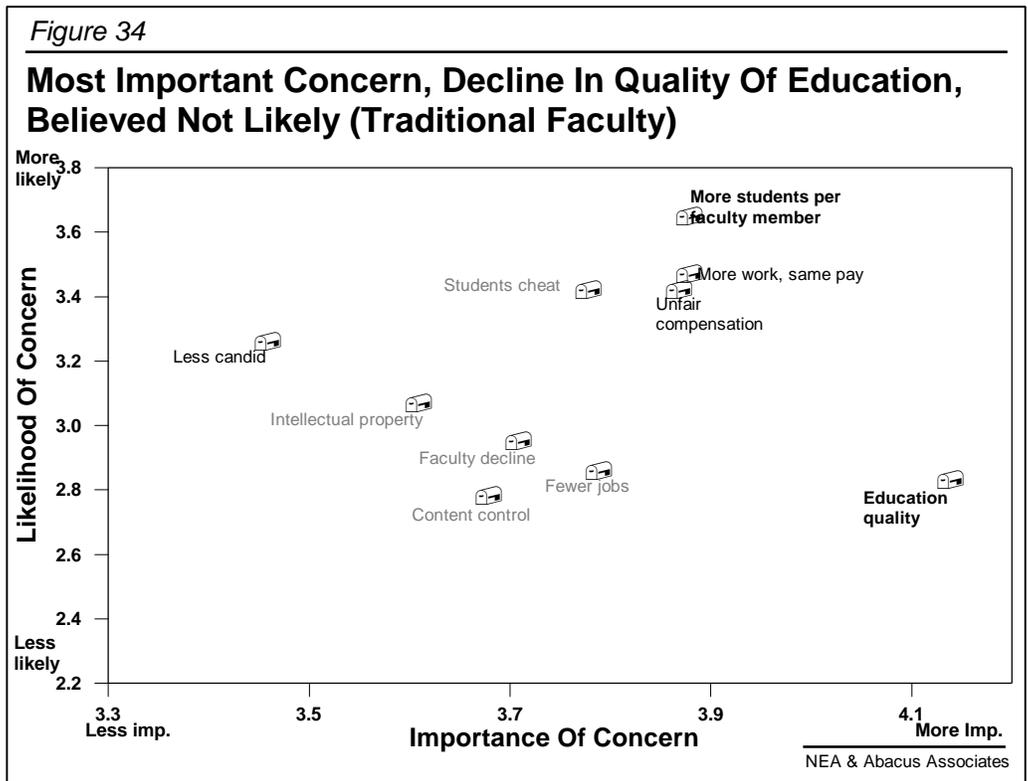
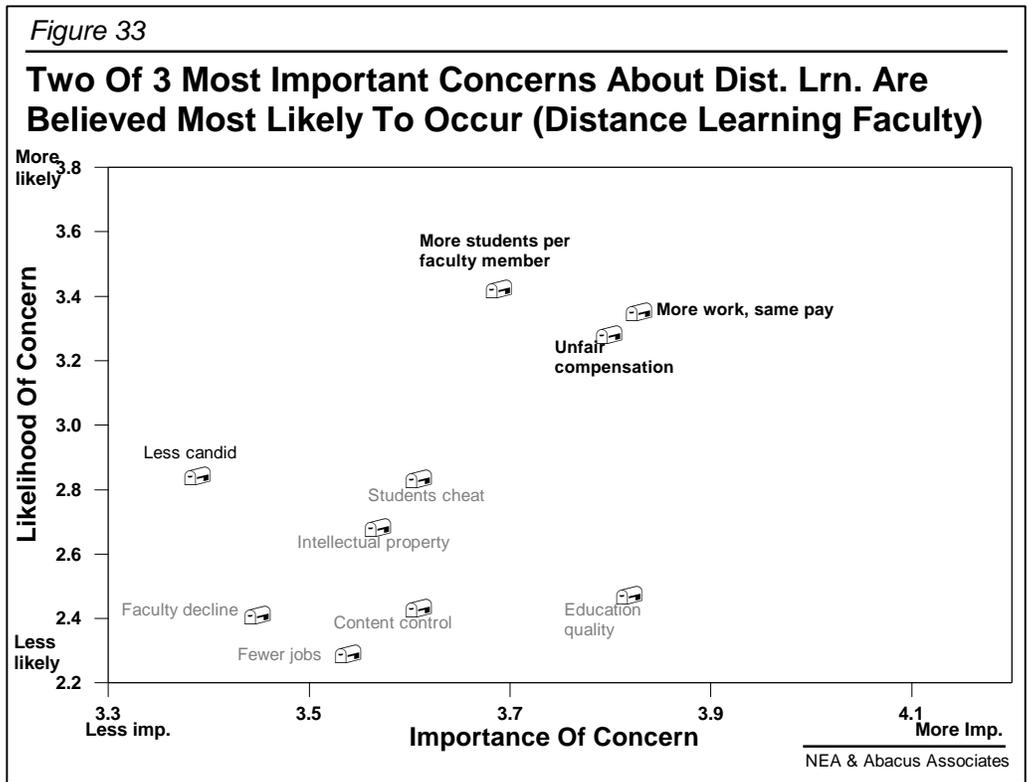
Distance learning faculty tell us that their three top concerns are about equally important to them, with two-thirds of distance faculty saying these concerns would be extremely or very important if they occurred (Figures 31,32):

- Distance learning will result in more work for the same amount of pay;
- The quality of education for students will decline;
- Faculty will not be fairly compensated for their intellectual property.

Traditional faculty ranks one top concern significantly ahead of all others, with 80% saying it would be extremely or very important if that outcome occurred:

- The quality of education for students will decline;

Distance learning faculty think that two of their three most important concerns are extremely or very likely (Figure 33). More work for the same amount of pay and unfair compensation are expected results of distance learning courses, and these outcomes rank among the top three most important possible outcomes for distance learning faculty, and the second most important possible outcomes for traditional faculty (Figure 34). Given these



expectations and priorities, one would expect less positive feelings toward distance learning in general on the part of both distance learning and traditional faculty. Yet, 72% of distance learning faculty and 51% of traditional faculty hold positive opinions of distance learning (compared to only 14% and 22% who hold negative feelings, respectively).

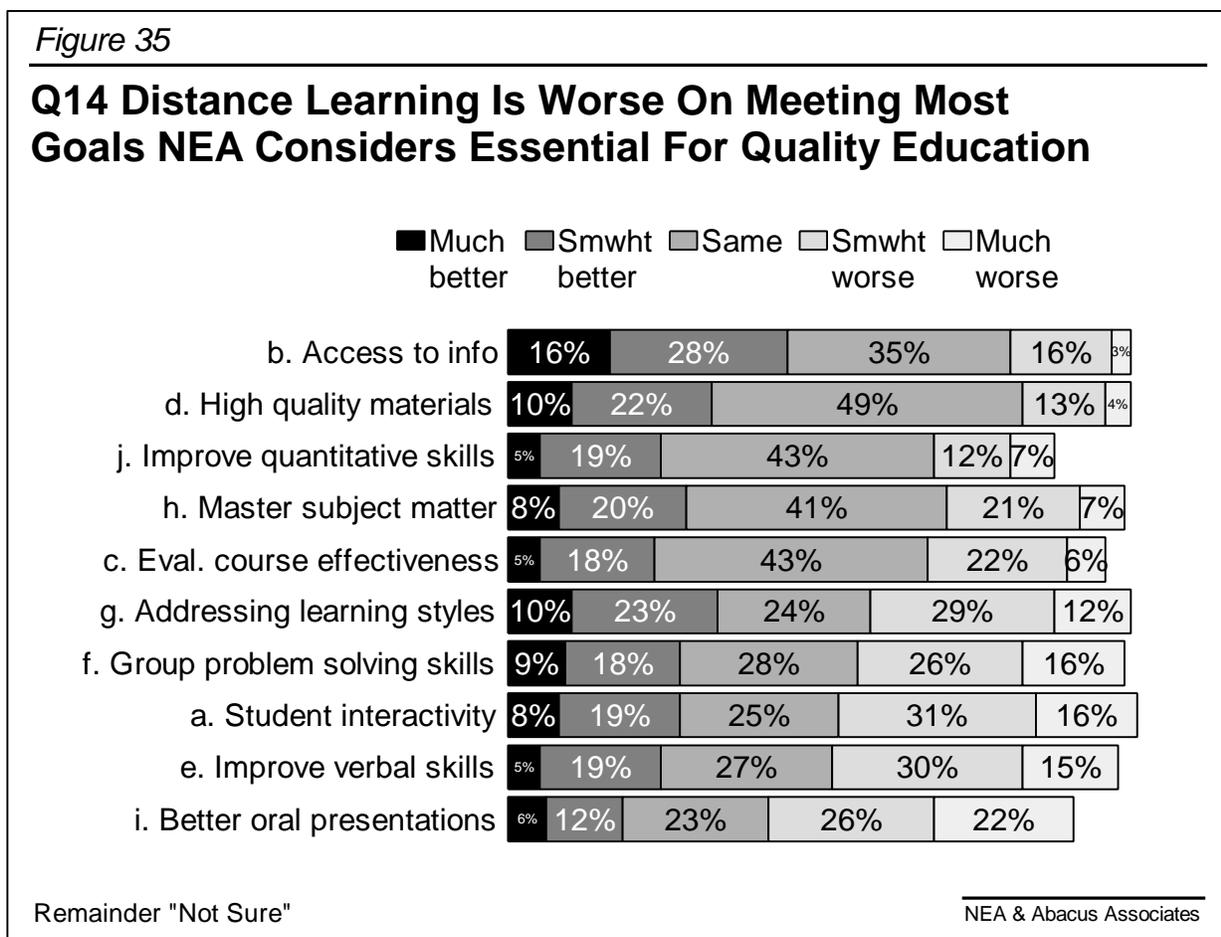
Correlations give us more insight into the complexity of faculty opinions. Overall feelings about distance learning are most highly correlated and most clearly driven by quality of education considerations. Distance learning faculty who are most positive about distance learning believe it is extremely likely that more students will be able to take courses, that there will be more class participation, that more students will learn from the best teachers, and that the quality of education and quality of faculty will not decline (correlations between expectations for these outcomes and overall feelings are all around .5). In spite of the concerns faculty tell us they have about compensation issues when directly confronted with those issues, we find that the following traditional union issues are relatively unimportant to overall feelings toward distance learning (correlations are about .2 or less): more work for the same pay; unfair compensation for intellectual property; responsibility for more students; fewer faculty jobs.

We see a similar pattern for traditional faculty. Overall positive feelings about distance learning are most highly correlated to whether the faculty member expects distance learning to result in a richer curriculum with the best teacher (correlation=.53), and whether they think the quality of education will not decline (correlation=.64). Correlations between the more traditional compensation issues and availability of jobs are lower (correlations range from between .20 and .35).

- ***Distance learning and traditional faculty think about quality of education issues first and foremost. Concerns about compensation and property rights become important only when probing makes these considerations more salient.***

Comparing Traditional And DL Courses On Meeting Educational Goals

We know from the above analysis that quality of education considerations are most important to overall feelings about distance learning courses. In light of this finding, it is somewhat unexpected that distance learning faculty (combined Web-based and not-Web-based faculty) believe their traditional courses do a better job in meeting goals that NEA considers essential for a quality education (Figure 35). Comparisons between distance learning courses and traditional courses are particularly useful in this study because most of our respondents have taught a traditional course or are currently teaching their distance learning course as a traditional course.



Distance learning faculty (both Web-based and not-Web-based combined) tell us that their traditional course in the same subject does a better job than their distance learning course in meeting five of 10 education goals:

- Addressing the variety of student learning styles. Forty-one percent (41%) tell us their traditional course is better; 33% tell us their distance learning course is better at meeting this goal.
- Strengthening students' group problem-solving skills (42% traditional better; 27% distance better);
- Developing student interactivity (47% traditional better; 27% distance better);
- Improving verbal skills (45% traditional better; 24% distance better);
- Helping students deliver better oral presentations (48% traditional better; 18% distance better).

Distance learning faculty tell us that traditional courses and distance learning courses do an equally good job of meeting the following education goals:

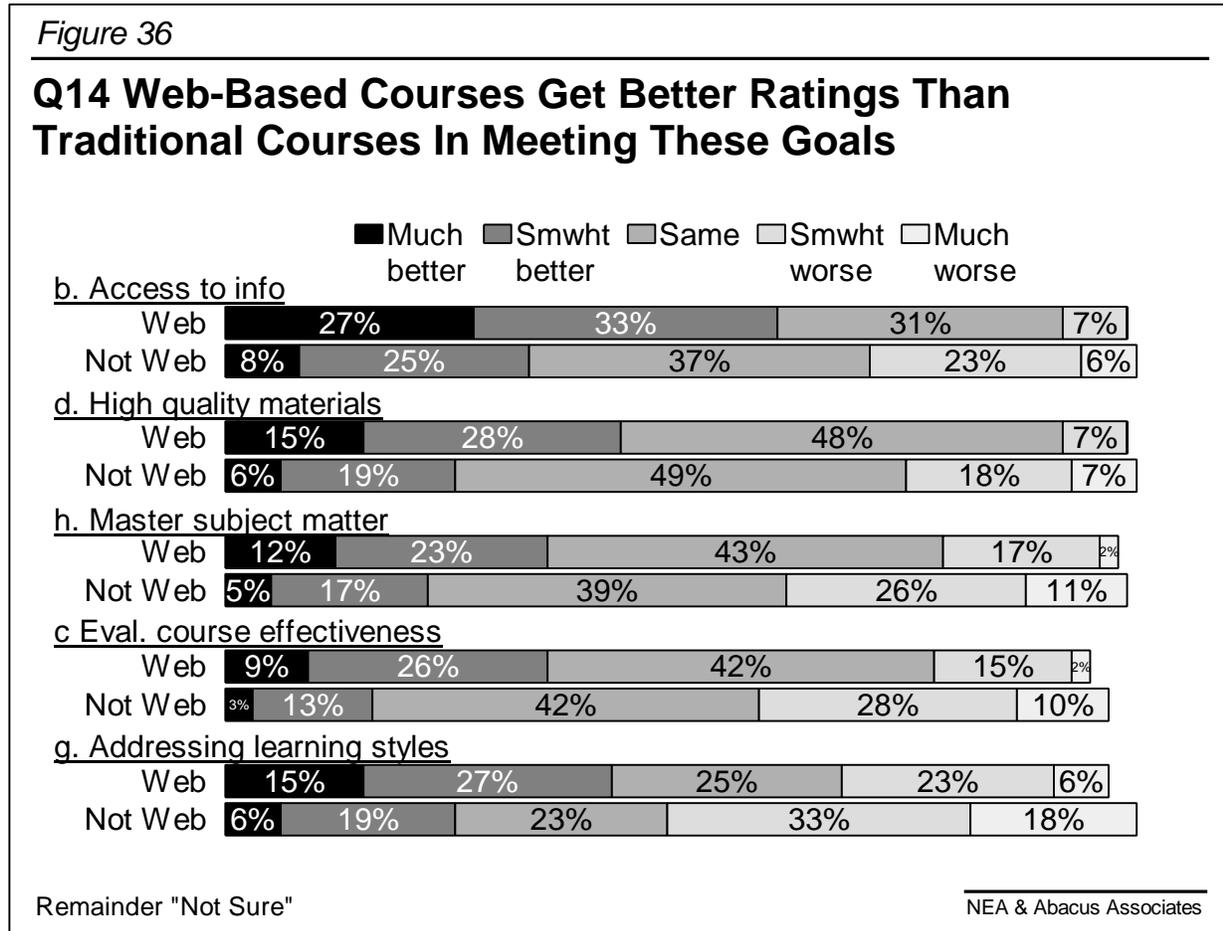
- Improving quantitative skills (43% same job, 19% traditional better, 24% distance better);
- Helping students master the subject matter (41% same, 28% traditional better, 28% distance better);
- Assessing the educational effectiveness of the course (43% same, 28% traditional better, 23% distance better).

Distance learning faculty tell us that distance learning courses do a better job than traditional courses of meeting these education goals:

- Giving the students access to information (44% distance better, 19% traditional better);
- Providing students with high quality course material (32% distance better, 17% traditional better).

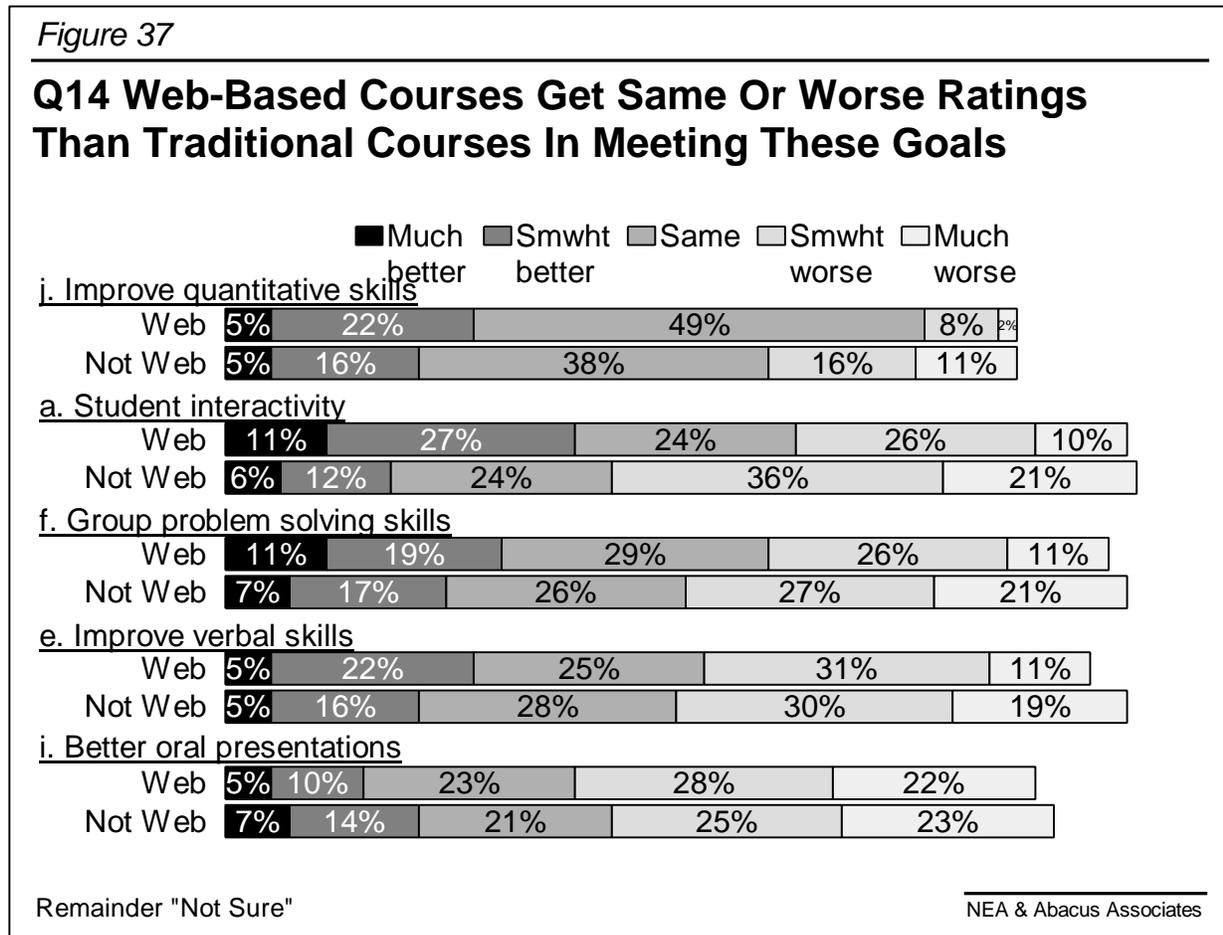
One would expect that under certain circumstances, distance learning courses would do a better job of meeting educational goals than under other circumstances. The obvious expectations were not confirmed. Faculty make similar assessments of which type of course better meets goals, regardless of the field of study (math/science vs. social studies, humanities and languages), the course level (graduate vs. undergraduate), the institutional organization (statewide system, etc.), size of the institution, the age of student body, distance of student from the professor, and class size. More specifically, faculty at institutions with under 2,500 students *do not* give distance learning courses higher ratings for providing access to information and quality materials than their counterparts at medium-sized and large institutions.

On the other hand, two differences are worth noting. First, faculty who teach Web-based courses give distance learning courses significantly better ratings than faculty who teach not-Web-based courses on meeting all of the goals except for giving oral presentations (Figures 36, 37). *In fact, when we separate Web-based courses from not-Web-based*



courses, we find that faculty teaching Web-based courses give their distance learning courses a better rating than their traditional courses on meeting five of the 10 goals:

- Giving the students access to information (60% distance better, 7% traditional better);
- Providing students with high quality course material (43% distance better, 7% traditional better);
- Helping students master the subject matter (35% distance better, 19% traditional better);
- Assessing the educational effectiveness of the course (35% distance better, 17% traditional better);



- Addressing the variety of student learning styles (42% distance better, 29% traditional better).

Web-based distance learning faculty tell us that their distance learning course and their traditional course to the same job at meeting these education goals:

- Improving quantitative skills (27% distance better, 49% same job, 10% traditional better);
- Developing student interactivity (38% traditional better; 24% same job, 36% distance better).

Web-based distance learning faculty tell us that their traditional course does a better job than their distance learning course at meeting these education goals:

- Strengthening students' group problem-solving skills (37% traditional better, 30% distance better);
- Improving verbal skills (42% traditional better; 27% distance better);

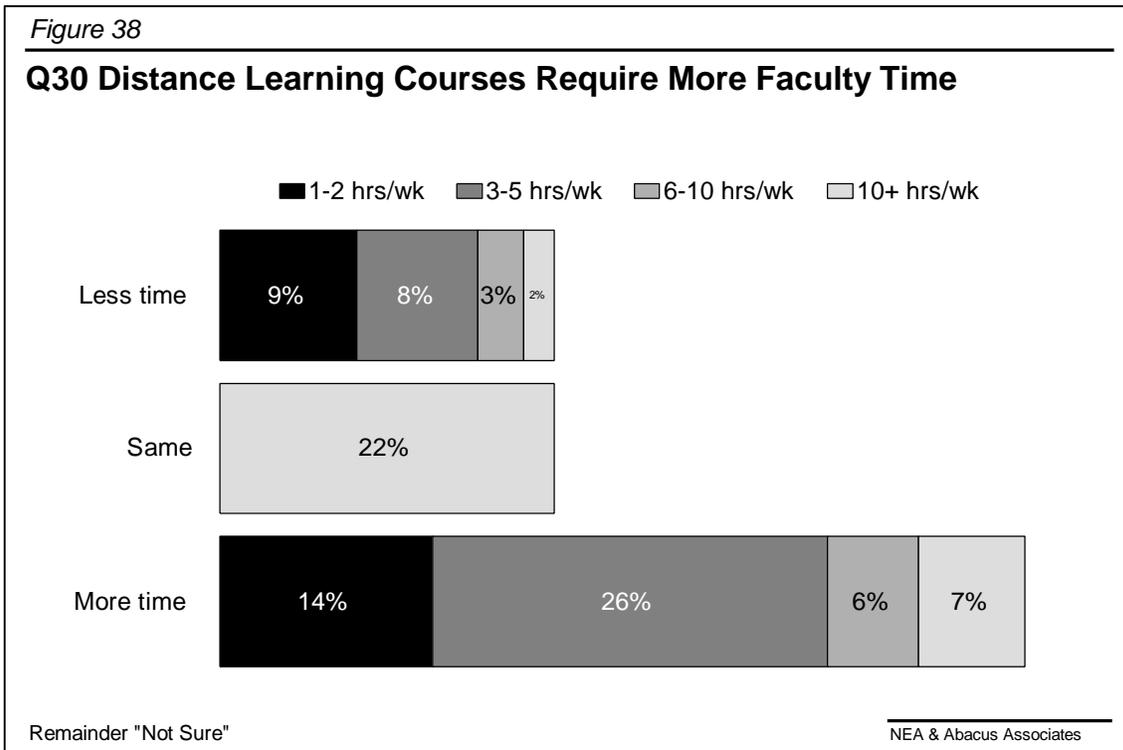
- Helping students deliver better oral presentations (50% traditional better; 15% distance better).

Faculty who have participated in a training workshop also give distance learning courses better ratings on meeting goals than those who have not participated in a workshop, but we expect this relationship is spurious, since Web-based faculty are much more likely to have participated in a workshop.

The second notable difference is that faculty at institutions where the *faculty* promotes distance learning rate distance learning courses higher on achieving educational goals than faculty at institutions where the *administration* promotes distance learning. This is related to the greater cynicism and overall lower level of satisfaction with distance learning that pervades institutions where the administration is the driving force.

Current Compensation Practices

Teaching a distance learning course does, in fact, require more time than teaching a traditional course (Figure 38) Over half (53%) of distance learning faculty tell us they spend more hours per week preparing and delivering their distance learning course than they do for a comparable traditional course, compared to only 22% who spend less hours. Faculty who teach math and science courses, Web-based courses, faculty who both manage and develop the course material are most likely to spend more hours on their course than their

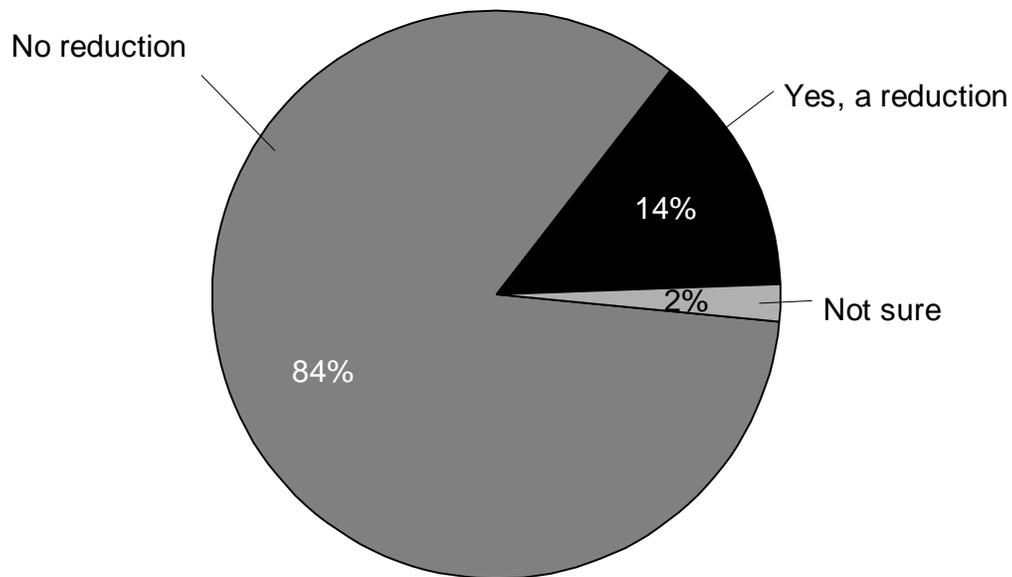


counterparts. Even those who have taught their distance learning course eight times or more spend more hours (48%) rather than less hours (21%) on their distance learning course. Notably, class size is not related to whether faculty spend more or less hours on their distance learning course.

In spite of spending more hours on their distance learning course, most (84%) of faculty get no course reduction (Figure 39). Faculty who teach Web-based courses are slightly more likely to get a reduction in their load (22%) than those who teach not-Web-based courses (7%), but still the large majority of both get no reduction.

Figure 39

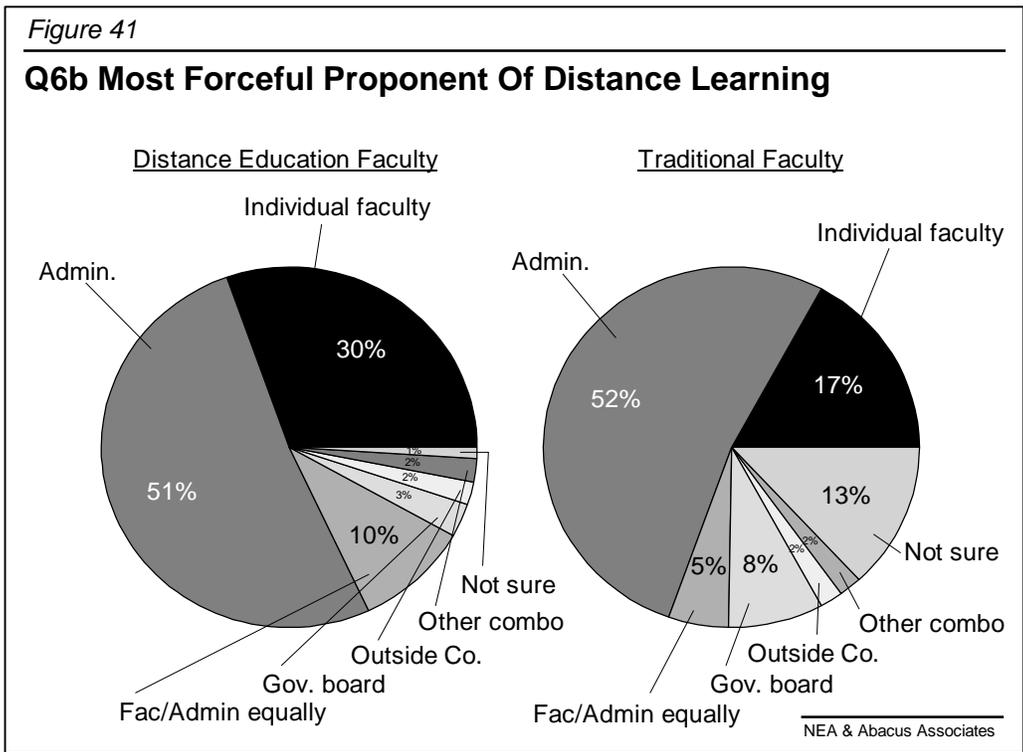
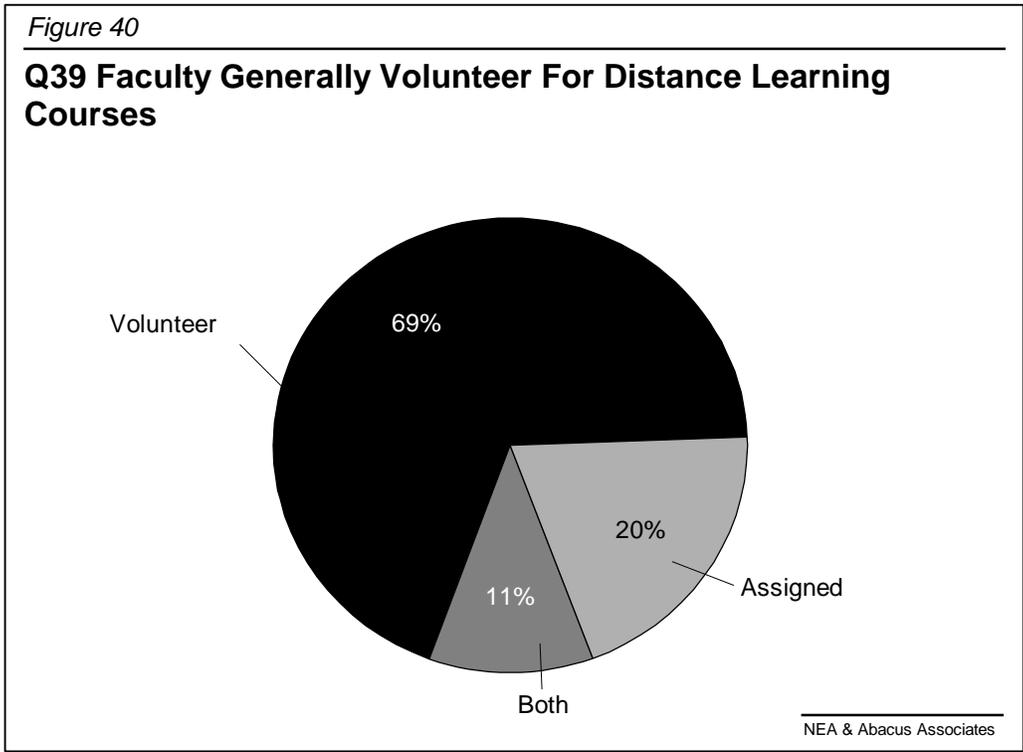
Q31 Most D.L. Faculty Get No Course Reduction



NEA & Abacus Associates

Faculty generally volunteer to teach a distance learning course, even though the administration is typically the stronger proponent of distance education on campus (Figures 40, 41). About half of both distance learning faculty and traditional faculty believe the administration is the primary mover on this front, compared to only 30% of distance learning faculty who believe the primary movers are the faculty members themselves. Other literature

suggests that for financial reasons, the administration is likely to take an even more assertive role in the future.



The administration appears to be the most forceful proponent of distance learning at statewide institutions (56% of faculty say that the administration is most forceful) than at district institutions with three or more campuses or institutions with one main campus, where about 45% say the administration is most forceful. However, the difference is not large. The majority of faculty report that the administration is the driving force at all three types of organizational systems.

Although the difference is not large, there is some indication that the information managers may be somewhat more likely to be at institutions where the administration promotes distance learning. When the administration promotes distance learning, 25% of faculty manage but do not develop the content; when the faculty promotes distance learning, 18% are managers but not developers.

With the few exceptions noted in the report, statewide systems with multiple campuses look remarkably similar to district systems with three campuses and single-campus institutions. In particular, the statewide systems resemble other institutions on issues related to distance learning policy and bargaining.

This initial glimpse at compensation, distance learning policy and collective bargaining suggests that NEA has considerable opportunity to enhance its advocacy efforts for faculty members working in this evolving area of higher education. After getting distance learning included in collective bargaining, NEA faces significant challenges to ensure that faculty have the resources they need to deliver a quality education through their distance learning courses, and to ensure fair policies in the areas of compensation, property rights, and evaluation.

Appendix

Interviewing procedures. Professional interviewers, working from a central, monitored location, between February 11 and March 6, 2000 called into the homes of about 90% of NEA's higher education members using telephone numbers from the membership file (41,000 calls). Interviews were completed with 402 distance learning faculty. For two-thirds of the completed surveys, the interviewer initiated the call. For one-third (33%) of the completed surveys, the distance learning faculty members called into the "800" number in response to a message left on their machines. As expected when calling a professional population, most of the calls involved leaving messages on home answering machines. The messages described a distance learning course and asked faculty members who qualify as distance learning faculty to call into the "800" number.

Identifying distance faculty. A distance learning course is defined as one in which more than half of the instruction takes place when faculty and students are at different locations and the instruction is delivered through audio, video or computer technologies. Correspondence courses and traditional courses with a smaller distance learning component are not considered distance learning courses. We estimate that about one in 10 NEA higher education members, or about 5,000 NEA members, have taught a distance learning course in the last five years. We arrive at this estimate by dividing the number of faculty members who qualified as distance learning faculty in an interviewer-initiated call (268 respondents) by the total number of faculty members who were contacted in person by an interviewer (268 distance learning faculty plus 2,468 faculty who did not qualify as distance learning faculty). Relatively few NEA members refused to talk with the interviewer when interviewers connected directly with a faculty member, and the cooperation rate was high (77%). The interviewers placed an extraordinary number of calls simply because only 10% of NEA faculty members qualify as distance learning faculty; they are a mobile population, and they are busy, and many protect their privacy with answering machines.

Generalizing to the population. Because interviewers attempted to reach almost the entire population of NEA higher education members for whom they had telephone numbers, our 402 respondents do not constitute a perfectly random sample of distance learning faculty in strict statistical terms. Also, a third of the respondents called in for the interview, potentially introducing self-selection considerations. However, the respondents who called in for the interview are only slightly more positive about distance learning than respondents completing an interviewer-initiated call, so we are not concerned about selection bias. If this

were a statistically random sample, the margin of error for the 402 respondents on a question where members are evenly divided is $\pm 4.9\%$ at the 95% confidence level.

Another 130 traditional faculty members were also interviewed as part of a control group. These respondents could be considered a random sample. The cooperation rate was high, and attempts were made over three nights to reach people who were not at home the previous night, before moving on to new telephone numbers. This improves accuracy by including hard-to-reach respondents and reducing response bias. The margin of error for the 130 traditional faculty on a question where members are evenly divided is $\pm 8.5\%$ at the 95% confidence level. Our confidence that the 130 traditional faculty are reasonably representative of the larger population of traditional faculty is bolstered by the similarity of their demographic characteristics with those of the random sample of NEA members we interviewed in 1998.

It is important to remember that the picture of distance learning presented in this report applies to NEA faculty members, and it may not be representative of what is happening at institutions not represented by NEA. However, in order to simplify the text, we simply refer to NEA members who teach distance learning courses as "distance learning faculty."