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## Beyond Bean Counting: Making Faculty Development Needs Assessment More Meaningful

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*Faculty development centers face many challenges including shrinking resources while providing an increasing array of programs and services to enhance learning. Needs assessment can be seen as a valuable tool to help centers focus efforts to meet the most salient needs relevant to the institutional mission. This chapter describes a faculty development needs assessment project that was implemented at a large public institution. Data collected was used to focus programming and guide decision-making. Based upon a presentation at the 2002 POD conference, selected needs assessment findings and their programmatic implications for the center are presented.*

Teaching and learning centers at large public institutions of higher education face many challenges. One of these is decreasing state appropriations to support programming for faculty development centers. As a result, there is an increasing call for centers to move beyond anecdotal evidence of effectiveness and to provide empirical data that illustrate their impact on teaching and student learning, as well as user characteristics and demand for services.

Another challenge faculty developers face is the emergence of many new and exciting learning-centered initiatives in higher education. Reaching beyond skills and activities, teaching and learning centers are asked to incorporate broad new initiatives such as service learning, learning communities, outcomes assessment, peer review, and electronic portfolio development. Some of these learning innovations are at the heart of the institution's mission and active in-

volvement serves to further weave centers of teaching and learning into the fabric of the institution. With many initiatives worthy of time and attention, it is often difficult to prioritize efforts given restricted resources.

While these are challenging issues, they also represent great opportunities for centers of teaching and learning. These emerging initiatives can greatly improve student learning and can position our centers at the forefront of institutional change. However, to be successful, our centers must be able to identify and address the salient issues.

In both of these situations—budget shortfalls and numerous teaching and learning reform measures—we are challenged to do more with fewer resources. Our services can easily become spread too thin and may become ineffective. How do teaching and learning centers decide which issues are most crucial to their institution's success? How do centers know that their programming is congruent with what will attract and benefit faculty? How can centers further document the need for and success of their services?

One possible answer to these questions is through a comprehensive faculty development needs assessment project. Effective needs assessment provides centers of teaching and learning with the guidance and information to make well-informed and effective decisions about direction, programming, and services. Many faculty developers intuitively know the value of needs assessment, yet lack the resources and information to plan a successful needs assessment project.

This chapter describes the comprehensive faculty development needs assessment project conducted at a large, midwestern, public, land-grant institution in the 2001–2002 academic year. The undergraduate and graduate student enrollment is approximately 27,000 and the faculty size is slightly over 1,800. The faculty development center has been in existence since the fall of 1993. This was the first comprehensive faculty needs assessment project undertaken by the center.

### **NEEDS ASSESSMENT IN THE LITERATURE**

The literature overwhelmingly stresses the value of faculty development needs assessment, yet, it is a tool greatly underutilized by centers of teaching and learning (Chism & Szabó, 1996; Engleberg, 1991; Harnish & Wild, 1992; Knowlton & Ratliffe, 1992; Travis, Hursh, Lankewicz, & Tang, 1996). Travis et al. (1996) indicated that there is relatively inadequate coverage of the process of needs assessment in the available literature.

Recommendations from research at The Ohio State University in 1996 called for more routine and public reporting of faculty development data

(Chism & Szabó, 1996). Chism and Szabó further claimed that programs should do more needs assessments for goal setting and to inform program planning as "information about who uses faculty development services exists more in the oral tradition than in the literature" (p. 115). "The oral tradition of answers to this question has been established and gone generally unchallenged, reducing the motivation to explore the issue" (p. 125). Chism and Szabó indicated that though some programs collect information on users and outcomes, these data are not routinely communicated to others, allowing the beliefs that are shared orally among faculty developers to continue to flourish. The authors advocated "... more research and responsible reporting concerning the characteristics of those who are served by faculty development programs" (p. 127).

Using needs assessment data as a decision-making tool was the focus of Engleberg's (1991): "Decision-making, not survey results, is the cornerstone of the needs assessment process" (p. 216). This, of course, speaks directly to the value of a needs assessment research project—to inform faculty development staff in making decisions on direction and programming on the basis of research and not subjective impressions and hunches.

Knowlton and Ratliffe (1992) described shrinking state appropriations and suggested that empirical research can help faculty development programs prove their value when budgets are tight. A case study conducted by Harnish and Wild (1992) also addressed the value of assessment in times of limited resources: "Evaluation is an especially important consideration because of its implications for the continued existence (funding) of professional development in the face of budget constraints and dwindling resources" (p. 5). Addressing budgetary as well as credibility issues, Boice (1997) wrote, "Faculty, particularly the considerable numbers who value research and empirical accountability, wonder if their local faculty development centers make a difference that merits the budget they get" (p. 379).

### NEEDS ASSESSMENT METHODOLOGY

The literature does not reveal a clearly preferred methodology for faculty development needs assessment projects. Numerous authors articulate the benefits of qualitative or quantitative studies, as well as for mixed methodologies. Travis et al. (1996) provided a summary of needs assessment projects at four public institutions, indicating "a multiple data collection method is preferable for obtaining the most complete representation as possible" (p. 98).

Although there is not unanimous sentiment in the literature about the most effective method for needs assessment, an explanatory mixed method

design was selected for this study (Creswell, 2002). It was felt this design would provide the center with rich and deep information that would most thoroughly answer the research questions and guide decision-making. Despite the additional requirements of time and financial resources, it was decided that priority would be placed on a cross-sectional survey administered to every member of the faculty to measure their current practices, opinions, and attitudes. From data obtained in the quantitative process, additional questions would emerge and would be explored through a qualitative phase—a series of focus group interviews.

After the decision to use a mixed methods approach was made, the center contracted with the Research Institute for Studies in Education (RISE), located within the university's College of Education. It was felt that utilizing the services of RISE would be beneficial because their staff would:

- Provide expert consultation on the research design and methodology
- Perform sophisticated data analysis beyond the expertise of center staff
- Provide a neutral perspective to administration of the survey
- Increase the professionalism of the survey instrument and focus group protocol
- Decrease the bias that center staff would introduce to the qualitative process
- Help respondents feel more comfortable in their anonymity, therefore increasing the response rate

For these reasons, the decision to contract with RISE for these services was pivotal, leading to an efficient and effective research process and successful conclusion of the needs assessment project.

### **THE NEEDS ASSESSMENT PROCESS**

A traditional paper and pencil survey instrument was developed by both RISE and center staff using as a resource the advice and sample surveys received through the POD Listserv (M. Theall, personal communication, August 30, 2001) (Appendix 5.1). RISE advised the center against using an electronic survey format because of poor faculty response rates on previous electronic surveys. Through staff dialogue and planning sessions, ten specific areas were identified for this project, which guided the development of the survey instrument:

- 1) Familiarity with center's services
- 2) Level of interest in various aspects of faculty development
- 3) Perception of the center's effectiveness
- 4) Type of teaching and learning activities preferred
- 5) Frequency with which faculty participate in the center's activities
- 6) Best method of communication with faculty about the center's activities
- 7) How the institution can best achieve excellence in teaching
- 8) How the center's services can be improved
- 9) Why center services are accessed
- 10) What center services should be provided electronically

Once developed, the survey was pilot tested by 15 faculty and staff members at various levels in the institution and in various colleges and units to remedy unclear points. The center's advisory board was also consulted with regard to the survey design and research questions.

With an in-house developed survey, reliability and validity were concerns. We believed the pilot testing improved the reliability. Center staff also developed an alternative survey form which was administered to about 30 faculty members at a center workshop. Similar results from this survey helped to enhance our confidence in the reliability and construct validity of the instrument.

Center staff felt strongly that the survey design was critical to a successful response rate. Great effort was expended developing succinct survey questions and ensuring that the instrument design was visually appealing and quick and easy to complete and return (i.e., ten to 15 minutes). The survey had 17 questions, including six questions requesting demographic information. Most questions were answered by the respondent using an ordinal scale. Several open-ended questions were also included to allow respondents the opportunity to provide additional suggestions and feedback.

The entire faculty population was surveyed ( $N = 1,826$ ), including all tenured, tenure-track, and nontenure-track faculty. The survey was sent in campus mail, accompanied by a cover letter on RISE stationery articulating the purpose and sponsorship of the research, encouraging completion, and assuring anonymity and confidentiality of responses. The due date for responses was approximately ten days following the mailing. A second mailing of the

survey and revised cover letter was sent to each member of the population not returning the instrument by the due date ( $n = 1,332$ ). For both mailings, the survey was to be returned to the RISE office, not the center's office, again to reduce any perceived bias or concerns of confidentiality.

The total population was adjusted to account for faculty retirements, resignations, and leaves of absence, and the overall response rate received was 43.8% ( $n = 781$ ). Statistical tests showed that the response sample provided a 95% level of confidence and that all estimates based on the response sample are within 3% of the population parameters. Based on this conservative estimate of the representative nature of the response, the results are generalizable to our total population with a high degree of confidence.

Demographics of the respondents aligned very closely with the entire faculty population with regard to academic rank, tenure status, college, and department. The exception was gender. A statistically significantly greater proportion of females responded to the survey than expected by chance,  $p < .001$ .

Once surveys were returned, RISE staff entered the responses into a database, cleaned the data, and performed the statistical analysis. Center staff interpreted, summarized, and reported on the data and decided how well it answered the research questions.

Following the conclusion of the quantitative process, three focus group meetings were held in spring 2002 to allow the center to clarify and expand data obtained in the quantitative phase of the needs assessment project. Center staff, in consultation with RISE staff, developed the focus group protocol. From there, RISE assumed responsibility for the remainder of the qualitative phase of the research to reduce the bias that center staff would inevitably introduce. A random sample of 90 teaching faculty was selected from the survey respondents who indicated that they were "somewhat familiar" and thought the center was "somewhat effective." The center chose this group of faculty because we felt they could provide valuable information to make our programming more effective. Further, we felt our programming changes could most significantly influence and engage those faculty who don't already hold a strong opinion about the center and are not significantly engaged in the center's activities.

Selected findings and programmatic implications from the quantitative and qualitative phases of the needs assessment project are integrated and presented in the following section. The complete report and appendices are accessible through the center's web site provided at the end of this chapter.

## FINDINGS AND RESULTING PROGRAMMATIC IMPLICATIONS

### **Familiarity**

Sixty-six percent of tenured or tenure-track faculty members who responded to the survey indicated that they are somewhat or very familiar with the center's services. However, 17% of nontenure-track faculty members responded that they are somewhat or very familiar with the center's services. A similar pattern was revealed in participation frequency in the center's events or activities: A statistically significant higher proportion of nontenure-track faculty responded that they never participate in the center's activities,  $p < .001$ . Alternatively, tenure-track faculty participate in center events with more regularity than one would expect by chance,  $p < .001$ .

Qualitative data obtained in the focus group sessions also reveal a gap in the center's impact on nontenure-track faculty. Because nontenure-track faculty (lecturers, adjuncts, and clinicians) are increasingly seen to be responsible for a significant portion of undergraduate instruction, the center needs to be more proactive in supporting a culture that values the services of these faculty members. We can do this by expanding and enhancing our programming to meet their unique needs.

### **Interest in Faculty Development Areas**

Respondents were asked to rate their level of interest in various areas of faculty development (Appendix 5.1, question 8), including broad educational initiatives such as service learning and learning communities. In addition, respondents were asked to indicate their level of interest in more specific areas of course planning, student learning activities, and assessment strategies (Appendix 5.1, question 10). In each question, respondents were asked to rate their level of interest by indicating, 1) little or no interest, 2) some interest, or 3) great interest. Alternatively, respondents could indicate "don't know/not applicable."

Table 5.1 shows the level of interest in the broad areas of faculty development. For those respondents who expressed interest, the percent responding, mean, and standard deviation for each are presented. The top three scores in each level of interest are in bold.



TABLE 5.1  
**Level of Faculty Interest in Broad Areas of Faculty Development**

Area of Interest	1) Little or no interest	2) Some interest	3) Great interest	Mean	SD	n
Scholarship of teaching and learning	27.6%	45.3%	27.1%	1.99	0.740	713
Principles of student outcomes assessment	25.8%	51.7%	22.5%	1.97	0.694	721
Developing teaching portfolios	38.6%	40.4%	21.0%	1.82	0.752	710
Developing teaching- centered grant proposals	44.5%	37.2%	18.3%	1.74	0.749	694
Activities designed for new faculty	53.6%	32.0%	14.4%	1.61	0.726	631
Integrating service learning into the curriculum	48.6%	37.5%	13.9%	1.65	0.711	638
Integrating communication skills across the curriculum	23.7%	45.7%	30.6%	2.07	0.734	726
Developing learning communities	45.9%	42.2%	11.9%	1.66	0.681	687
Large class instruction	39.3%	38.9%	21.8%	1.83	0.763	687
Classroom management	44.2%	41.8%	14.0%	1.70	0.701	694
Intellectual property	43.9%	39.8%	16.2%	1.72	0.725	708

Table 5.2 shows the respondents' level of interest in the more specific areas of faculty development (e.g., developing critical thinking skills, designing effective lectures, etc.). To further clarify levels of interest, faculty were asked to indicate their top three areas of interest (Appendix 5.1, question 11). A weighted frequency calculation shows that the strongest faculty interest is in facilitating effective classroom discussions. Helping students develop critical thinking and problem solving skills and incorporating active learning strategies were the second and third most appealing. Faculty are also highly interested in designing effective lectures and using technology to enhance learning. These data offer a strong indication of areas where the center should focus programming efforts. Furthermore, data from the focus groups revealed that it is the topic of a workshop or forum that motivates

faculty to attend, so the center wants to pay careful attention to offer activities in subject areas where faculty indicate strong interest.

TABLE 5.2  
**Weighted Frequency as Top Area of Interest in  
Specific Areas of Faculty Development**

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Other	13
Accommodating student disabilities/special needs	39
Designing a syllabus	43
Acquiring mid-course student feedback	51
Teaching first-year students	51
Working individually with students	53
Creating course packets	71
Designing service-learning activities	84
Evaluating student progress and assigning grades	84
Creating student learning outcomes	114
Providing feedback on student writing	116
Incorporating field-based/experiential learning	126
Designing assessment strategies	127
Accommodating diverse learning styles	129
Designing effective exams	139
Assessing student learning outcomes	143
Integrating communication skills	152
Developing effective assignments	185
Involving undergraduates in research	187
Optimizing group learning activities	197
Using technology to enhance learning	369
Incorporating active learning strategies	372
Designing effective lectures	388
Developing critical thinking/problem-solving skills	451
Facilitating effective classroom discussions	516

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### Effectiveness

Respondents were also asked to indicate their perception of the center's effectiveness (Appendix 5.1, question 12), with 15.2% of respondents ( $n = 119$ ) indicating that our efforts are highly effective as shown in Table 5.3. The percentage of tenure-track and nontenure-track faculty who view the center as highly effective is statistically significantly greater when compared to tenured faculty members,  $p \leq .011$ . Correspondingly, when faculty rank is examined, assistant professors and instructors view the center as highly effective more frequently than do associate and full professors,  $p < .001$ .

TABLE 5.3  
Center Effectiveness in Addressing Issues Related to  
Teaching and Learning

Those who marked:	n	Mean Years at Institution	SD	Mode
Not at all Effective	40	17.44	10.669	3, 18*
Somewhat Effective	346	11.91	9.731	1
Highly Effective	119	10.58	9.615	1
Don't Know/ Not Applicable	276	9.10	10.693	1

\*Multiple modes

One concern is the 276 respondents (35.3%) who indicated "don't know/not applicable" and therefore do not know about the center's effectiveness or do not feel that the center's programming is applicable. This reveals that a significant number of faculty are not being reached through center services and activities to the point of forming an opinion about the center's effectiveness. The data indicate that the majority of these respondents are nontenure-track faculty. The center has not traditionally directed resources toward the development of nontenure-track faculty and changes are being initiated to address their unique needs.

Gender of the respondent also seems to play a role in the perception of the center's effectiveness. A statistically significantly greater proportion of females view the center as highly effective than do males,  $p < .001$ .

Further analysis of these data reveal that respondents who describe the center as highly or somewhat effective are in beginning to mid-career, based on mean years of service as shown in Table 5.4. The mean years of service of those who marked "don't know/not applicable" is somewhat lower. Faculty

who have been at the institution for a longer period of time perceive the center to be less effective. While the reason for this finding is not known, we know that the faculty members who marked "not at all effective" likely had well-established careers long before the center's inception.

TABLE 5.4  
Mean Years of Service at Institution and Center Effectiveness

Those who marked:	n	Mean Years at Institution	SD	Mode
Not at all Effective	40	17.44	10.669	3, 18*
Somewhat Effective	346	11.91	9.731	1
Highly Effective	119	10.58	9.615	1
Don't Know/ Not Applicable	276	9.10	10.693	1

\*Multiple modes

### Participation

As shown in Table 5.5, over 82% of faculty indicated that they would be somewhat or very likely to participate in workshops as their preferred type of teaching and learning activity (Appendix 5.1, question 13). Workshops are the center's traditional mode of delivery and faculty are accustomed to attending these, which may provide some explanation for the strong response. Other suggested types of faculty development activities may not have been as familiar to faculty and, therefore, received lower scores.

After workshops, respondents were most likely to participate in informal discussions with colleagues about teaching problems, tips, and techniques over coffee or lunch. Focus group participants concurred that they like the opportunity to interact with others whom they see infrequently; therefore, the center will continue to facilitate discussions surrounding teaching issues in informal settings and explore ways to build community through social activities.

Nearly 12% of respondents indicated that they participated in center events often (more than three times per year) and over 45% indicated occasionally (one to two times per year) (Appendix 5.1, question 15). Nearly 43% indicated that they do not participate in center events. The majority of those who indicated that they do not participate are a statistically significantly greater proportion of nontenure-track faculty,  $p < .001$ . Alternatively, tenure-track faculty participate in center events occasionally (one to two per year) and

TABLE 5.5  
Likelihood for Participation in Types of Faculty Development Activities

Type of Activity	1) Not likely	2) Somewhat likely	3) Very likely	Mean	SD	n
Individual consultation with center staff	42.7%	40.5%	16.8%	1.74	0.727	751
Classroom observations with feedback	42.9%	41.6%	15.5%	1.73	0.714	741
Small group activities	37.9%	46.3%	15.8%	1.78	0.699	736
Workshops	17.6%	41.2%	41.1%	2.23	0.730	754
University-wide forums	46.6%	38.6%	14.8%	1.68	0.717	741
Institutes/retreats	66.1%	26.0%	7.9%	1.42	0.634	734
Faculty development study group (in same discipline)	39.4%	40.5%	20.2%	1.81	0.748	749
Interdisciplinary faculty development study group	44.2%	39.0%	16.8%	1.73	0.732	751
Web-based resources and discussion groups	46.3%	38.4%	15.3%	1.69	0.722	750
Informal discussions with colleagues about teaching problems, tips, and techniques over coffee or lunch	25.5%	44.8%	29.7%	2.04	0.742	752
Structured discussions, focused around a reading provided prior to the meeting	45.3%	39.3%	15.4%	1.70	0.72	748

often (three or more per year) more than one would expect by chance,  $p < .001$ . The data also reveal that women participate in center events/activities more frequently than do men,  $p < .005$ . Additional analysis reveals that faculty who participate more regularly in center events and activities perceive the center to be more effective.

### Communication

Respondents were asked to indicate the best ways for them to be notified of upcoming Center events by placing a checkmark next to the list of communication

modes (Appendix 5.1, question 16). More than one box could be checked as a preferred method of contact. Seventy-four percent of respondents indicated that electronic mail is the preferred method of communication. Other methods, which are the center's traditional communication channels, include the center's newsletter (30.4%) and a flyer in the mail (29.8%). Another of the center's traditional modes of communication, notification through the department chairs, was indicated by only 8.8% of respondents. As a result, the center has greatly reduced use of this method when the message is intended for the general faculty population.

### **Excellence in Teaching**

Nearly one-third of all respondents provided comments regarding how the institution can best achieve excellence in teaching (Appendix 5.1, question 17). The following salient themes emerged: 1) teaching should be more highly valued and rewarded at the institution, 2) faculty are severely stretched for time and they have to make time allocation decisions based on what they perceive to be the institution's priorities, and 3) support for the effectiveness of the center's services. One respondent captured the first two themes by writing,

Our institution can achieve excellence in teaching by valuing and rewarding good teaching. The system is not set up to do so as it is. Research is what really counts; smart faculty know where to put their time and energy. People with a passion for teaching suffer.

While the data gathered from this question confirmed our observations and anecdotal evidence, the general nature of the question did not reveal any new information that informed the center's programming. Rather, these issues need to be addressed at the central administrative level because they necessitate broader cultural change at the institution.

### **Improving the Center's Services (Focus Group Results)**

While responses on the survey highlighted a more general perspective about faculty development, the focus groups provided us with concrete suggestions that have allowed the center to more immediately make improvements in our services. Data obtained in focus group sessions indicated that a faculty member's main reason for participating in center events is that the subject matter topic is of interest to them. Faculty prefer to consult one-on-one with center staff if they are experiencing a teaching problem. There was no indication that faculty attend events because they are required to do so or that they attend to validate the quality of their teaching.

Another research question answered through the focus group process concerned how the center's services can be improved. One suggestion for improvement was that the center market its services better. The sentiment was the center is effective and provides valuable services, but more faculty should know about the variety of assistance provided. An email reminder of events was mentioned as a marketing tool. As a result of these comments, the center has developed a weekly e-newsletter. Over 600 faculty members voluntarily subscribed to receive the weekly "News & Tips" and have responded very favorably. Not only are faculty reminded of events via this communication method, but the center is able to promote the variety and range of its services. Each weekly tip includes a specific suggestion for a strategy to enhance learning with a web link to provide extended information.

Although the email notification appealed to faculty, the focus group participants did not favor a change to web-based faculty development to replace workshops and other events. They mentioned that interacting and learning from one another is what makes center events valuable and this would be lost through computer-based programming.

Another focus group suggestion, which the center has implemented, is the adoption of theme tracks. Focus group participants felt that a university-wide theme might unite all teaching training sessions for a given period of time and that an integrated curriculum, with sessions that build upon each other, might be offered for designated faculty members. As a result of these comments and survey findings, the center chose critical thinking as the theme for the 2002–2003 academic year. A workshop with a critical thinking topic has been held and the first fall newsletter announced the theme and provided a list of critical thinking resources for faculty. The center has continued to incorporate the critical thinking theme throughout its programming.

The center has expanded its services to include advisers and teaching assistants. While recognizing that these employees are not our primary audience, the center can provide services to support their teaching efforts. As one example, the center offered a teaching and learning circle in spring 2002 regarding the overlap of advising and teaching.

A gap in the center's impact on nontenure-track faculty was illuminated in this study. As background information, the university recently changed its classification system for adjunct and other nontenure-track faculty. In the past, nontenure-track faculty were seen as temporary hires; in fact, the center was discouraged from directing resources toward their professional development. However, beginning July 1, 2002, there was a change in classification titles for these faculty members, who are now called lecturers and clinicians. It

is now generally recognized and accepted that these faculty members are hired to teach, and in many cases are the first faculty that our freshman students encounter. The center recognizes that, since our goal is to enhance student learning, we need to direct resources and programming for the benefit of non-tenure-track faculty.

The center has begun addressing the needs of this population by altering the fall orientation to be more inclusive so all faculty participate in similar programming. In addition, these faculty are now invited to apply for institutional grants and participate in all of the center's programming.

Other suggestions to improve the center included taking services directly to departments to make programming more discipline-specific. One respondent, in support of departmental-level training, stated that, "when it applies to elementary education it has absolutely nothing to do with engineering." Furthermore, "going to their house" was suggested as a solution for lack of faculty time to participate in center's activities. To encourage teaching development at the departmental level, the center initiated a small grants program (up to \$1,000) for departmental activities related to teaching and learning. Sixteen applications were received and funding was awarded to 11 departments. Examples of how departments have used these funds included bringing in an outside expert to lead conversations about teaching issues, organizing a retreat for teaching faculty to develop a year-long series of teaching seminars, and developing a comprehensive learning outcomes assessment plan. The center will assist departments with funded projects based upon their specific needs and interests.

Another suggestion from the focus groups was that faculty who participate in center events should receive recognition. The center is considering sending a letter to the faculty member (with a copy to the department chair) acknowledging his or her participation. Some felt that this outcome would strengthen the value of center events.

An online registration system for center workshops and forums was another suggestion to help the center more easily and effectively manage user data while achieving greater client responsiveness. A personal follow-up letter would be more easily generated with an electronic download list of attendees.

Finally, the center has joined with the Office of the Provost to greatly enhance the orientation program for new tenure-track faculty. For the first time in fall 2002, a full day of programming was offered to address new faculty development and teaching needs. Programming was planned throughout the year for new faculty and a web site was developed to address their specific needs. The orientation event was well attended and program evaluations revealed that the



attendees found it very valuable. Plans are underway for additional enhancements in the program for fall 2003.

### LESSONS LEARNED

Several lessons were learned with regard to the development and administration of both the quantitative and qualitative phases of the needs assessment project. Quantitative analysis of the data revealed several changes that would improve the usefulness of the survey. For instance, on four questions the respondents had a choice of "Don't know/Not applicable" (Appendix 5.1, questions 8, 9, 10, and 12). Data analysis indicates that it would have been preferable to separate these into two responses. For example, if a faculty member marked "Don't know/Not applicable" about service learning, we could not ascertain whether he or she did not know the definition of service learning, or whether it does not apply to his or her professional responsibilities.

The question in which respondents were asked to indicate which type of teaching and learning activities they would most likely attend was too narrow (Appendix 5.1, question 13). More specific options should have been provided regarding the types of activities that the center could facilitate, for example, a workshop series or peer review groups, and the preferred length of time that faculty would be willing to spend at these activities.

The question in which respondents were asked the frequency of participation in center events was also too narrow (Appendix 5.1, question 15). In retrospect, it would have been better to write the question to measure overall contact with center services (individual consultations, visits to the center library, etc.) and not just events and activities. In addition, the question was not time specific. Some respondents may have participated in three activities in one particular year and none in the next and therefore would not have been able to identify an appropriate response.

The specific research question to ascertain why faculty access center services should have been asked on the survey and not gathered from the focus group interviews. Different center services are accessed for different reasons, and we believe this would have been better measured on the quantitative portion of the project in a forced choice question.

The timing of the qualitative phase of the project could have been improved. The focus group sessions were held too late in the spring semester and recruiting faculty to participate proved to be difficult. Additional faculty participants could have increased the richness of the information obtained.

## CONCLUSION

This faculty development needs assessment project has provided the center with high-quality data upon which to base programming decisions. It has energized the center's staff. It is rewarding to know that where we place our efforts and emphases aligns with faculty interest. It was affirming to learn that the faculty who use our services find our programming to be effective. Furthermore, due to the results, we have been able to focus our programming and our delivery strategies. We have also become more inclusive by more actively promoting our services to new faculty and to nontenure-track instructors. Planning the center's programming based upon faculty needs as expressed in the needs assessment project has resulted in increased participation and interest in center events.

Equipped with the breadth and depth of the information provided in this research project, the center's administration feel better prepared to meet the challenges that our center, and many others like us, face in today's uncertain environment. Budgets fluctuate and administrators come and go, but we feel that we are well positioned to move forward in a positive way—to help our institution, our faculty, and our students be successful in advancing learning.

## REFERENCES

- Boice, R. (1997). What discourages research-practitioners in faculty development? *Higher Education: Handbook of Theory and Research*, 12, 371–435.
- Chism, N. V. N., & Szabó, B. (1996). Who uses faculty development services? In L. Richlin & D. DeZure (Eds.), *To improve the academy: Vol. 15. Resources for faculty, instructional, and organizational development* (pp. 115–128). Stillwater, OK: New Forums Press.
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Merrill/Prentice Hall.
- Engleberg, I. N. (1991). Needs assessment: The first step in staff development. *Journal of Staff, Program, and Organizational Development*, 9(4), 215–222.
- Harnish, D., & Wild, L. A. (1992). Faculty speak: A way to assess the impact of professional development on instruction. *Journal of Staff, Program, and Organizational Development*, 10(1), 5–12.
- Knowlton, L. M., & Ratliffe, S. A. (1992). Statewide staff development survey reveals trends and outcomes in California. *Journal of Staff, Program and Organizational Development*, 10(2), 111–116.

Travis, J. E., Hursh, D., Lankewicz, G., & Tang, L. (1996). Monitoring the pulse of the faculty: Needs assessment in faculty development programs. In L. Richlin & D. DeZure (Eds.), *To improve the academy: Vol. 15. Resources for faculty, instructional, and organizational development* (pp. 95–113). Stillwater, OK: New Forums Press.

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## APPENDIX 5.1

**THE CENTER FOR TEACHING EXCELLENCE (CTE)  
NEEDS ASSESSMENT SURVEY, IOWA STATE UNIVERSITY**

*Please clearly mark or check the appropriate boxes below. Thank you!*

1. Please indicate your academic rank.

☐ Full Professor ☐ Associate Professor ☐ Assistant Professor ☐ Instructor

2. Please indicate your tenure status.

☐ Tenured ☐ Tenure track ☐ Continuing Adjunct ☐ Nontenure track  
(e.g., adjunct, affiliate, temporary, or visiting)

3. Please indicate your gender.

☐ Female ☐ Male

4. Typically, how many credit hours do you teach at Iowa State University in an academic year (fall, spring, summer)? \_\_\_\_\_

5. How many years have you been teaching at the college level? \_\_\_\_\_

6. How many years have you been teaching at Iowa State? \_\_\_\_\_

7. How familiar are you with the services available through ISU's Center for Teaching Excellence (CTE)?

Very familiar	Somewhat familiar	Not at all familiar
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. The CTE would like to provide various opportunities for faculty development. Which of the areas below would be of interest to you? Please mark the box that most closely matches your level of interest.

	Great interest	Some interest	Little or no interest	Don't know/ Not applicable
a. Scholarship of teaching and learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Principles of student outcomes assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Developing teaching portfolios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Developing teaching-centered grant proposals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Activities designed for new faculty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Integrating service learning into the curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

g. Integrating communication skills across the curriculum (i.e., auditory, oral, visual, written)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Developing learning communities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Large class instruction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Classroom management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Intellectual property (e.g., copyright, plagiarism, Internet use)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Other _____ (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall, how effective do you think the CTE has been in addressing issues of faculty development at ISU?

Highly effective	Somewhat effective	Not at all effective	Don't know/Not applicable
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. The CTE would like to assist faculty in various areas of course planning, student learning activities, and assessment strategies. Which of the areas below would be of interest to you? Please mark the box that most closely matches your interest.

	Great interest	Some interest	Little or no interest	Don't know/Not applicable
<b>Course Planning</b>				
a. Designing a syllabus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Creating student learning outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Creating course packets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Accommodating diverse learning styles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Accommodating student disabilities/special needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Developing effective assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Student Learning Activities</b>				
g. Facilitating effective classroom discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Designing effective lectures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Incorporating active learning strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Incorporating field-based/experiential learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Designing service-learning activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Optimizing group learning activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Integrating communication skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Providing feedback on student writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- |  |                          |                          |                          |                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| o. Using technology to enhance learning                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| p. Designing effective exams                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| q. Teaching first-year students                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| r. Involving undergraduates in research                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| s. Working individually with students                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| t. Developing critical thinking/<br>problem-solving skills | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Assessment Strategies**

- |   |                          |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| u. Designing assessment strategies                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| v. Assessing student learning outcomes            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| w. Acquiring mid-course student feedback          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| x. Evaluating student progress & assigning grades | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| y. Other _____<br>(please specify)                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

11. Of the items in question #10, please rank order the letters that represent your top three areas of interest:

_____	_____	_____
(1)	(2)	(3)
greatest interest		

12. Overall, how effective do you think the CTE has been in addressing issues of teaching and learning on campus?

Highly effective	Somewhat effective	Not at all effective	Don't know/Not applicable
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. In which of the following types of teaching and learning activities would you be most likely to participate? Please mark the appropriate box.

- |  | Very likely              | Somewhat                 | Not likely               |
|--|--------------------------|--------------------------|--------------------------|
| a. Individual consultation with CTE staff                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Classroom observations with feedback                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Small group activities  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Workshops (one meeting focused on<br>a technique or strategy) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. University-wide forums  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Institutes/retreats (2–3 days)                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- g. Faculty development study group  
(i.e., three or more faculty in the  
same discipline who meet regularly to  
discuss teaching issues) ☐ ☐ ☐
- h. Interdisciplinary faculty development  
study group (i.e., three or more faculty  
in different disciplines who meet  
regularly to discuss teaching issues) ☐ ☐ ☐
- i. Web-based resources and discussion  
groups (e.g., listserv/chat rooms) ☐ ☐ ☐
- j. Informal discussions with colleagues  
about teaching problems, tips, and  
techniques over coffee or lunch ☐ ☐ ☐
- k. Structured discussions, focused around  
a reading provided prior to the meeting  
(e.g., a teaching and learning circle) ☐ ☐ ☐
- l. Other \_\_\_\_\_  
(please specify) ☐ ☐ ☐
14. Of the items in question #13, please rank order the letters that represent your top three  
areas of interest:
- \_\_\_\_\_  
 (1)                      (2)                      (3)  
 greatest interest
15. How often have you participated in CTE events or activities?
- Often (3 or more/year)      Occasionally (1-2/year)      Not at all  
☐                                      ☐                                      ☐
16. What is the best way for CTE to notify you of upcoming events? (Please check all that  
apply.)
- ☐ Newsletter                                      ☐ Notified through DEO  
☐ Email    ☐ *Today's News* on the ISU home page  
☐ Flyer in the mail                              ☐ CTE web site (<http://www.cte.iastate.edu>)  
☐ Other \_\_\_\_\_  
 (please specify)
17. General comments. Please let us know your opinions about how Iowa State University  
can best achieve excellence in teaching.

*Thank you for participating in this survey!* [Fold in half, staple, and mail.]