ABSTRACT

Reported are the impacts of a series of workshops for instructional improvement conducted by the Faculty Development Organization of Wittenberg University, a private, undergraduate institution of 2300 students. The impacts delineated are the results of an evaluation of these workshops. The impacts examined were extracted from the expected outcomes of various instructional improvement programs delineated by Gaff. The impacts selected for analysis were (1) the development and use of new techniques or methods of instruction and (2) the development of favorable attitudes toward teaching and learning by faculty. A survey instrument, which operationalized these two impacts, was administered to the population of 65 faculty who had participated in one or more of the workshops for instructional improvement. A total of 44 completed forms were received for a response rate of 68 percent. The results tend to indicate that the workshops did have some impact upon the faculty participants. Most faculty did become involved in the process of developing new methods or techniques of instruction. More favorable attitudes toward teaching and learning were also developed. (Author)
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Impacts of Workshops for Instructional Improvement:
The Results of an Evaluation of a Component
of a Faculty Development Program

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ABSTRACT

This study reports the impacts of a series of workshops for instructional improvement conducted by the Faculty Development Organization of a private, undergraduate institution of 2300 students.

The impacts delineated are the results of an evaluation of these workshops. The impacts examined were extracted from the expected outcomes of various instructional improvement programs delineated by Gaff. The impacts selected for analysis were (1) the development and use of new techniques or methods of instruction and (2) the development of favorable attitudes toward teaching and learning by faculty.

A survey instrument, which operationalized these two impacts, was administered to the population of 65 faculty who had participated in one or more of the workshops for instructional improvement. A total of 44 completed forms were received for a response rate of 68%. The results tend to indicate that the workshops did have some impact upon the faculty participants. Most faculty did become involved in the process of developing new methods or techniques of instruction. Moreover, more favorable attitudes toward teaching and learning were developed.
The 1970's have witnessed an expansion of the concept of faculty
development. Prior to the 1970's most colleges and universities assisted
in the professional development of their faculties through sabbaticals and
travel funds for attendance at professional meetings. During the 1970's,
however, faculty development has been expanded to include programs and
practices designed to improve teaching effectiveness. The extent of this
expansion is illustrated by the findings of a survey conducted by John Centra
(1975). The population of accredited degree-granting institutions of the Uni-
ted States was surveyed. Centra found that 59% of the 1783 respondents in-
dicated that their institution had an organized program or a set of practices
for faculty development and improving instruction (1976, p. 6).

Moreover, expectations for the effectiveness of such programs are
considerable. Jerry Gaff posits that faculty development is a movement
which will help to remedy the fundamental deficiencies of doctoral training
for the preparation of college teaching (1975). Despite the significance of
this movement, little is known about the impact of such activities upon fac-
ulty. Some knowledge of the impacts of instructional improvement programs
is important for two principal reasons. The first reason is that the value of
such activities is an important criterion for the continued support of such
programs in the current operating budgets of institutions. The second reason
is embodied in the emergence of a new conceptual paradigm for viewing the
academic profession. Gaff succinctly states this paradigm as the perspective
that faculty need more than a knowledge of their academic disciplines in order
to be effective in and satisfied with their work (1977, p. 511). This perspective
is the heart of the expanded view of faculty development. However, the validity
of this new conceptual paradigm is a function of the extent to which faculty are developing a more wholistic conception of academic work. Thus, some knowledge of the impacts that instructional improvement programs have upon faculty would help to test the validity of this emergent conceptual paradigm.

The purposes of this paper are twofold: (1) to help to advance knowledge of the impact of instructional improvement programs upon faculty by reporting the results of the evaluation of such a program, and (2) to suggest an approach or framework for the evaluation of such programs for use by institutional research officers.

The results of an evaluation of the teaching improvement component of a four-dimensional faculty development program at Wittenberg University, a private, undergraduate institution of approximately 2300 students and 140 full-time faculty, is the focus of this paper. In addition to teaching improvement, the other components of the faculty development program at Wittenberg are professional enrichment through travel and tuition grants, re-direction or re-training of faculty, and the improvement of counseling of students by faculty.

The specific elements of the teaching improvement component assessed were nine (9) workshops designed to encourage the use of new methods and techniques in the classroom. Examples of some of the topics of these workshops, which were conducted during the 1975-76 and 1976-77 academic years, are the writing of course objectives, the use of groups in the classroom, personal style in teaching, and personalized systems of instruction. Thus, these workshops placed an emphasis on both faculty and course development.

The thrust of this evaluation was not upon the impacts of any one of these nine workshops, but rather upon the impacts of these workshops as a collectivity.
EVALUATION DESIGN

The Framework

Possible consequences of instructional improvement programs for faculty, students and organizations have been delineated by Gaff (1975). Gaff has extracted these possible consequences or benefits from the expected outcomes of various instructional improvement programs. From these possible consequences two substantive possible benefits for faculty members were selected to construct the framework for this evaluation.

The two possible benefits selected for analysis were: (1) the development and use of new techniques or methods of instruction; and (2) the development of favorable attitudes toward teaching and learning. Impacts are defined as the extent to which these two benefits were realized by faculty participants in the nine workshops.

The rationale for utilization of such a framework for evaluation is as follows: (1) these two possible benefits are attendant to the improvement of college teaching; (2) the improvement of teaching is a global objective which needed to be expressed in measurable terms; and (3) such an approach to evaluation will help to advance the state of knowledge concerning the impact of instructional improvement programs by expressing impact in terms of possible benefits extracted from the literature.

The Instrument

This framework was operationalized through a questionnaire designed for this evaluation. The development and use of new techniques or methods of instruction is expressed in terms of three dimensions. These three
dimensions are: (1) the perceived helpfulness of workshops for instructional activities; (2) the workshops prompted further reading on instructional innovations; and (3) the use of instructional innovations in courses as a result of attendance at a workshop. Three survey items operationalized these dimensions of the development and use of new techniques or methods of instruction. Moreover, an overall measure of the impact of the workshops was constructed from the summation of responses to these three equal-appearing items. The following weights were assigned to these items: helpfulness of workshops-1; prompted further reading-2; and innovations tried in courses-3. Thus, impact scores can range from 0 to 6 for faculty participants.

Two Likert-type (6-point scale) survey questions provided an indication of the degree to which favorable attitudes toward teaching and learning were developed. For both of these items, respondents were asked to provide self-estimates of the extent to which they agree or disagree that a particular attitude was developed as a consequence of participation in instructional improvement workshops. These two sets of attitudes were: (1) a faculty member can learn teaching methods and skills; and (2) faculty member should be concerned with the methods of teaching as well as the content of an academic discipline. The salience of these two attitudes is that an expression of them in their negative aspects have been identified as impediments to faculty interest in the methodology of instruction (Eble, 1972; Francis, 1975; and Gaff, 1975).

Additional items on the instrument pertain to the number of years the respondent has been engaged in teaching, as well as to the division of knowledge (humanities, natural sciences and social sciences) within which the respondent teaches.
Administration of Instrument

The evaluation instrument was administered to the entire population of faculty who participated in one or more of the nine workshops. Thus, a total of 65 faculty were surveyed. From this population, a total of 44 completed forms were received, for a response rate of 68%.

FINDINGS

Profile of Faculty Participants

Career age, division of knowledge of academic discipline and number of workshops attended are the aspects of a profile gathered for faculty participants who responded to the survey instrument.

Career age was defined in this study as the number of years an individual has been engaged in college teaching. The average career age for faculty responding to this item was 14.5, with a range of two (2) to thirty (30) years of college teaching experience.

In order to help to maintain the anonymity of respondents, individuals were asked to indicate the division of knowledge, rather than the specific academic discipline within which they teach. Of those participants responding to this item, 51.2% (N=21) were teaching in the humanities; 26.8% (N=11) were teaching in the natural sciences; and 22% (N=9) were teaching in the social sciences.

A survey item also asked respondents to specify the number of instructional improvement workshops they had attended. The number of workshops attended ranged from one to seven, with an average of 2.44 attended. Moreover, the distribution of attendance at the workshops was bi-modal -- 13 individuals attended one, while 13 attended three.
New Techniques and Methods

The development and use of new techniques and methods of instruction by faculty participants as an impact of workshops for instructional improvement was operationalized through three items on the evaluation instrument. These three items were: (1) whether or not (yes or no) any of the workshops were helpful in faculty instructional activities; (2) whether or not any of the workshops prompted further reading on instructional innovations; and (3) whether or not anything different in courses was tried as a result of any of the workshops attended. The distribution of responses to these three questions are exhibited in Table 1.

(Insert Table 1 here)

Table 1 reveals that the majority of respondents were impacted by the workshops in one or more ways. More specifically, 84.1% of the respondents stated that the workshops were helpful to them in their instructional activities as a faculty member; 50% of the respondents did further reading on instructional methods; and 84.1% of the respondents tried a different method or technique in their courses.

The mean composite impact score of 4.36, also displayed in Table 1, tends to indicate that the average faculty participant derived from the workshops at least two of the benefits attendant to the development and use of new techniques and methods of instruction. Moreover, 47.7% of the respondents had a composite impact score of six. This suggests that these participants found the workshops helpful, did further reading on instructional methods,
and tried a different method in their courses. Put in different words, maximum impact from the workshops in terms of the development and use of new techniques and methods was realized by 47.7% of the participants.

Respondents were also asked to describe the different methods attempted by them in their courses. Analysis of the responses to this unstructured question indicates that the use of small groups within classes was the method most frequently attempted (N=17). The setting of learning objectives for the course (N=6) and the use of self-paced instruction (N=4) were also methods frequently cited by respondents.

The perceived benefit of different instructional methods is a factor closely related to the use of such methods in courses. This factor was also subjected to analysis. Responses to an item on the evaluation instrument concerning the perceived benefits of trying different methods in the course(s) indicate that 59.1% of the respondents found the method beneficial to the course. The three most frequently cited methods perceived as beneficial were the setting of course objectives (6); use of small groups within the class (5); and small group discussions (5).

**Attitudes Toward Teaching and Learning**

The other possible benefit selected to evaluate the instructional improvement workshops at Wittenberg University was the development of favorable attitudes toward teaching and learning. The two sets of attitudes selected for analysis were: (1) faculty can learn teaching methods and skills; and (2) faculty should be concerned with the methods of teaching as well as the content of an academic discipline. As previously stated, respondents
were asked to provide self-estimates of the extent to which they agree or disagree (on a 6-point scale) that these attitudes were developed as a result of participation in the workshops. Table 2 displays the distribution of responses to these two items.

(Insert Table 2 here)

A mean response of 4.89 was obtained to the item concerning the learning of teaching methods and skills, while a mean of 5.03 was computed for concern with methods of teaching as well as the content of an academic discipline. Both of these findings tend to suggest that favorable attitudes toward teaching and learning were developed as a result of participation in one or more of the workshops of the faculty development program at Wittenberg University.

Additional Findings

Some additional analyses were conducted outside the framework and focus of this evaluation. The purpose of these analyses was to help to discern if associations between each of the profile characteristics of workshop participants and measures of the impacts of the workshops exist. These analyses were exploratory or heuristic in nature. Moreover, the small number of cases in some of the classificatory categories suggest some caution in their interpretation. Furthermore, the measures of association computed are applicable only to the population of faculty participants of this evaluation. With these caveats stated, the results of these additional analyses are presented below.
Career Age

Pearson product-moment correlations were used to help to determine if an association exists between career age and each of the three measures of impacts used in this evaluation. The resultant correlations tend to indicate that: (1) almost no relationship ($r = -0.03$) exists between career age and composite impact scores; (2) a small inverse relationship ($r = -0.37$) exists between career age and feeling that one can learn teaching methods and skills; and (3) there is a small inverse relationship ($r = -0.29$) between career age and the feeling that one should be concerned with teaching methods as well as the content of their academic disciplines.

Division of Knowledge of Academic Discipline

The eta statistic was used to measure the association between division of knowledge of academic discipline (humanities, natural sciences and social sciences), and the three measures of workshop impacts. Eta is an appropriate descriptive measure of association when the independent variable is nominal and the dependent variable is at the interval or ratio (Nie and Hull, 1975) level of measurement. The eta statistics obtained are exhibited in Table 3 below.

(Insert Table 3 here)

These findings tend to suggest that there is a slight association between teaching in the social sciences and both composite score ($\eta = 0.26$) and the feeling that one is able to learn teaching methods and skills ($\eta = 0.21$). Table 3 also helps to indicate that there is little association between the division of knowledge within which a participant teaches and the feeling that
one should be concerned with teaching methods as well as the content of their academic discipline (eta=.07).

Workshops Attended

Pearson product-moment correlations were also computed in order to help to discern if there is a relationship between the number of instructional improvement workshops attended by faculty and each of the three measures of impact. The results of these computations suggest that a slight association exists between workshops attended and all three impact measures. The correlations obtained were as follows: (1) a correlation of .30 (N=43) between workshops attended and composite impact score; (2) a correlation of .29 (N=36) between workshops attended and the attitude toward the learning of teaching methods and skills; and (3) a correlation of .39 (N=36) between workshops attended and the attitude that concern should be for teaching methods as well as the content of an academic discipline.

Discussion

It is posited that institutional research officers should consider the use of this or a similar framework for conducting evaluations of faculty development programs at their institutions. This suggestion is made for two primary reasons. The first reason emanates from the global nature of the goals and objectives promulgated by many faculty development programs. The possible benefits for faculty, students and institutions gleaned from the literature by Gaff provide a range of measurable factors. Moreover, most of these benefits are suitable operationalizations of most global program goals and objectives.
Thus, most of the benefits delineated by Gaff are suitable, measurable factors for the evaluation of faculty development programs.

The use of the possible benefits identified by Gaff as elements of a framework to evaluate faculty development programs would also help to advance the state of knowledge concerning the impacts of such programs. These benefits represent conceptualizations of the dimensions of the expanded view of faculty development. Thus, the evaluation of these benefits would help to test the validity of the assumptions undergirding the emergent conceptual paradigm for viewing the academic profession. This is the second reason for suggesting the use of this or a similar framework for evaluation.

Additional Findings

The additional findings of this evaluation are heuristic. The small number of cases and the lack of external validity suggest the heuristic nature of these findings pertaining to the association between participant profile characteristics and impact measures. Further tests of these relationships should be made by building these factors into the designs of evaluations of faculty development programs conducted by institutional research officers.

However, these findings do have some implications for the faculty development program at Wittenberg. One implication is that future instructional improvement workshops at Wittenberg can continue to be focused upon the faculty as a whole, rather than upon specific areas of knowledge. Basically, the measures of association obtained support such an approach. Put in different words, the workshops did not have a strong impact on faculty from any particular
division of knowledge, although faculty of the social sciences were more likely to develop new methods and techniques and feel that they can learn teaching methods and skills more than faculty from the humanities and natural sciences.

The moderate correlations between the number of workshops attended and the three impact measures suggest that faculty who attend more than one workshop are more likely to benefit from their experiences than those who attended only one. Thus, the officials of the faculty development program should consider and devise methods to encourage faculty to attend more than one instructional improvement workshop.

The correlations obtained for career age and the three measures of impact suggest that the development and use of new methods or techniques is not associated with career age. However, the fewer the number of years of teaching experience a faculty member has, the more likely it is that favorable attitudes toward teaching and learning will be developed. These associations must be tested further before implications for policy can be drawn from them.

CONCLUSIONS

Two major conclusions can be drawn from the findings of this evaluation. The first conclusion is that the instructional improvement component of the faculty development program at Wittenberg had a considerable impact upon faculty participants.

The second conclusion relates to the emergent conceptual paradigm for viewing the academic profession. The results of the evaluation suggest that, at least on this campus, some faculty are beginning to view academic
work in more encompassing terms. In different words, the participants of the faculty development program at Wittenberg feel that they should be concerned with teaching methods as well as the content of their academic disciplines. Moreover, they have begun to focus more attention upon the use of instructional methods in their courses. Thus, some faculty at the institution feel that their effectiveness as a faculty member goes beyond a knowledge of an academic discipline.
Table 1

Distribution of Responses to the Measures
of the Development and Use of New Techniques
and Methods by Faculty Participants

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<td>N</td>
<td>%</td>
<td>N</td>
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<td>84.1</td>
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Table 1
(Continued)

Distribution of Composite Impact Scores

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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td></td>
<td>N %</td>
<td>5 11.4</td>
<td>2 4.5</td>
<td>0 0</td>
<td>1 2.3</td>
<td>14 31.8</td>
<td>1 2.3</td>
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Mean - 4.36
Standard Deviation - 2.036
Table 2

Distribution of Responses to the Measures of the Development of Favorable Attitudes Toward Teaching and Learning

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<td>%</td>
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</table>

Note: The table includes ratings on a 6-point scale, with higher numbers indicating stronger agreement. The table also includes the number of respondents (N) and the percentage (%). The mean and standard deviation (Std. Dev.) are also provided.
Table 3

Measures of Association Between Division of Knowledge of Academic Discipline and Three Measures of Impact

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REFERENCES


