A formal and systematic model of program evaluation is essential in the setting of goals and objectives, in the formulation of the logical sequence of procedures to be followed, and in the determination of the degree of achievement. The goals and objectives of the evaluation are always the primary consideration. The programs of curriculum, instruction, and student services in the school are designed to accomplish the objectives set forth by the institution. This chapter attempts to formulate a model for evaluative studies that will aid in the planning and implementation of the primary objectives of the evaluation process. The model is based on the following principles:

1. The principle of educational equity and the need for a broad-based approach to the evaluation of educational programs.

2. The principle of educational effectiveness and the need for a comprehensive approach to the evaluation of educational programs.

3. The principle of educational efficiency and the need for a cost-effective approach to the evaluation of educational programs.

4. The principle of educational justice and the need for a fair and equitable approach to the evaluation of educational programs.

5. The principle of educational quality and the need for a high-quality approach to the evaluation of educational programs.

6. The principle of educational innovation and the need for a proactive approach to the evaluation of educational programs.

7. The principle of educational accountability and the need for a transparent approach to the evaluation of educational programs.

The model for program evaluation involves the following steps:

1. The identification of the objectives of the program evaluation.

2. The formulation of the logical sequence of procedures to be followed in the evaluation of the program.

3. The determination of the degree of achievement of the objectives of the program evaluation.

4. The analysis of the data collected in the evaluation of the program.

5. The interpretation of the data collected in the evaluation of the program.

6. The communication of the results of the program evaluation to the relevant stakeholders.

7. The implementation of the recommendations made in the program evaluation.

8. The evaluation of the impact of the program evaluation on the objectives of the program.

The model for program evaluation is a systematic and comprehensive approach to the evaluation of educational programs. It is designed to ensure that the objectives of the program are achieved and that the outcomes of the program are evaluated in a fair and equitable manner.
The Continuing Conference for the Liberal Arts was organized to test the thesis that interdisciplinary studies involving the basic arts and sciences can be structured in a way to provide superior preparation for immediate entry into careers not always associated with undergraduate education. The programs of Augustana College, Denison University, and Saint Joseph's College are described as illustrative of the variety of programs maintained by Conference institutions. This paper attempts to formulate a model to evaluate these diverse programs taking into consideration the primacy of personality development and attitudinal changes within the programs under study. A model is proposed with these desired outcomes: (1) collection of data on which to ground decision-making with reasonable expenditure of resources; (2) documentation of evidence so that outside evaluators can make quasi-independent judgments and be persuaded by the statements of outsiders; and, (3) cooperation with program staff with regard to the development of evaluation design, self-evaluation, and report writing. (PC)
AN EVALUATION DESIGN
FOR CONTINUING CONFERENCE PROGRAMS
IN CAREER AND VALUE EDUCATION
WITHIN THE LIBERAL ARTS

A Paper Presented at the
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By
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The Continuing Conference for the Liberal Arts sponsored by the Lilly Endowment, Inc., was organized to test the thesis that interdisciplinary studies involving the basic arts and sciences can be structured in a way to provide superior preparation for immediate entry into careers not always associated with undergraduate education. As a result of a series of meetings a new set of relationships has emerged among the colleges, relationships which have already fostered plans for exchange of ideas, of people, of programs and of resources. Of particular concern to the twenty schools forming the Conference is the attention given to implementing programs for career development within the context of values and a traditional liberal arts curriculum.

Illustrative of the variety of programs maintained by Continuing Conference institutions are the following from Augustana College, Denison University, and Saint Joseph's College.

The Augustana program combines short periods of off-campus work-study with basic academic programs on campus for both students and faculty, with the intent of increasing career awareness among both. Students spend four weeks on the job with local employers including an agricultural equipment manufacturer, radio and TV stations and museums. The internships are supplemented with a seminar and an evaluation period. Faculty are placed in situations similar to student internships. The intent is to enlarge the faculty's knowledge of the business and professional world (and their value, systems) and to help them be more effective in advising students regarding career choices.
The Denison University program on "Simulation and Learning" intends to close the gap between theory and the application of what is learned. It provides intensive training in problem-solving and decision-making. It creates contexts in which complex questions of values may be addressed more effectively. Student activities include role-playing, simulation games and modeling of complex situations. It appears that it is quite possible to develop a working relationship between learning and the quality of an individual's life.

At Saint Joseph's the approach to values and careers is based on an interdisciplinary program which is integrative in its structure. It gives the entire student body a common experience in reflecting on man, his situation, his achievements and problems, his meaning and purpose. The move to Core demanded radical changes in schedules, in departmental offerings, in course assignments, and in many other long held policies and ideas.

In attempting to formulate a model to evaluate such diverse programs, we faced various obstacles which prevented us from adopting several existant procedures developed by educational researchers. The primacy of personality development and attitudinal changes within the programs under study precluded using any single measurements of cognitive achievement. We needed to assess behavioral and attitudinal changes, regardless, of whether this occurred during a career-oriented program, typified by internships, or a cultural and value-oriented curriculum, as exemplified by Saint Joseph's
College. In many instances the established goals set by the staff lay outside the area of measurement, that is, they were abstract and global rather than specific and behavioral. In this the educators involved manifested a common attitude, stemming certainly from the time of Classical Greece, that right knowledge leads to right action. Only in recent decades have social scientists attempted to evaluate the complex process of personality and skill development of late adolescence.

As in most educational settings, the establishment of an experimental design to control most of the variables which might affect desired outcomes looms as an insurmountable task. The designers of programs funded through the Lilly Endowment did not concern themselves with experimental design per se, but primarily focused their efforts on program design and implementation.

A research design that would adequately account for variables would require longitudinal studies, requiring a period of time beyond the period of funding. Their concerns lay primarily with formative evaluation which we interpreted as a quick assessment of strengths and weaknesses for the purpose of improving the program.

In the majority of instances, program directors could not establish a control group by which to compare the experimental group. Students who participated in the programs came from a continuum with extreme positions. In many instances they elected through interest in the specific educational experience and the
anticipated and direct benefits they see accruing to themselves; at the other end they had no choice but to fulfill a college requirement prescribed for all students. Their mentors did not envision an experimentally controlled atmosphere in which the experiences would take place.

Another major obstacle derives from faculty attitudes with regard to evaluation. Most persons connected with the programs were not trained in research methodology nor did they envision themselves becoming proficient in that area. Many expressed doubts about the efficacy of any evaluation methods, and a few rejected such a process on the philosophical grounds that true education defies measurement. To prove to others what they themselves judged successful from their own experience and intuition seemed to them an unessential burden.

As program directors, they expressed concern with the cost and the energy of implementing an evaluation program, when they really desired using their resources for program development. Their prior experience with outside evaluators had, for the most part, been non-productive. They did not see how evaluation could lead to the improvement of their program and looked upon it primarily as meeting the accountability requirements, necessary but painful, of a granting agency. They did not view evaluation as formative which could lead to program improvement and a better use of funds granted to them.
The model which we proposed to them anticipated most of the objections cited above and incorporated them into the evaluation procedures. Basically, our desired outcomes were: (1) Collection of data on which to ground decision-making with reasonable expenditure of resources; (2) Documentation of evidence so that outside judges could make quasi-independent judgments and be persuaded by the statements of insiders; and, (3) Cooperation with program staff with regard to the development of evaluation design, self-evaluation, and report writing.

For this, we made an adaptation of a perception based model of evaluation grounded primarily on the work of Richard Kunkel and others at Saint Louis University and the CIPP model of Daniel Stufflebeam, which speaks to the analysis of a program with regard to context, input, process and product. We anticipated that this approach would be much less threatening to faculty members, would involve them in the entire process, and would indicate to them ways in which they could improve their basic program during its beginning stages.

Serving as a touchstone of our perception based model was the belief that in most instances the objectives, as defined by the project directors, can not be measured by standard instruments. Our perception-based model maintains that consensus about the value and quality components of a program represents an approximation to an objective measurement of success that cannot be discounted when the persons involved in the educational experience agree that they are achieving desired benefits.
To meet the initial objections of many project directors with regard to evaluation, we set as our goals the following characteristics: First, that the process be helpful and that the personnel involved in the programs recognize that our procedures would benefit them by stimulating them to think in terms of improving student learning. Our emphasis lay in formative evaluation, with constant revision of the program in light of new information with regard to its effectiveness as an ongoing process. We did not stress procedures or acceptance of data unless the program administrators would accept it and use it in decision-making both for the immediate and long term duration of the program.

That the process be reasonable in terms of expending human energy, time, and financial expenditures. Our hope was to provide maximum information about the effects of projects with minimum input. This met the concern of project directors that nearly all of the money granted to them be used in planning activities to bring about change in students and that a reasonably minimal amount would go to monitoring the process. Thus, we did not encourage over-use of standardized instruments which are costly to administer and difficult to analyze in terms of the program's direct effect on students.

Third, that our approach would be holistic; that is, a great variety of sources of evidence with regard to success of the program would be investigated and admitted into the evaluation procedure. This would include perceptions of students from a variety
of sources, observation of the process, observable commitment given by persons in support of the program, comments, letters, and critical incidences—all clearly indicating to the program directors that the activities were prized by individuals and that behavioral change was observed and recognized by participants. In short, the question raised here was, what kind of evidence would you accept as marking success in your program, no matter how varied or unusual it might be.

Fourth, that the inter-personal relationship be one of negotiation at each step of the way. Instead of intruding our objectives, values, and measurements of outcomes into their system, we discussed these concepts with the staff ascertaining what manifestations of these they felt essential for the program. If there was a discrepancy between their views and ours, which we as consultants could not accept, these were negotiated to everyone’s mutual satisfaction. That process also applied to the evidences that would be acceptable as marking progress as well as to final reports submitted to the Endowment. In this latter case, when agreement on specific points could not be reached, the institution responded to our critique of their self-evaluation with one of their own. Our approach was committed to dialogue with regard to all aspects of evaluation procedures, never stressing our own biases, but always pushing them to clarify and explain why the objectives and evidences which they desired were, indeed, valuable and valid with regard to program goals.
Fifth, that the analyses of information be moved in a direction of greater quantification, when the bases of data are attitudinal and subjective as indicated by self-evaluation techniques. Essentially we desired that the evidences used in judging the program be documented in some way to be summarized and assimilated more easily by a non-involved third party. So often when we began to talk about anthropological evidences of success, project directors indicated that they could recall many items from their past experience which would indicate achievement of stated objectives. However, they could not verify these by producing documentation that would convince us of the persuasiveness of these attitudes.

The actual process of evaluation proceeds accordingly: As evaluator consultants we visited and arranged to negotiate all aspects of the process with personnel involved in the programs. We raised questions as follows: What major questions should be asked in the evaluation and what are the objectives of the experience? What sources of evidence can be found with regard to the process? What quality components can we apply to the evidence received through the various processes of data gathering? Who are the best judges of the process and how much weight ought one to give to the evidence derived from them?

We requested materials about the program and evaluative data and reports. We strove through letters, telephone calls, and the on-site visitation to build mutual understanding and trust.
for our role in the evaluation process. We gave feedback after our first meeting and the receipt of their self-evaluation reports and encouraged them to be candid in appraising our efforts and activities.

The programs from three of the Continuing Conference schools provide examples by which to demonstrate our approach. In judging the success of internships, we developed several means grounded on perception and affirmed by project personnel as valid appraisers of the process. Through the use of a log written by students on a daily or weekly basis we hoped to encourage students to reflect in written form about their experiences, emphasizing not so much their performance of activities but focusing on their attitudes toward the job environment, values issues which emerged, their emotional feelings about them, and insights that occurred with regard to decision-making while engaged in their work situation. An analysis of the log over a period of weeks or months would indicate the depth of thinking and insightfulness which a student was undergoing. The criteria by which to measure progress were distilled from the overall objectives of the internship component of the program. We encouraged the evaluators to describe a progression of steps through which the student would pass as a way to assess individual as well as group development.

We encouraged the development of "benchmarks" as a means of recording attitudes towards the process of the internship by
the instructor, student, and the supervisor. These are brief instruments utilizing Likert scales and open-ended questions to elicit judgments of satisfaction and self-evaluation of progress toward individual objectives, designed for use at frequent intervals so that the results can be used to alter the activities or relationships throughout the length of an experience.

We felt that an interview with both supervisor and student would yield deeper insights to behavioral and attitudinal changes and permit comparisons of two different perceptions of the same events. We suggested a directed interview, the results of which could be documented and tabulated in quantifiable manner.

The simulation program implemented at Denison University lends itself easily to the use of "benchmarks." Both students and instructors could use such instruments as a quick way of registering their satisfaction with the unique teaching methods used. Observation of the simulation in a classroom presentation offers another source of evidence for consideration. The observer must construct criteria by which he judges the quality of the experience for students in consort with the instructor based on the objectives of the particular simulation involved. Self-evaluation in greater depth from students can be learned from required essays or interviews during or at the conclusion of the experience. Again, criteria ought to be set after careful consideration of objectives. Some way to document the findings ought to be employed so information gained can be offered to an outsider in a persuasive format.
Not surprisingly, the most difficult programs to evaluate are those that aspire to educate the liberated individual. So often in cases of enculturation programs, one is asked to evaluate a philosophy of education rather than an educational process. A traditional view of higher education has maintained that exposure to the great ideas of Western thought is in itself an elevating experience. The goals of such curricula are defined in conceptual terms that cannot be judged in any given time frame.

While granting the evanescent nature of the outcomes of such programs, we argue that some approximations of the success of the approaches taken can be learned through use of a perception based model. We found some reluctance to undertake an instrumented approach even though the testing and measurements area has many of these to offer. Basic reasons for rejecting this tack follow from financial and energy constraints, but perhaps more importantly from a distrust that prepared instruments really measure the qualities desired for the students of a specific course. Institutional philosophies and the special desires of the faculty involved seem not to admit the efficacy of a "canned" treatment.

Adaptations of methods previously described, that is "benchmarks", interviews, logs, essays, and observation are all flexible enough to meet the needs of evaluation. The crucial steps here are defining the criteria by which to measure progress. The perception based model asks the question, what would you accept as evidence of success, and who is the best judge of the process.
So with the other two programs we pressed individuals to state their objectives in behavioral activities that could be observed or in attitudinal terms that could be self-evaluated and recorded.

To judge progress made by students, the faculty were asked to establish for themselves a developmental schema consistent with their objectives. As models we suggested the works of Lawrence Kohlberg, Abraham Maslow, Erik Erikson, William G. Perry, and the seven vectors of Arthur Chickering. Out of this background a paradigm compatible with the specific program could emerge, providing the criteria for personal growth along continua important to the designer of the curriculum.

The results of our approach with the Continuing Conference Institutions to-date have been most rewarding and, we feel, beneficial to the institutions involved. Because of our approach to various methods of evaluation which involves the participants in the process of defining goals and objectives, we feel that trust has been established both for us and the process, and that the outcomes of evaluation are accepted. One aspect of our approach mentioned by more project personnel than any other as of great service to them was our insistance upon clarification of objectives and re-defining goals into behavioral and attitudinal terms which could be observed, measured through instruments, or self-evaluated in some meaningful way.
With regard to the process itself, we feel that a working session with faculty, taking them through the steps of evaluation, yields more benefit than our observation or a walk-thru of their particular project. We stressed that our opinion about the program was of little importance, of greater concern was their ability to set objectives, define criteria, and establish acceptable evidences. With regard to the final report of the evaluation, we learned that the most helpful format occurred when the personnel involved wrote their own self-evaluation after our conferring with them, to which we responded in the form of a critique of the evaluation procedures rather than to the program itself. On those few occasions where we wrote the report from the information given to us by the individual institutions, both groups expressed dissatisfaction. They argued that we did not fully understand their activities and goals; we felt pressed because it required more negotiations to arrive at a point of mutual satisfaction. The institutional self-evaluation report encourages the program staff to engage in the development of their own evaluation procedures from the beginning and blocks reliance on outsiders to come in and state what is right or wrong with the program. The use of outside "objective" evaluators often creates a defensive attitude in which a great amount of time and energy is expended in defending the negative aspects of the program, or explaining it away by one means or another.