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ABSTRACT
        As more psychologists become involved in program
evaluation, program evaluation courses have been developed by many
psychology departments. Psychology graduate students (N=19)
participated in a semester-long simulation course. Students divided
into small groups, and each group submitted a written proposal for
evaluating the counseling service of a fictional community agency.
Students could question the agency director, role-played by the
instructor, to obtain evaluation-relevant information which had been
intentionally omitted from descriptive materials about the agency. A
second proposal was also written and submitted by each group. The
groups then analyzed a fictitious set of pre-and post-measures
describing the psychosocial adjustment of three client subgroups and
prepared a comprehensive final evaluation report that included the
analysis results. Data relevant to the effectiveness of the
simulation was generated from questionnaires completed by
participants, questions asked by the groups, the proposals and final
report, and the instructor's informal observations. Both the
performance of the students during the simulation and their
subsequent evaluation of the simulation effectiveness indicated that
the simulation was involving and educational. The findings suggest
that teaching evaluation research via simulation need not be confined
to short-term courses. (Author/NRB)

Teaching Evaluation Research

via a Semester-Long Simulation

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the American Psychological Association,

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2

Teaching Evaluation Research

via a Semester-Long Simulation

In recent years a growing number of psychologists, especially
those in the field of community psychology, have become involved
in program evaluation (e.g., Cowen & Gesten, 1980; Dowell & Kriesel,
1981; Guttentag & Struening, 1975; Lachenmeyer, 1980; Perloff &
Perloff, 1977; Spielberger, Piacente, & Hobfoll, 1976; Stenmark,
1977). Not surprisingly, this trend has been accompanied by the
development of program evaluation courses in psychology departments
across the country. Ideally, these courses would always provide
students with the opportunity to supplement their classroom learning
with some form of participation in an actual program evaluation.
What options are available to the instructor, however, when the
opportunity to evaluate a "real world" program does not exist for
all of the class? One possibility is to have students engage in a
simulated program evaluation. Northman (Note 1) reports success
with such an approach when it was used as part of a one-week insti-
tute in program planning and evaluation attended by human service
administrators, clinicians, and graduate students. The present
paper describes a more elaborate simulation employed in a semester-
long graduate course in evaluation research.

Method

Participants

Nineteen students in an M.A. program in clinical-community
psychology participated in the simulation, which was conducted as

part of an evaluation research course. There were also eight students in the course who had the opportunity to evaluate real programs. These individuals did not participate in the simulation and their experiences will not be focused on in this paper.

Procedure

Phase 1 (weeks 1-5). Early in the semester students sorted themselves into groups of three or four members each for the simulation. A one-page description of the "Midtown Multi-Service Center," a fictitious community agency, was given to students in each of the five groups that were formed.[1] Intentionally omitted from this description was information which a skilled evaluator would probably wish to examine before generating an evaluation plan (e.g., an organizational chart depicting the Center's structure in detail). Most of the description dealt with the Center's counseling service, which the organization's Board of Directors was asking each group to evaluate.

The first task for each group was to submit to the Board a written proposal (8-10 pages) for evaluating the counseling service. Each group was instructed to address the following questions in its proposal:

1. At a general level, how should the evaluation task be conceptualized?

2. What special evaluation problems are associated with this task and/or setting, and how might these problems be handled?

3. What methods should be used to determine the goals of the counseling service?

4. What criteria should be used to select a subset of these goals upon which the evaluation might focus?

5. What is an appropriate research design for assessing the counseling service's performance with respect to a given subset of these goals?

6. To what extent is it feasible and appropriate to evaluate the counseling-service on the dimensions of effort, efficiency, process, and adequacy of performance (Suchman, 1967, pp. 60-71)?

In the course of preparing its proposal each group could submit five questions in writing to the Center's Executive Director, who was role-played by the course's instructor. It was the instructor's expectation that questions would focus on information which was missing from the one-page description of the Center but which class lectures had indicated was relevant to preparing an evaluation proposal.

For the purpose of responding to the questions and clarifying any misunderstandings concerning these responses, a meeting was held between each group and the director. Some answers could simply be given orally, while others were sufficiently complex and/or detailed that a written reply was required.

Phase 2 (Weeks 6-9). After the proposals were evaluated by the instructor and returned, a second proposal was requested. This proposal was to contain the following:

1. A more detailed description of the experimental or quasi-experimental evaluation research design which the group recommended in its initial proposal. (If the group was unhappy with the first design, it could modify it for the second proposal.) This required a discussion of:

a. how the design handled each of the major threats to validity outlined by Campbell and Stanley (1966);

b. how blocking, concomitant variables, and/or factorial design would be employed (if at all);

c. how subjects would be assigned to experimental and control conditions; and

d. the time frame and sample size for the study.

2. A general discussion of the process and outcome measures to be used in the evaluation.

3. A one-page questionnaire constructed by the group which would assess the Board of Directors' perceptions of the counseling service on issues relevant to the evaluation.

4. A discussion of how the data emerging from the evaluation might be used in agency decision-making.

As was the case with the simulation's first phase, each group could address five questions to the director.

Phase 3 (Weeks 10-14). The simulation's final stage presented the groups with two tasks. First, each group analyzed a fictitious set of pre- and post-measures prepared by the instructor describing the psychosocial adjustment of three subgroups (depressed, psychotic, anxious) of the counseling service's clients. (All participants in the simulation received the same data.) The data were constructed so that each subgroup exhibited a different pattern of improvement/nonimprovement.

Second, each group prepared a comprehensive final evaluation report for the Board which included the results of the preceding analysis as one component. In its report each group was instructed to make whatever recommendations it considered appropriate to enhance the functioning of the counseling service. Once again, five questions were allowed. The simulation ended with the instructor's evaluation

of these reports.

Results

Data relevant to the effectiveness of the simulation came from four major sources: an anonymous questionnaire completed by participants after the course ended; the questions asked by the groups; the proposals and final reports; and the instructor's informal observations.

Questionnaire Responses

Responses to Likert-type items on the questionnaire indicated that students evaluated the simulation quite positively. Specifically, the simulation was seen as a well-organized, interesting, and effective teaching device which contributed significantly to the quality of the course (see Appendix A, items 1-4). The omission of relevant information from the Multi-Service Center description, the procedure of allowing groups to question the director, and the requirement of three papers during the simulation were all viewed as pedagogically useful (see Appendix A, items 5-7).

Participants believed that the simulation clearly succeeded in giving them the opportunity to: 1. apply in an evaluation setting the approaches and techniques discussed in class, and 2. appreciate "first-hand" some of the difficulties involved in doing an evaluation (see Appendix B, items 1, 2). With respect to the goal of having students experience the processes involved in working on an evaluation team, the simulation fared less well: half of the respondents judged the simulation to only be "somewhat" successful in achieving that objective (see Appendix B, item 3).

7

It should be noted that although the participants tended to believe that the simulation resulted in less learning for them than participating in a real evaluation would have, they also thought the former technique allowed for more fair and equitable grading of students than the latter (see Appendix A, items 8, 9).

When asked in an open-ended question to indicate what was the most valuable aspect of the simulation for them, most participants pointed either to the opportunity to apply concepts learned in class or, more specifically, to the challenge involved in developing an appropriate research design for their proposal. When the question focused on the least valuable aspect of the simulation, the most frequent response dealt with the statistical analysis that students had to perform on the data set provided them by the instructor.

Group Questions

The groups generally made good use of their allotted questions to focus on the information gaps characterizing the description of the setting. Inquiries routinely dealt with such issues as the Center's organizational structure, its official mandate, the demographic characteristics of the counseling service's clientele, the range of client problems encountered, and the procedures for assigning clients to staff.

On occasion the information requested (e.g., the Center's annual report) exceeded in scope what the instructor could provide. There were also times when, either deliberately or inadvertently, groups presented as one question what actually were two clearly separable inquiries. In these instances the instructor would respond by drawing the group's attention to the problem and asking them either to with-

draw one of the questions or to present them as two distinct items.

Proposals and Final Reports

The quality of the proposals and final reports varied from group to group, ranging from acceptable but mediocre to outstanding. Not surprisingly, there seemed to be a positive relationship between the quality of the questions a group asked during a given phase of the simulation and the quality of the proposal or report it subsequently produced. In addition, groups primarily composed of individuals who excelled in traditional classroom activities (e.g., tests) also tended to do well in the simulation. In assessing the significance of these relationships caution needs to be exercised, however, given that all evaluations of student performance emanated from the same source, i.e., the instructor.

Informal Observations

Students appeared to become quite involved in the simulation and devoted significantly more out-of-class time to it than the instructor had expected they would. While this latter occurrence may have been partially due to the simulation requiring more work on the part of students than had been intended, the students' perception of their task as a challenging and intriguing one also seemed to be a major contributing factor.

A moderately competitive atmosphere developed among the groups, accompanied by expressions of anxiety and frustration (e.g., "Too many things are beyond our control here!"; "We don't have enough information!", "There's never enough time!") familiar to anyone who has been a fledgling evaluator in the real world. In addition,

throughout the simulation the groups could be observed grappling
with a variety of process issues (e.g., methods of decision-making,
intra-group conflict, communication) relevant to small-group
dynamics.

Discussion

The findings of this study suggest that teaching evaluation
research via simulation need not be confined to short-term courses.
It must be emphasized, however, that conducting a simulated program
evaluation is no substitute for conducting a real one, and the first
priority of instructors should be to provide their students with the
latter experience.

Perhaps the ideal arrangement would be one where a simulated
evaluation was conducted during the first semester of a two-semester
program evaluation course, with a real evaluation taking place during
the second semester. Such an approach would result in students being
better prepared for the real evaluation than if they were exposed
both to the course content and to the real evaluation simultaneously,
as is often the case. Indeed, in a course involving a real program
evaluation it would be instructive to have three groups of students
whose performances could be compared: the first group would be one
which had received no training in evaluation prior to the semester
in question; the second would have had a lecture course only; and
the third would have had a lecture course which included a simulation.

Regardless of how a simulation is integrated into a course
sequence in program evaluation, the simulation described in this
paper could be improved in several ways. Several questionnaire

respondents suggested that the process of formulating questions for the director would be facilitated if some guidelines were provided by the instructor. These guidelines would obviously not focus on the content of the questions, but would instead deal with such issues as format and scope.

Confusion on the part of students during the simulation would also be reduced if clearer guidelines were provided concerning the expected format for the other written assignments. Distributing sample proposals and final reports to the class would probably be helpful here.

Rather than giving all groups the same pre- and post-data to analyze, different sets of data appropriate to the designs proposed by each group might be used. This procedure would link in a more meaningful way the task of preparing the final report to that of generating the proposals. Questionnaire responses indicated that the major reason for the data-analysis phase being so frequently cited as the least valuable aspect of the simulation was that many of the students were quite disappointed at not being allowed to follow through on their own designs. Since the task of individualizing data sets would significantly increase the instructor's workload, however, it might only be feasible in courses where a graduate assistant was available.

More could be learned from the simulation if it incorporated in greater measure the bureaucratic processes, political conflicts, and budgetary constraints with which one must contend in real evaluations. This might be achieved in part by making the initial setting descriptions more elaborate, though care must be taken to preserve

the information gaps that students should fill in themselves through questions. One could also increase the simulation's ability to capture the ongoing dynamics of evaluation by introducing information at various points throughout the simulation which complicated the scenario. In addition, groups could be permitted to question a variety of individuals within and outside of the agency as role-played by the instructor, with the latter being free to exhibit varying degrees of cooperativeness, secrecy, trust, etc..

The richness of a given program evaluation simulation, in terms of the amount of realistic detail characterizing it, will tend to increase from semester to semester as the instructor adds a few new touches each time. A particularly effective means of accomplishing this is to generate supporting materials for the simulation in the form of fictitious annual reports, staff handbooks, funding proposals, summary minutes of staff and board meetings, etc.. Indeed, as this auxiliary material accumulates, the simulation setting almost begins to take on a life of its own.

Finally, the systematic recording of questions asked by the groups would assist the instructor in identifying areas of program evaluation that warrant greater attention in course lectures. It would be important here to assess not only whether the appropriate domains of program evaluation were being addressed by the questions, but also whether the questions were formulated in a way which indicated an adequate understanding of how to solicit information within a given domain. When the groups' questions are examined in this fashion, the simulation becomes a method for increasing not only the student's effectiveness in the real world, but the instructor's effectiveness in the classroom as well.

Appendix A

Simulation Questionnaire Results: I

Item	Mean Response
1. How well organized did you feel the simulated evaluation was? [1=very well organized, 7=very poorly organized]	3.44
2. How interesting did you find the simulated evaluation? [1=very interesting, 7=not at all interesting]	3.00
3. How would you rate the overall effectiveness of the simulated evaluation as a teaching device? [1=very effective, 7=not at all effective]	2.19
4. If the simulated evaluation were removed from the course (with no other procedure substituted), what do you think would be the effect on the course? [1=would greatly decrease its quality, 7=would greatly increase its quality]	2.13
5. In the simulated evaluation an attempt was made to approximate the difficulties often faced by a real evaluation team by not initially revealing all of the information about the hypothetical agency that was needed to complete the evaluation. How useful a teaching device do you feel this procedure was? [1=very useful, 7=not at all useful]	2.44
6. Five questions concerning unknown facts about the agency were allowed before each of the proposals and final reports were due. How useful a teaching device do you feel this procedure was? [1=very useful, 7=not at all useful]	3.31
7. Three papers were required during the semester: an initial proposal, a second proposal, and a final evaluation report. How useful a teaching device do you feel this procedure was? [1=very useful, 7=not at all useful]	2.25
8. Compared to the students who participated in a real evaluation during the semester, how much do you think you learned from the simulated evaluation? [1=much more than they did, 7=much less than they did]	4.25
9. Compared to a real evaluation, to what extent do you feel that the simulated evaluation technique allowed for fair, equitable grading of course work? [1=simulated evaluation much more fair, 7=simulated evaluation much less fair]	2.81

Note: n=16

13

Appendix B

Simulation Questionnaire Results: II

Item	very well	moderately well	somewhat	minimally	not at all
No. of responses					

To what extent do you feel the simulated evaluation achieved each of the following objectives?

Item	very well	moderately well	somewhat	minimally	not at all
1. To link the class lectures with an opportunity to apply these approaches and techniques in an evaluation setting.	6	8	2	-	-
2. To appreciate "first-hand" some of the difficulties involved in actually doing an evaluation.	7	6	3	-	-
3. To experience the process involved when one works as a member of a group assigned the task of conducting an evaluation.	6	2	8	-	-

Footnote

[1] The description may be obtained by writing to the author.

Reference Note

1. Northman, J. E. <u>Simulation as a method for teaching program evaluation.</u> Paper presented at the annual meeting of the Eastern Psychological Association, Boston, April 1977.

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