

LDR 8564
RESEARCH ACTIVITIES IN LEADING AND MANAGING SYSTEMS

Course Syllabus
by
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Revised Summer 2004
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A. COURSE DESCRIPTION

Students will engage in research activities in support of the course LDR 8540, Research Activities in Leading and Managing Systems. In LDR 8564 students will be introduced to one of the major research methodologies used in dissertations: evaluation methodology. Students will identify a problem and design a proposal for a study using evaluation methodology. During this course students are invited to start thinking about a possible dissertation topic based on leadership and the student's specialization area. Research activities will include extensive use of web-based technologies.

B. LEARNING OUTCOMES

Upon successful completion of the course, the participants will be able to:

1. Identify major elements of evaluation methodology.
2. Write a problem statement.
3. Design a proposal for an evaluation research project.
4. Locate critical course and program information.
5. Successfully complete course work in an on-line environment.

C. REQUIRED TEXTS/IMPORTANT WEB LINKS

Charles, C. M., & Mertler, C. A. (2002). *Introduction to educational research*. (4th ed.). Boston: Allyn and Bacon.

American Psychological Association. (2001). *Publication manual of the American Psychological Association*. (5th ed.). Washington, DC: Author.

Applied Research Office Home: <http://www.fgse.nova.edu/aro/index.htm>

FSG/Educational Impact Electronic Textbook. To be purchased at the Educational Impact Web site: <http://www.educationalimpact.com>

FSG/Organizational Leadership Homepage:
<http://www.fgse.nova.edu/orgleader>

Mills, P. K. (2002, August). *Form and style guidelines for course papers*. Fort. Lauderdale, FL: Nova Southeastern University.
<http://www.nova.edu/fgse/orgleader/resources/formnstyle.pdf>
(Note that on page 4 regarding levels of headings, the third level heading should be indented, italicized, and the first word and proper nouns only should be capitalized. The third-level heading should be followed by a period and then text on the same line. These levels of headings correspond with APA Levels 1, 3, and 4 as per the discussion in APA on pages 114-115, section 3.32.)

Mills, P. K. (2003). *Guide to the applied dissertation process*. Fort Lauderdale, FL: Nova Southeastern University.
This resource can be found at the Applied Research Office:
<http://www.fgse.nova.edu/aro/pdf/guidedol.pdf>

Mills, P. K. (2003, June). *Style guide for the applied dissertation*. Fort Lauderdale, FL: Nova Southeastern University.
This guide can be found at the Applied Research Office:
<http://www.fgse.nova.edu/aro/pdf/sgad.pdf>

Electronic Resources: <http://www.nova.edu/library/eleclib>

NSU WebCT: <http://www.nova.edu/webct/>

In LDR 8564 you are required to read chapter 7, 8, and 13 in *Introduction to Educational Research*. The information in these chapters will assist you in completing course assignments.

D. COURSE REQUIREMENTS

Three chats 15 points (5 points each maximum – attendance and participation)
Assignment 1 – Problem Statement - 20 points
Assignment 2 – Proposal for Evaluation Study - 65 points

OR

(Your instructor will let you know which set of requirements to follow.)

Three chats 15 points (5 points each maximum – attendance and participation)
Assignment 1 – Proposal for Evaluation Study – 85 points

This version of the proposal includes three additional sections to be described in detail:

1. A complete description of the program to be evaluated
2. A discussion of the perspective of the evaluator (internal or external)
3. A discussion of the program stakeholders (direct and indirect)

Your instructor for LDR 8564 will provide you with more detailed information regarding the grading criteria for each assignment.

Chats

The purpose of chat 1 is to discuss the correct way to write a problem statement using the evaluation model for assignment 1. Students will share their statements and analyze each other's work. Elements of evaluation methodology and topics covered in chapters 7, 8, and 13 in the text will also be discussed.

The focus of chat 2 will be the development of a research proposal using evaluation methodology. Various components of a proposal will be discussed, including those described in this syllabus under PROBLEM IDENTIFICATION, ESTABLISHMENT OF CRITERIA, PROCEDURES, and ASSUMPTIONS AND LIMITATIONS. The requirements of assignment 2 will be reviewed.

In chat 3 students will share assignment 2. Specific guidelines for this discussion will be provided by the instructor.

Your LDR 8564 instructor will notify you of the dates and times of chats.

E. GRADING

Work completed in LDR 8564 is graded according to the NSU grading policy. In LDR 8564 final grades will be assigned as follows:

- ◆ A = 100-90 points
- ◆ B = 89-80 points
- ◆ F = 79 points or below
- ◆ I = Incomplete
- ◆ AW = Administrative Withdrawal

No plus or minus grades (e.g., A-, B+) are used in the Organizational Leadership (OL) doctoral program. A grade point average of at least 3.0 ("B") is required for retention in the program. A grade of Incomplete ("I") must be negotiated with the course instructor. The "I" grade is assigned when the student has completed the majority of the assignments. A student who has not completed any assignments at the end of the course is not eligible for an "I". An "I" must be made up by the date stipulated by the course instructor. The longest period of time that may be granted to a student is one term. A grade of "F" will automatically appear on a student's permanent record, if course requirements are not met on time.

For additional information regarding grade assignments in the OL program, see the *Student Handbook of Policies and Procedures*.

F. ASSIGNMENTS

Assignment 1 (For those completing two course assignments—ask your instructor if you are to complete this assignment).

You will write a comprehensive problem statement that you plan to develop into a proposal using the evaluation methodology. You may choose a topic from LRD 8540, from your work setting, or from another organizational context. A well-defined problem statement anchors a research project. The statement must address a problem that actually exists within an organization. It must describe an existing situation that needs to be evaluated for effectiveness. The problem statement should focus on a discrepancy between “what is” and “what should be.”

Examples:

- There is no evidence that indicates that the organization is accomplishing the goals of the strategic plan.
- There is no proof that the new multi-media instructional program is achieving better results in freshmen biology courses than traditional instruction.

A problem statement must be supported by existing data. Sources of data can come from historical sources, personal discussions/interviews, and/or a review of literature.

Your problem statement actually consists of one or two paragraphs that clearly articulate the problem. It is a good idea to begin with: “The problem is that...” Once your problem statement is approved, you will use it to begin the proposal for an evaluation project.

Assignment 2 (Please note that there are two versions of assignment 2. Ask your instructor which applies to your class).

The purpose of this assignment is to give you the opportunity to create a research proposal using the evaluation methodology. You will create a proposal based on the problem statement in assignment 1. The evaluation methodology guidelines that follow provide theoretical information about how to create a study based on the evaluation model. Read the guidelines carefully.

The proposal you will write will contain specific elements of the evaluation methodology presented within the framework of the dissertation proposal. (See the *Guide to the Applied Dissertation Process*.) This requires you to adjust a few elements of the evaluation model into the structure of the dissertation proposal. In the guidelines in this syllabus the entire development process from proposal to final report is presented. You are responsible for creating the definition of the problem, establishment of criteria, procedures, assumption and limitations. Results and decision-making speak to the implementation of the evaluation and

the final report; you are not responsible for these components of the evaluation model.

Additional information about evaluation methodology can be found in appendixes A and B. Read this information more than once. The information will help you understand the evaluation research model and will assist you with proposal development. Your research instructor will provide you with assistance and additional guidelines regarding this assignment.

Guidelines for the Evaluation Methodology Research Proposal

(Adapted from Evaluation Methodology Learning Activity Package
by Kenneth Varcoe, Ph. D.
Program for Higher Education, Nova Southeastern University)

PROBLEM IDENTIFICATION

The initial procedure of an evaluation study is to define the **problem**

Problem **A problem statement describes the *existing situation that needs to be addressed by a research study*. Typically, the existing situation involves a *lack of evidence that the activity or product is doing what it was established to accomplish*.**

Examples:

- There is no evidence that the remedial math program is effective.
- There is no evidence that educational delivery via multi-media personal computer is better than traditional classroom instruction.

Purpose of of the Study The purpose of an evaluation study follows directly from the statement of the problem. If the problem is sufficiently delimited and focused, then the purpose is to solve the problem by implementing an evaluation problem-solving methodology study. Accordingly, the purpose is to determine the degree to which the program meets the goals or criteria established. Thus, the purpose can be stated simply as follows: “The purpose of this evaluation study is to determine how effective the ABC program is in achieving the intended outcomes.” This statement of purpose implies that intended outcomes (criteria) for effectiveness are established and the assessment information generated will be compared to what was desirable about the program outcomes.

Research Questions Research question(s) include a query about an assessment of the relative value, compared to criteria, for various components or objects of the evaluation study. Oddly enough, research questions are written as questions. Thus, the research question might be developed as follows:

- ✓ Does program ABC meet the established effectiveness criteria?

Note: Specific examples include where criteria are established to reflect a level of performance or change in some measure (improvement)--that is, absolute or relative standards can be included in a research question.

Literature Search At this point in your study, you should conduct a preliminary or exploratory literature search. The literature search in an evaluation study can result in information useful in several key areas that can assist you in developing the proposal. Your information search must include a search of resources available within Educational Impact.

- Information can help in the development of the design of the study.
- Conceptual information on evaluation models helps you select the most appropriate model for your study.
- Information assists in the development of standards or criteria for your study.
- Information about approaches, models, and results from other similar studies can inform your approach and strategies.

Note: The literature review in your evaluation proposal is brief, usually containing at least fifteen sources. For the project and report, your literature search should be more extensive. Your sources should be primarily from the last five years. Only well-known, classic studies should exceed the 5 year time period.

ESTABLISHMENT OF CRITERIA

The second component of an evaluation study is the establishment of criteria.

Criteria are the indicators of what is “good” or “of value.” Simply, criteria define the ideal state of the program, activity, or product.

There are **two steps** involved in establishing criteria:

- Development
- Validation

Development In theory, to develop criteria for your evaluation study, you need only refer to the standards established for the program or product when it was created. In reality, however, such standards are often vague. The following are guidelines for developing criteria:

- Criteria should be considered valid as an indication of the program or product’s worth.
- Specific metrics or indices that relate to the value criteria may be viewed independently or collectively in evaluation studies.
- Criteria should be discrete and specific whenever possible.

- Criteria should be developed around established goals or objectives, if such expected results exist.
- If expectations are vague or do not exist, a process for establishing evaluation criteria needs to be developed. This process frequently includes input from stakeholders of the program or activity.
- Criteria need support and endorsement from the decision maker(s) who will be using the results of the evaluation study.
- Agreement on established measures is essential to establish validity of criteria for quantitative studies.
- Quantitative studies normally focus on the gaps between observed results and criteria and use this information to make judgments and consider recommendations about the programs or activities.

If criteria are vague or non-existent, what processes do you need to implement in order to define the criteria?

Validation

Once you have developed the criteria for your evaluation study, they need validation (i.e., several people should concur that your criteria are, in fact, appropriate measures of the value of the program or activity you wish to evaluate).

Example: In a computer literacy course, one objective might be that the student will demonstrate ability to enter, edit, save, and print a document using the keyboard. If only written test score data are collected, there will be evidence of student understanding only. The objective, however, calls for demonstrated competence. Thus, the evaluation criteria (test scores) are not a valid indicator of the program's value, according to its objectives. More appropriate evaluation criteria might include successful completion of the entry, editing, saving, and printing of a document using a keyboard.

How to validate criteria for an evaluation study

- Determine the similarity between the criteria for your study and the criteria for similar studies found in the literature.
- Ask for feedback on your criteria from subject matter experts (i.e., people who have either conducted evaluation studies or evaluated a number of similar programs or activities).
- Ask stakeholders in the program or activity whether or not information about your criteria will provide evidence of value and help in the decision making process.
- Ask decision makers involved in the program or activity whether or not information about these criteria will provide evidence of value and help in the decision making process.
- Consider all feedback and reading when refining/revising your criteria.
- Document all feedback. Since this documentation will be necessary in the final report, it will prove useful to create a brief form that can be used to focus the reviewer and collect comments and feedback.

- Criteria Validation--Normally, formative and summative review processes are utilized to obtain input and suggestions about the proposed criteria for effectiveness.

PROCEDURES

The third component in an evaluation study is the development of procedures. The key steps for evaluation studies are as follows:

- Review literature and seek other information pertinent to the study.
- Select model and establish criteria (validate).
- Design assessment process (mechanism) and collect data.
- Analyze data (including “gap analysis”) to produce findings.
- Make decisions or recommendations (based on the findings).

Although these steps are depicted linearly, they are iterative. For example, you may conduct a brief literature review, collecting and analyzing data in order to select a model and establish criteria. Once you have selected a model and established criteria, you will conduct a more extensive literature review and collect and analyze additional information and data to refine criteria and assist in answering your research question(s).

<u>Key Steps</u>	<u>Processes</u>
Review Literature	Produces information relevant to the topic and nature of the problem. Results in a conceptual base for the evaluation information gathered through this review serve to develop criteria, which will be used to determine the worth or value of what is being evaluated. The literature review must include at least two resources located using Educational Impact.
Establish Criteria	Specifies what will be evaluated and what is indicative of “good.” Defines the ideal approach, product, plan, program, etc. Procedures used to develop criteria should be described. Criteria need to be reviewed and validated.
Design Assessment Mechanism and Collect Assessment Data	Describes in specific terms what information is needed and how the information/data will be obtained or collected. Design aspects such as objective measurement, representative sampling, experimental control, and statistical techniques need to be considered, selected, planned, and implemented. A process will need to be implemented to validate the instruments that will be used to collect the assessment information.
Analyze Data	In data analysis, data collected are compared with the objective criteria established at the start of the project. Descriptive statistics most likely will be used. You may also use inferential statistics. The key is to plan your data analysis before your data are collected, to prepare for data acquisition and recording, and to conduct the data analysis according to the design you described in the proposal.
Decisions/ Recommendations	Based upon the data analysis you will have a series of findings. These should be able to support some decisions. This will be discussed in the last part of the proposal.

ASSUMPTIONS AND LIMITATIONS

The fourth component in the evaluation study addresses assumptions and limitations.

Assumptions

- General:** The primary assumptions used in quantitative approaches relate to the validity of criteria established for the program or activity and the measures or techniques used to collect information and data.
- When expert panels are used to establish validity, there is an assumption that the experts are able to perform this task (validate instruments, goals, objectives, etc.).
 - Since evaluation studies are usually conducted within the context of a specific environment, it is assumed generally that the study is valid for that environment.

- Specific:** In order to carry out the specific design components of an evaluation study, assumptions are made about the procedures. Think about the assumptions you have made.
- Sampling: have you assumed a representative and significant sample?
 - Measurement techniques.
 - Statistical treatments.
 - Assumptions particular to the research procedures used.

Limitations

- **General:** The most common general limitation of any evaluation project is that the results are not normally generalizable because the data and information obtained for the study pertain to specific programs or activities in a unique environment.
- **Specific:** In every evaluation study, the research procedures used to conduct the study have limitations. Think about the limitations of the specific research design you used. Be sure to include any limitations surrounding:
 - potential flaws in the research design
 - sampling process
 - response rates
 - non-respondent biases
 - scope and construction of instruments used
 - criteria for the study
 - statistical analysis

(This component includes the results of the study and the assumptions and limitations are discussed in the context of results. In LDR 8564, you will address the assumptions and limitations as indicated in the proposal format in the Guide to the Applied Dissertation Process.)

DECISION MAKING

The fifth component of an evaluation study is made up of the decisions (or recommendations) for which your study provided the evidence. From the analysis of the data, evidence is developed to reach conclusions and support decisions. But offering conclusions and decisions is not enough. A logical sequence of information on the findings and discussion of the findings should bring the reader of your report (or the decision-maker) to the same conclusions and decisions.

This component of the evaluation study has the following four sections:

- **Discussion:** Does something in the literature support or contradict your results? Discuss it.
- **Conclusions:** How does this discussion, based on your findings, answer your research questions?
- **Implications:** What are the implications of your results? For recommendations? For future practice? For future research?
- **Recommendations:** Based on your conclusion, what would you recommend?

(You are not responsible for writing this component in LDR 8564.)

Appendix A

Evaluation Research Methodology

(Adapted from Evaluation Methodology, Learning Activity Package
by Ken Varcoe, Ph. D.
Program for Higher Education, Nova Southeastern University

The term “evaluation” has a number of different meanings in education depending on both the context and the circumstances in which it is used. Some literature uses evaluation in conjunction with statistical techniques; thus, the concept relates to applied statistics. In the context of research in education, program evaluation is contrasted with a more theoretical effort used to evaluate a hypothesis.

Basic research entails focusing on the theoretical or fundamental structure or process with the goal of understanding the phenomena. Applied research focuses on the practical or implementation of theoretical constructs. The evaluation study falls into the category of applied research. The unique feature of the evaluation methodology is that an organized, structured procedure is followed to produce and analyze data that enables judgments to be made in the control or improvement of an agency, institution or a business.

Definition	An evaluation study is a carefully implemented set of procedures used to assess the value, merit, or worth of a program, practice, activity, product, process, etc. when compared with pre-established criteria. The comparison of the observed (assessment information) to the criteria-- called “gap analysis”--produces the findings. These findings are the basis for recommendations and/or decisions.
Uses	<ol style="list-style-type: none">1. Evaluation can identify the value of an activity.2. Evaluation can be used to plan for or improve a process, product, or practice.3. Evaluation can be used to make judgments or decisions.
Evaluation Process	As a methodology, evaluation--no matter what model is used--needs to contain specific components: <ul style="list-style-type: none">▪ agreement on standards or criteria (the ideal)▪ collection of assessment information (the real)▪ determination of discrepancies between the assessment information and the established criteria for the process or product being evaluated (“gap analysis”)▪ use of discrepancy information (findings) to identify weaknesses and use it as the basis for changes (decisions and recommendations).

Steps An evaluation study is an iterative process (i.e., although the steps are presented linearly, you may recycle to previous steps as new information is needed or obtained).

The main components of an evaluation study are as follows:

- Definition of the problem
- Establishment of the criteria
- Assessment procedures
- Assumptions and limitations
- Implementation and data analysis
- Decision-making and recommendations

Each step of the process consists of a series of sub-steps that may be revisited as you refine the design of your study.

NOTE: Evaluation can be quantitative and qualitative in nature. The information about the project is intended to be applied to a quantitative evaluation model. This does not mean that students cannot use the qualitative model. If you choose a qualitative model you should read the following information.

Evaluation studies can be used as a (n):

- tool in program management, policy analysis, and decision making;
- determination of accountability;
- focus on assessment of educational outcomes;
- assessment of curriculum and materials, instructional methods and activities, learning processes or approaches, organizational or management practices, programs for special populations, intervention techniques, etc.; or
- assessment of performance of faculty, staff, and students.

Evaluation Models

Evaluation begins with the thought that you do not have enough information to determine whether a program or product is doing what it ought. To determine if something is wrong or needs improvement, the first step is to define the problem. However, as you gather information to bring the problem into sharp focus, it helps to have some information on the types of studies that might support your evaluation. Since these guidelines concentrate on quantitative studies, here are some of the most common models used for evaluations.

Objective-based Evaluation: Requires establishment of objectives for the program or activity and the measurement of performance.

Example:

- Competency testing of students used to judge the effectiveness of the curriculum.
- Differences between objectives of the program and the actual achievement scores (discrepancy scores) are used to guide decisions about the program or curriculum.

- This type of evaluation frequently uses behavioral objectives (explicit statements of expected outcomes).

Limitations:

- focuses only on outcomes specified in objectives
- creates possible problems of acceptance of measures as valid
- ignores other valued outcomes that may be program or activity related
- negative outcomes unrelated to measures not considered

Needs Assessment Evaluation: An assessment of the discrepancy between an existing set of observations and the desired conditions. In this model the “desired conditions”—the criteria—must be pre-established and the observed are compared to these “desired conditions.”

- This type of evaluation is typically used when a preliminary statement about current program merits implies a gap between real (existing) conditions and ideal (desired). “What is and what should be?”
- It can be effective in determining specific needs and using them to focus development of approaches for inclusion in the design (or redesign) of programs.
- It is helpful to define a range of desired criteria (i.e., ideal, “best in class,” “best of the breed,” norm, typical, minimum level/standard, etc.).
- Levels can define acceptable or desirable variability for a particular set of activities.
- Consider the homogeneity of the group--recognize that individual or subgroup differences may vary considerably from the overall group.

Note: *If one merely attempts to obtain information about the perceived needs of a group of people, this does not constitute an evaluation. This would be a descriptive research study. A comparison of perceived needs to some pre-established set of needs (criteria) would have to be incorporated to conduct an evaluation study.*

Formative and Summative Evaluation: Assessment of a product with a particular purpose in mind and at a particular point in the product’s life. Formative evaluation is conducted during product development to refine the product. Summative evaluation is conducted after the product is complete to determine implementation feasibility or need to re-design.

Example:

- Pilot testing a course or curriculum (formative); assessing an existing curriculum to see if it should continue (summative).
 - Criteria must be established or understood by reviewers *prior* to review.
 - Formative reviews are frequently conducted internally--reviewers may even be directly involved in product development.
 - Summative evaluations are usually conducted by persons external to the organization and with demonstrated expertise in the area--this is the “expert model” approach to validation of the potential value.

- Summative evaluation uses established criteria (program/product goals, objectives, etc.) as the foundation for developing a mechanism to collect assessment information and feedback from the reviewers--*the feedback mechanism must be validated.*

Program Management Evaluation (CIPP): Comprehensive four-part system to guide decision-making function in program management. It incorporates elements of all earlier models.

- Context: Identification of problems and needs in a particular setting.
- Input: Assessment of resources and strategies needed to accomplish goals and objectives--used by decision-makers to maximize potential for successful program implementation.
- Process: Data collection and analysis after program or product pilot--this is a formative evaluation that uses data collected from initial implementation to correct weaknesses.
- Product: Similar to summative evaluation, assessment of degree to which program achieved desired outcomes/goals.

Note: Regardless of the model utilized, the design of the study needs to establish criteria, collect assessment information, and compare information to the criteria (to produce the findings of the evaluation).

Qualitative Evaluation

The major models of evaluation can be categorized as either quantitative or qualitative. Frequently the complex activities or programs that are the subject of an evaluation study may defy simplistic quantitative approaches to evaluation. Qualitative approaches may enable the researcher to obtain valid information that would not be produced through quantitative methodologies. The qualitative models are complex and frequently require sophisticated researchers. This information has been developed to provide an introduction to qualitative evaluation models and approaches.

Qualitative approaches typically view the researcher as the primary instrument for collecting data and the researcher makes decisions about the process while the study is in progress. The main methods or research designs include case studies, participant observation, ethnographic interviews, concept analysis, and documentation analysis. Qualitative research methods rely on investigator skills in observation and interpretation and are usually considered to be much more subjective than the typical quantitative approaches. Qualitative research focuses on the participant's perspective of understanding of the situation or condition.

When using qualitative methods, establishment of criteria to judge success or value of the program is also crucial to conducting an evaluation; however, the criteria are not typically identified as an initial step in the process. The criteria evolve or emerge as an integral part of the application of the various qualitative methodologies. The criteria may relate to perceptions and opinions of those affected by the program (stakeholders). Some general agreement prior to the implementation of the study (or validation by experts) is desirable even though the criteria may change and evolve as the study

progresses. When the qualitatively oriented study is completed, the validity of the study will be determined by the decision-makers as they review the results and recommendations. The merits of the study are dependent upon the perceived validity of the criteria for judgments as well as the information and analysis presented.

Qualitative Methods

The various qualitative models may provide information about aspects of the programs that the quantitative models do not address. The quantitative models do not deal effectively with some important problems in evaluation such as providing insight into why a particular objective may be considered worthwhile while other objectives may be rejected by some stakeholders. Qualitative models do not assume that objective criteria exist for judging the worth of a program or activity. They do assume that the values and perspectives of those judging the program influence the attributed worth or success of the program or activity. Those who are involved in the evaluation become a critical component of the process since they can influence the outcomes of the evaluation.

Responsive Evaluation

This model focuses on the concerns and issues affecting stakeholders. The model considers the overall context of the program including values and perceptions or needs as identified by the stakeholders. Instead of focusing the evaluation on established goals or objectives, this approach generates concerns and issues, providing a much more comprehensive or broader based focus for the evaluation. Concerns are stakeholder perceived threats or characteristics needing substantiation. Issues are points of contention among various stakeholders. Processes include identifying stakeholders, defining the entity to be evaluated, determining what existing data and information can be reviewed, using surveys or stakeholder interviews to identify concerns, issues, and values, collecting descriptive information about the entity being evaluated (the program), and preparing and submitting a report of the results and recommendations. The case study format is frequently used for reports, although a more standard report format can also be used.

Information can be obtained using a variety of procedures including naturalistic observation, interviews, questionnaires, standardized tests, document analysis, committee minutes, and written reports and records. Research designs are not formulated at the outset of the study; responsive evaluations incorporate emergent designs, i.e., and the design for the research changes as the evaluators gain new insights into the concerns and issues of the stakeholders. The model is complex and requires that the researcher be knowledgeable about a variety of research designs. The student considering using this model should be cautious about the limitations inherent in method that relates to the expertise of the investigator.

Adversary Evaluation

This model is similar in some respects to the responsive evaluation model. The approach creates a debate format where both sides of an issue are presented. The model is a derivative of the process used in legal proceedings where a wide array of data, including

testimony and the presentation of both positive and negative aspects, is encouraged. The initial stage of the process involves producing a broad range of issues by surveying those involved with the program to determine the possible relevant issues. The next stage reduces the listing to the more important issues and these issues become the objects of analysis by a pro and a con group. The object of this third stage is for one group to prepare the arguments in favor of the program while the other group prepares the arguments in opposition to the program. The issues are the subject of the adversarial presentations to the program's decision-makers or a jury in a hearing type setting by the two teams.

This model has obvious shortcomings and would not typically be utilized in the preparation of a research study or an applied dissertation. However, there are aspects of the model that would appear to have some application in a situation where a decision must be made about the continuation of a program or the implementation of a new approach or initiative. A thorough presentation of the pros and cons in a setting where argument is the norm could produce a much more thorough review than those conducted behind closed doors based on impressionistic information. In practice, decisions about program discontinuation or implementation are frequently made after listening to supporters of the desired decision. This method typically precludes the presentation of both sides of an issue. Finding a way to adopt some of the positive aspects of the adversarial approach would be an interesting research project.

Expert Evaluation

Experts are frequently used to obtain information about the value of a program or activity. The use of panels or teams of experts or combinations of persons with different expertise is a widely used method of evaluation. Accreditation teams frequently utilize this type of model when they conduct studies to determine if a program or institution is to be endorsed as meeting particular standards (i.e., accredited).

In theory, the experts develop a general process that will enable them to gather pertinent information about the subject of the evaluation. Processes such as participant observations, case studies, and interviews can be adapted by the researcher for use in conducting an expert evaluation. The purpose of the review is to identify the key aspects of the programs or activities that are most important and collect and analyze data and information relevant to the program. The expert reviewer prepares a critique that contains a description of the data considered as well as an analysis of the meaning of the information gathered and considered. The evaluation of the program, including the positive and the negative assessments, is presented in the synthesis of the review.

Educational criticism, as produced by experts, is sensitive to both the strengths and the weaknesses of evaluated programs. The method can provide a comprehensive and thorough review that is difficult to obtain using merely quantitative research evaluation designs. Of course, since the expertise of the evaluator or critic is the primary determinant of the validity of the evaluation, the evaluation will be only as good or valid as the competence of the expert. Sometimes the report becomes the impetus for instituting quantitative research to verify or supplement aspects of the expert evaluation. The results produced by this method may be supported and verified by information obtained through the application of other supplementary evaluation measures and techniques.