This guide provides a brief overview of the issues involved in the validation process. It was developed for evaluators of adult education projects, such as 310 projects. The guide is organized in three sections. The first section discusses the rationale for validation. The second section describes the characteristics of validation models. The validation processes described are the Joint Dissemination Review Panel Process and the Identification, Validation, Dissemination process. The final section is an overview of other issues in validation, including adoption versus adaption, evaluation experience of project staff, exemplary versus promising programs, educational versus statistical significance, responsibilities of validated program staff, and costs of validation. The guide also includes references and submission guidelines for the Joint Dissemination Review Panel Process and the Identification, Validation, Dissemination Process. (KC)
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INTRODUCTION

The various state education agencies each year sponsor special demonstration and teacher training projects in adult education in accordance with provisions of the Adult Education Act, P.L. 91-230. Under this act, the purpose of Section 310 projects is to encourage the development of new approaches and models designed to address critical educational needs which have been identified as state or national priorities for adult basic and/or secondary education. These projects often involve the development, testing, and implementation of innovative ideas and procedures to help meet major needs in adult education in the state. They focus on potential solutions to common problems rather than specifically addressing unique local needs. In particular, the New Jersey Department of Education (NJDE), through its Division of Adult Education, aims for adult education 310 projects to result in replicable models that incorporate demonstrably effective products or practices which can be adopted or adapted by other educational agencies across the state.

In a time of diminishing federal and state resources for local educational initiatives, the identification, validation, and dissemination of exemplary programs becomes very important. Through sharing successful programs, practices, and products that can be disseminated, costs of needlessly reinventing solutions can be eliminated through systematic adoption or adaption of existing validated programs. For a program to be validated, it must demonstrate in some objective manner that whatever claims it has made for its effectiveness are indeed valid or true. In short, to be validated a program must prove that it does what it says it does.
This Guide provides an overview of the steps and concerns that projects must address in going through the validation process and briefly summarizes some of the issues involved in the validation of exemplary 310 projects. Separate sections of this Guide discuss the rationale for validation; describe the characteristics of existing validation models such as the Identification, Validation and Dissemination (IVD) process used by many states and the process used by the Joint Dissemination Review Panel (JDRP) at the federal level; and summarize some of the major issues that 310 projects should consider in their validation efforts.

It's important that 310 projects consider the implications of the validation process from the initial stages of their implementation. Validation of project success is not something that can be accomplished post hoc, after the project has run its course. Rather, careful, systematic planning, documentation, and evaluation are required throughout the life of the project. The Validation Guide, by providing an overview of factors that should be addressed, gives 310 projects a framework for guiding their validation efforts.

While it is anticipated that the Validation Guide will be of most value to 310 projects, because the nature of their funding makes them particularly appropriate users, the contents of the Guide are such that it may be relevant and useful to any exemplary adult education project.
RATIONALE FOR VALIDATION

Reed (1981), in an historical review of the evolution of the validation movement, noted four early influences responsible for the phenomenon: 1) the need to justify substantial amounts of federal monies that had been pouring into local education agencies which would not continue to be available in sizeable sums, 2) the need to justify the expenditures by demonstrating that the outcomes of federally funded LEA programs are generalizable, 3) the need to attest to the reliability of the programs and practices to be disseminated, and, 4) the limitations on the ability of national systems such as ERIC to effectively disseminate exemplary programs and practices. A long range goal was to enable the creation of a bank of proven educational practices that provided some consumer protection for potential adapters or adopters. These factors led to the development of processes such as the Joint Dissemination Review Panel, the Identification, Validation and Dissemination process, Sharing Business Success (SBS), Project Information Packages (PIPs), and the National Education Practices File.

The rationale described above indicates a program sponsor's perspective on the validation process, an important perspective certainly shared by NJDE and other state education agencies as the sponsors of adult education 310 projects. The National Association of State Advisory Councils (NASAC, 1979) described several other advantages of validation that complement the above list, while also addressing the perspectives of the developer and consumer. They note that the validation process provides a stimulus for structuring the development work on a beginning project in a systematic way, effectively marshalling the use of limited resources. The
complexities of the development process are outlined and defined prior to adoption or adaptation. Forcing the publication of credible documentation about a project also reduces the risks to potential adopters and actually reduces overall developmental costs. The process insures that only "quality" projects will be disseminated. In addition, validation systems usually involve some type of network of projects that provides awareness, dissemination, and technical assistance. Finally, the NASAC study indicated that validation insures maximum educational benefit for students as well as cost efficiency for the development agency.

Even in light of the rationales described above, a New Jersey 310 Project might legitimately ask itself "How will the validation process benefit my 310 project?" A pamphlet produced by the U.S. Department of Education for the JDRP lists five important benefits that, although specifically written for the JDRP, are applicable to the validation process in general. These benefits are as follows.

1. **Internal Assessment** - Evaluation data collected as part of the validation process give you effective tools for monitoring development and implementation as well as determining overall impact.

2. **External Assessment** - Participation in a formal validation process gives you an objective, outside view of your project and can offer suggestions for improvement.

3. **Professional/Public Recognition** - Successful validation brings recognition for your project's accomplishments from your colleagues on local, state, regional, and national levels (depending on the scope of the validation) and is an affirmation of your professional accomplishments. Approval also brings positive recognition from the public for your school, or institution, an important payoff in a time when education has been heavily criticized in the media.

4. **Increased Chances of Obtaining Funds** - Successful validation improves your institution's track record. As educational budgets shrink, institutions with demonstrated effectiveness may be viewed as more efficient and less risky than funding untested
agencies. In addition, the validated program is more likely to receive competitive funds.

5. **Entry into Diffusion System** - Through JDRP validation your project is eligible for entry into the National Diffusion Network (NDN) and may compete for dissemination funding. In such a case, your project could be used throughout the country.

Your project receives the first two benefits listed above whether or not your validation effort is approved. The latter three are additional benefits that result from approved validation efforts. Closer to home, validated 310 projects could be disseminated across the state through an adult education 310 dissemination project.
CHARACTERISTICS OF VALIDATION MODELS

As noted above, there are several different models of program validation that are currently being used. Reed, Patrick, and Holdzkom (1981) conducted a comprehensive survey to determine what validation processes were used by state education agencies. Virtually all of the 45 states that reported a validation mechanism used either the IVD process, the JDRP process, a modification of one of these two, or a combination of IVD and JDRP. New Jersey falls into the latter category, using the basic IVD procedures but incorporating criteria from the JDRP. Although New Jersey has suspended its formal validation process at present, Department officials are currently considering reopening validation procedures and instituting new validation initiatives.

Several indispensable resource guides describe in detail the characteristics of validated programs, criteria for evaluation, steps for completing the process, and examples of model submissions. These include the JDRP Ideabook (Tallmadge, 1977) and IVD's Sharing Educational Success (Hinze, 1979). In addition, specific evaluation concerns are addressed in two volumes published by the U.S. Office of Education in the mid-seventies, A Procedural Guide for Validating Achievement Gains in Education Projects (Tallmadge and Horst, 1976) and A Practical Guide to Measuring Project Impact on Student Achievement (Horst, Tallmadge, and Wood, 1975). Finally, Reed's (1981) report for NIE's Research & Development Exchange, The Search for Quality Control in Dissemination of Educational Products and Practices provides a comprehensive description of the various models for program validation. Although this Guide summarizes
much of the information contained in the above documents, the original sources should be reviewed for more detailed description.

There are procedural differences between the validation models; there are also many similarities. Several common characteristics are listed below.

- Detailed documentation of program background, development, and operations is needed.
- There is usually a focus on student impact.
- Impacts must be significant, that is, important and of sufficient magnitude.
- Evidence of impact must be credible; "hard" evaluation data on sizable student samples is almost always required.
- A sound experimental (or quasi-experimental) evaluation design is important in order to provide valid and reliable measures of post-intervention conditions and credible estimates of conditions without the intervention.
- Programs must be able to be replicated or disseminated.

Specific criteria and procedures are presented below for the JDRP and IVD validation processes.

The Joint Dissemination Review Panel Process

The JDRP, a joint effort of the former U.S. Office of Education and the National Institute of Education, was initiated in 1972 as a mechanism to review exemplary programs developed with federal funds so validated programs could be disseminated through systems such as the National Diffusion Network. The panel now reviews a broad range of programs from all states and supported through a variety of developmental funding sources.

The JDRP Ideabook indicates that "evidence of effectiveness is the sole criterion for approval." It's important to emphasize that a program
must not only be effective, but must also provide credible evidence of effectiveness. This distinction is often problematic for many worthy program applicants. Six questions must be addressed in a JDRP application.

1. Did a change occur? Was the change a positive one that was in some way related to the objectives?

2. Was the effect consistent enough and observed often enough to be statistically significant?

3. Was the effect educationally significant? In judging the educational significance of an intervention's impact, two factors must be considered: the size of the effect and the importance of the area in which it happened. There ought to be a reasonable balance between the two factors. The chance that a small gain would be considered educationally significant is higher in a broad or educationally important area than in a narrow or less important area.

4. Can the intervention be implemented in another location with a reasonable expectation of comparable impact?

   Is the project setting unique?

   Is the project effect solely due to the unique characteristics of the staff?

   What evidence is there to suggest that the intervention would work with different participants, in a different setting, and with a different staff?

5. How likely is it that the observed effects resulted from the intervention?

   Can plausible alternative explanations be generated?

   Can the alternative explanations be rejected?

6. Is the presented evidence believable and interpretable?

   Are there any apparent inconsistencies in the data presented?

   Are enough data presented to satisfy the skeptical evaluator?

   Are the inferences drawn from the data consistent with the evidence?
Has evidence been presented that common errors have been avoided?

Project staff who decide to submit their project for review by JDRP follow a specific format for submitting materials (see Appendix). They can submit no more than 10 pages of explanation and documentation. Surveys of program applicants suggest that the difficulty of selecting the most appropriate information and of demonstrating avoidance of typical evaluation pitfalls lead most project directors to hire outside evaluators.

Panel reviews examine factual accuracy, social fairness, and possible harm to users, as well as evidence of effectiveness. Approved projects are eligible for, but not guaranteed, dissemination funds distributed by the Department of Education for the National Dissemination Network. Approved projects are described in the annual NDN catalog, Education Programs that Work, which is distributed nationally.

The Identification, Validation, Dissemination (IVD) Process

The IVD process was initiated by several national groups with heavy input from state education agencies. Although it was initially designed for the validation of Title III (and later Title IV-C) projects, the developers hoped that the procedures would be applicable for validating other projects as well. The IVD process is guided by a handbook titled Sharing Educational Success: A Handbook for Validation of Educational Practices. The handbook was written with the intention of allowing states a great deal of autonomy in the validation process. Using IVD, states validate exemplary projects based on the following two criteria.

- **Effectiveness/Success** - Project objectives identified for validation are supported by convincing evidence showing statistically and educationally significant outcomes. The documented effectiveness or success of a program or practice is
of paramount importance for validation. A program or practice can be "proven to work" in numerous ways including: (1) by demonstrating with convincing evidence that the program will bring about desired change or improvement over existing practices, (2) by demonstrating a more efficient or cost-effective program or practice through improved management, resource utilization, etc., or (3) by demonstrating with convincing evidence that a desired objective may be accomplished without detriment to the existing program.

- Exportability - Information is provided to demonstrate that the project or practice is capable of being diffused to other school districts and can be adopted or adapted by other school districts with similar needs and environments. For the project as a whole (or for each applicable component), information required includes evidence of educational significance, a description of the minimum level of adoption or replication which would produce similar results, and information about: the target population; staffing and training requirements; materials, equipment, and facilities; replication costs; and special problems.

Sharing Educational Success describes six steps to be taken in the validation process. These steps can be modified by individual states to meet their own needs, and time-and-money-saving options are suggested.

1. LEA completes and submits application for validation to the state agency or office responsible for coordinating validation activities at the state level.

2. Preliminary review by the state agency for validation followed by:
   a. approval for validation team review; or
   b. return to the local education agency for revision according to suggestions; or
   c. disapproval for further validation.

3. Selection of the validation team:
   a. the team leader to be selected out-of-state from the list of U.S. Department of Education's trained team leaders within the region,
   b. two team members selected within the state from the list of state-trained members.

4. Review of application by individual team members. (This may be done as individuals in isolation from the other team members or
the team may be convened to review an individual application or serve as a panel to review a group of applications.)

a. the team leader makes recommendations to the state agency responsible for validation that the identified revisions are to be completed before the on-site team visit is conducted.

b. the team leader informs the state agency responsible for validation that the on-site visit is to be conducted according to the existing application.

5. Conduct of the on-site visit. The most frequent procedure is to send all team members on-site. Some states have designated an individual team member to conduct the on-site visit as a cost saving measure. The individual conducting the on-site visit serves the role of collecting and clarifying any incomplete or missing information identified by the review of the application by the whole team.

6. The primary decision of the validation team is either approval or disapproval under the IVD standards.

If approved, the team might also make the following recommendations:

a. submission to JDRP.

b. state dissemination.

c. a special component or product be recognized as worthy of distribution.

The IVD process requires no commitments from the federal or state governments. In the past, many states have operated their own diffusion networks and have offered dissemination funding. In addition, the IVD process is often a preliminary step in preparing a JDRP submission. Specific submission requirements for the IVD process are summarized in the Appendix.

Evaluating for Validation

To prepare properly for validation of any project, a carefully planned and implemented evaluation is required. For a detailed discussion
of evaluation issues in adult education, see the companion document to
this one entitled An Evaluation Guide for Adult Education Projects (Dusewicz,
Biester and Kenney, 1983). While the companion document referenced above
addresses evaluation planning, design and procedures in depth, this sec-
tion of the present Guide presents a brief overview of evaluation pitfalls
and suggestions related to validation.

Many JDRP applications are rejected because of flaws in the evalu-
ation design. The RMC Research Corporation, in a major effort to validate
Project Information Packages (PIPs) for exemplary compensatory education
programs, identified 14 common flaws or potential pitfalls in conducting
an evaluation study (Horst, Tallmadge, and Wood, 1975). The JDRP Ideabook
incorporates this list of evaluation hazards and describes how to avoid
them. The flaws are listed below.

1. Claiming much, providing evidence of little. Where evidence
matches the claims of what a project says it can do, a favorable
decision is far more likely than where evidence falls far short
of goals, objectives, and claims.

2. Selecting measures not logically related to the intervention.

3. The use of grade-equivalent scores. Grade-equivalent scores
provide an insensitive, and, in some instances, a systematically
distorted assessment of cognitive growth. As such, the JDRP
does not regard them as credible indicators of achievement or
growth.

4. The use of a single set of test scores for both selecting and
pretesting participants.

5. The use of comparisons with inappropriate test dates for
obtaining information. In norm-referenced evaluations, tests
should be administered at nearly the same time as the test
publisher tested the norm group.

6. The use of inappropriate levels of tests.

7. Missing data.

8. The use of noncomparable treatment and control groups.
9. The use of inappropriate statistical adjustments with non-equivalent control groups. Making between-group comparisons using either "raw" gain scores or "residual" gain scores should be assiduously avoided.

10. Constructing a matched control group after the treatment group has been selected.

11. The careless collection of data.

12. The use of different instruments for pretesting and posttesting.

13. The use of inappropriate formulas to generate no-treatment expectations. Many projects use an unrealistic theoretical model or formula to calculate "expected" posttest scores from IQ or other pretest scores. If students do better than the calculated expectation, the project is considered a success.

14. Mistaken attribution of causality. The plausibility of alternative explanations should be carefully examined before evaluation results are attributed to project impact, as evaluation hazards are often the cause of apparent gains or losses.

It is important to consider these potential pitfalls in the project planning stages. If project administrators and staff do not understand the issues in dealing with such pitfalls, the JDRP recommends hiring an evaluation consultant. However, hiring an evaluation specialist after the fact cannot eliminate such flaws.

RBS' experience with the JDRP and IVD processes has suggested a few other recommendations for preparing a validation application, as follows.

1. Panel members will not spend a lot of time in laboring to understand the essential elements of your submission. Essential points need to be stated in a clear, concise way.

2. Regarding the above point, consider the use of subheadings that directly reflect the panel's criteria for assessing evidence of effectiveness (JDRP criteria are interpretability, credibility, evidence of impact, statistical reliability, educational significance, internal validity, and external validity). Specifically noting these under explicit subheadings would help assure the reader that you have attended to all concerns.

3. In addition to being a technical document, the submission is also a marketing document. You need to "sell" the reader on the
idea that your project is important, effective, and worth being disseminated as exemplary.

4. Make a case for your project's uniqueness right up front. Unique solutions to common problems stand a better chance for acceptance.

5. Clearly indicate your claims of effectiveness. The "evidence" section shows why you are making each claim. Evidence must be credible.

6. Sample size and comparison groups are often problems with validation of adult basic education programs. A strategy successfully employed by the F.I.S.T. project in New Brunswick was to use a replication design where the evaluation study was conducted twice. Similarly positive evaluation results for different samples at two points in time proved to be convincing evidence for JDRP despite small sample sizes and the lack of a comparison group.

7. Don't make claims for outcomes where there is no evidence.

8. Consider the documentation of side effects as you plan your evaluation study.

9. Remember that panel members, for the most part, tend to have an "experimental psychology" perspective when it comes to evaluation. As such, you'll need to use the jargon of experimental design.

10. Talk to someone familiar with the JDRP process before going to Washington for your final panel review. The experience can often be an intimidating and frustrating one for those who don't know what to expect.

11. Don't be discouraged if the initial application is not accepted. Valuable feedback and experience will have been gained and reapplications are often successful.

* A JDRP-validated project operated through Middlesex College; evaluation assistance was received from Rutgers University, and from RBS.
OTHER ISSUES IN VALIDATION

Reed (1981) and others have noted a number of other issues related to the validation process. Six of these are briefly discussed below.

Adoption vs. Adaption

Research on innovation and change has shown that exemplary programs, when replicated, most often are adapted by local education agencies rather than adopted. That is, they are changed or modified to suit local conditions and needs, rather than replicated exactly as the developer intended. Although the emphasis of validation panels is clearly on "outcome evaluation," the above finding illustrates the need for a process evaluation of the project. Operations need to be clearly documented, in detail, using qualitative and quantitative evaluation techniques.

Evaluation Experience of Project Staff

Most development project staff lack the technical evaluation expertise needed to address design and analysis concerns in the validation process. Outside help is frequently recommended. However, this recommendation has budgetary implications that need to be addressed in the project planning stage.

Exemplary vs. Promising Programs

The validation process, with its emphasis on hard evaluation data, is a rigorous one. Often, programs that are very effective in achieving highly desirable outcomes cannot go through the validation process successfully because of constraints such as feasibility or budgetary limitations. Thus, many promising practices are not publicized through existing dissemination channels. Recently, mechanisms have been developed
to address these omissions, such as the National Educational Practices File being compiled through the ERIC system, and other computerized knowledge bases such as SPIF/SPIN developed by Bibliographic Retrieval Services (BRS).

**Educational vs. Statistical Significance**

Validation panels usually require two types of significance -- statistical and educational. Although they are somewhat related, evaluation results could demonstrate either type by itself. That is, a statistically significant outcome may not be educationally significant and vice versa. Statistical significance, as the name implies, involves the use of inferential statistics to determine that outcomes can be attributed to something other than chance probabilities. Educational significance, on the other hand, is a judgment of whether an intervention's impact is sizable and important. In JDRP's words, "An educationally significant effect is one of nontrivial magnitude, in a content area generally accepted as important, which can be achieved at a reasonable cost." Educational significance is determined through theory, past experience, and expert judgment. In addition, statistical rules of thumb are often applied (e.g., the size of a change must exceed one-third of a standard deviation).

**Responsibilities of Validated Program Staff**

Staff members should realize that their roles may change as a result of successful validation. Responsibilities typically include answering requests, preparing brochures or other documents describing the project, scheduling and handling visitors, and participating in other dissemination activities such as educational fairs or conferences. In addition, staff
could become heavily involved in providing training and technical assistance in helping other agencies to replicate/adapt their program. In some cases, such as NDN, funds are available to support these services. However, applicants should realize that success has its price and the above responsibilities need to be considered when beginning the validation process.

Costs of Validation

Although there are clear benefits in conducting a thorough evaluation, and the rationale for participating in a validation effort is a convincing one, certain costs will be incurred. This is particularly true when an evaluation consultant is employed. Comprehensive evaluation efforts can be quite costly. A typical rule of thumb in preparing cost estimates for development efforts is to allocate ten percent of the project budget for evaluation tasks. However, in a time of diminishing resources, important decisions on the best use of limited funds must be made. The NASAC survey of IVD submissions indicated that Title IV-C projects in 1979 typically spent between $1,500 and $6,000 on evaluation activities. Project managers need to consider these costs during the initial planning stages.
CONCLUSIONS

This Guide has provided a brief overview of the issues involved in the validation process. Although the benefits of going through the process are many, so are the potential pitfalls. Careful planning and attention to the basic principles of good educational evaluation can lead to a successful validation experience. Validation of high quality educational programs helps to insure that practices which are disseminated to a wide audience in a cost-effective way really fulfill the claims which are made for them. The ultimate beneficiaries of the validation process are the students who participate in these exemplary efforts during the development period and in succeeding generations as the project multiplies through successful replications at additional sites.
REFERENCES


FORMAT FOR SUBMITTING MATERIALS
TO THE JOINT DISSEMINATION REVIEW PANEL

PROGRAM AREA:  (e.g., Title III, reading, career education, environmental education, education for the handicapped)

I. INTERVENTION TITLE, LOCATION:

Specify the title of the intervention and the location for which evidence of effectiveness is being submitted.

II. DEVELOPED BY:

Indicate who developed the intervention originally, even if this happened at a different site than the one for which evidence of effectiveness is being presented.

III. SOURCE AND LEVEL OF FUNDING:

List all funding sources for the intervention at the location for which evidence of effectiveness is presented and, for each source, list the amount of funds (see Figure 1 for an example).

IV. YEARS OF INTERVENTION DEVELOPMENT:

Indicate the year or years during which the intervention was originally developed or tested.

V. BRIEF DESCRIPTION OF INTERVENTION:

Briefly describe the intervention for which claims of effectiveness are being made. The description should cover at least the following points:

- What is the intervention?
- What are its objectives?
- What claims of effectiveness are being made?
- What is the context in which it operates?
- Who are the intended users and beneficiaries?
- What are the characteristics of the groups on which the intervention was developed and tested?
- What are the salient features of the intervention?
- What are the costs of adoption and maintenance of the intervention?

VI. EVIDENCE OF EFFECTIVENESS:

Describe the evidence of effectiveness for the intervention. This section should deal with each of the following points, although not necessarily in the same order:

- Interpretability of measures: Evidence that the quantitative measures are reliable and valid indicators of the effects claimed.
- Credibility of evidence: Who collected and analyzed the data, what assurances are there that the findings are objective?
- Evidence of impact: What is the evidence that something happened? What are the effects claimed for the intervention?
- Evidence of statistical reliability of the effects: What is the evidence that the effects happened often enough and with sufficient reliability to be likely to happen again under similar circumstances?
- Evidence that the effects are educationally meaningful: What is the evidence that the effects are large enough, powerful enough, or important enough to be educationally meaningful, regardless of their statistical significance?
- Evidence that the effects are attributable to the intervention: Can alternative explanations such as practice effects, maturation, selection of superior treatment groups, etc., be ruled out?
- Evidence of generalizability to the populations for which the product or practice is intended: Evidence that the product or practice has been tested widely enough and under sufficiently diverse circumstances to give assurance that the effects claimed may be similar when the product or practice is used elsewhere for the populations intended.
IVD SUBMISSION REQUIREMENTS
(Abbreviated Form)

Part I. Information and Overview
A. Applicant Information (including expenditures)
B. Project Abstract or Overview
   A two-page summary describing key elements: target group, needs addressed, what you did (process), results, significance of results, and cost and exportability factors.

Part II. Effectiveness/Success
A. Purpose and Objectives
   1. Identify the major purpose of the program or practice.
   2. List the anticipated changes or objectives for the program or practice.
   3. Identify how much change in process or behavior was expected for each objective if this was not included in the statement of objectives.
   4. Describe how the major objectives are interrelated and if they are of equal importance.
   5. Identify new or unanticipated objectives as well as any objectives that were deleted during the project.
B. Program Activities
   1. Describe the process(es) including each key element, such as:
      a. What the learner did differently
      b. What the teacher did differently
      c. Use of traditional or non-traditional materials
      d. Special management plan(s)
      e. Duration and intensity of process (i.e., daily schedule)
      f. Involvement of parents and/or community
C. Evaluation Design
   1. Describe briefly the evaluation design utilized in the project. (Time series, baseline, norm referenced, traditional experimental-control design, discrepancy model, case study, etc.)
   2. Establish that the evaluation instruments or data gathering techniques utilized were valid, reliable and sensitive. The following format is suggested for each instrument:
      a. Test or data gathering device
      b. Validity
      c. Reliability
      d. Norm group (if norm-referenced tests)
      e. Criteria levels (if criterion-referenced tests)
      f. Other relevant characteristics
   3. Show that evidence was systematically gathered and recorded.
D. Results and Analysis
   1. Report the results of the process intervention. Relate these results to specified objectives, both process and product. Indicate whether results met or varied from expectations.
      The following format would be helpful in responding for each objective:
      a. Expected change or anticipated outcome
      b. Actual change or results. Utilize charts, graphs, statistical summaries where appropriate
      c. Significance of results—either statistical or otherwise. If other than statistical provide rationale for evaluation of significance.
   For overall project results:
      a. Estimate of educational or practical significance of findings
      b. Brief interpretation of results
   2. Show that the results were systematically and competently analyzed.
   3. Report unanticipated outcomes of major importance and significance.
Part III. Exportability

The documented success of a program is an essential part in making that program available for diffusion. The actual process of diffusion may require a different, but related, set of program activities and materials. This section will identify and document the program's capability to diffuse a successful program.

1. Educational Significance
   Importance to the educational community, magnitude of the problem, benefits of a replication in another school site, etc.

2. Target Population
   Describe the appropriate learner population for the replication of the program and any unique characteristics about the original site that may limit the success of a replication.

3. Staffing and Training Requirements
   Describe special staffing and any training that is needed in order to replicate the program. Is such staff usually available to a school district; can the training be segmented?

4. Materials, Equipment, Facilities
   Describe all required program materials, equipment, and facilities necessary to replicate the program. Provide copies during on-site visit.

5. Minimum Adoption or Replication
   Describe what would constitute a minimum level of replication of your program that would produce similar results to those you have documented as successful. Can individual components be replicated?

6. Replication Costs
   Detail all costs, including costs of training, materials, and start-up.

7. Special Problems
   Describe special problems that are likely to be encountered in the replication and operation of your program. How can they be overcome or avoided?