PN-AAB-675

FIELD PAPERS

Junior Secondary Educational Improvement Project

BOTSWANA

Educational Program Evaluation Guidelines for Botswana

1988 Edition

IEES

Improving the Efficiency of Educational Systems

Florida State University
Howard University
Institute for International Research
State University of New York at Albany

United States Agency for International Development
Bureau for Science and Technology
Office of Education
Contract No. DPE-5283-C-00-4013-00

Improving the Efficiency of Educational Systems (IEES) is an initiative funded in 1984 by the Agency for International Development (AID), Bureau for Science and Technology, Office of Education. The principal goals of the IEES project are to help developing countries improve the performance of their educational systems and strengthen their capabilities for educational planning, management, and research. To achieve these goals, a consortium of U.S. institutions has been formed to work collaboratively with selected host governments and USAID Missions for ten years. The consortium consists of The Florida State University (prime contractor), Howard University, the Institute for International Research, and the State University of New York at Albany.

There are seven countries working with the IEES initiative to improve educational efficiency: Botswana, Haiti, Indonesia, Liberia, Nepal, Somalia, and Yemen Arab Republic.

Documents published by IEES are produced to promote improved educational practice, planning, and research within these countries. All publications generated by project activities are held in the IEES Educational Efficiency Clearinghouse at The Florida State University. Requests for project documents should be addressed to:

IEES
Educational Efficiency Clearinghouse
Learning Systems Institute
204 Dodd Hall
The Florida State University
Tallahassee, Florida 32306
USA
(904) 644-5442

Agency for International Development
Bureau for Science and Technology
Office of Education
Contract No. DPE-5823-C-00-4013-00
Project No. 936-5823

Junior Secondary Educational Improvement Project

BOTSWANA

Educational Program Evaluation Guidelines for Botswana

Department of Curriculum Development and Evaluation
Ministry of Education
Gaborone, Botswana

1988 Edition

IEES Field Papers are the products of IEES assistance in collaborating countries. They are papers, outlines, guides, or summaries produced by consultants or staff as part of the long-term IEES strategy which is collaboratively developed with each country for improving educational efficiency. Some of these papers are products of USAID-funded and IEES-administered field projects now underway. These papers are copied and disseminated in their original form because of their potential usefulness to technical staff, planners, and decisionmakers in developing nations and to agencies assisting those nations in the improvement of their educational systems.

A complete list of **IEES Field Papers** may be obtained from:

Improving the Efficiency of Educational Systems
204 Dodd Hall
Florida State University
Tallahassee, FL 32306 USA

FOREWORD

These guidelines are based on those drafted by Garrett R. Foster (with C. Howard Williams, Rebecca M. Lyons, Lynn S. Ilon, & Heibatollah Baghi) of the Department of Educational Research, Development, and Foundations (The Florida State University) as part of *The Model Program Evaluation Standards Project* in Florida, USA (March, 1986). The introduction to this monograph and initial revisions of the standards for the Botswana context were completed by Wes Snyder (Botswana Junior Secondary Education Improvement Project--JSEIP) with assistance from Howard Williams (The Florida State University). The first review and revision of the standards was undertaken by the Evaluation Standards and Training Seminar at FSU in September, 1987 (which included Seodi Khama, Felicity Leburu, and Florence Stoneham of the Botswana Ministry of Education, Wes Snyder and Ash Hartwell of JSEIP, and Garrett Foster, Walter Dick, and Howard Williams of FSU). Subsequent reviews were carried out in November, 1987, by the Evaluation Task Force of the Ministry of Education, and a formal presentation of the guidelines was made to a plenary session of the Botswana Educational Research Association (BERA) 1987 Conference.

The Guidelines Editor for 1987 has been Wes Snyder, Ph.D., Programme and Materials Evaluation Specialist with JSEIP and the Department of Curriculum Development and Evaluation. The Editor-elect for 1988 is William Davids, M.Ed., of the Research and Testing Centre, also in this department. Responsibility for monitoring the document and its continued usefulness will lie with the Evaluation Task Force. This department will continue to provide information based on field use of the guidelines in curriculum evaluation activities, and BERA will distribute the guidelines to researchers and evaluators throughout Botswana.

We would like to express our special thanks to Professor Garrett Foster for his permission to use the FSU-developed standards as a reference for our own efforts.

Guidelines, by their nature, must change with circumstances. To correct or contribute to the development of these guidelines, please contact:

Mr. Jakes Swartland or Dr. Ulla Kann
Botswana Educational Research Association
c/o NIR, P/Bag 0022
Gaborone, Botswana

or

Mr. William Davids (Guidelines Editor)
Research and Testing Centre
Department of Curriculum Development and Evaluation
P.O. Box 221
Gaborone, Botswana

We are pleased to bring you this first edition of the Guidelines. We trust that it will sensitise you to the dimensions of quality evaluations. Education is a complex enterprise. The evaluation of educational programmes is almost never straightforward. Perhaps these guidelines will help the less experienced through the process, and remind the well initiated of the path through the complex. In the development context, there is an implicit emphasis on doing things rather than reflecting upon their worth or merit. We must, however, periodically assess our actions. Evaluation is an essential component in the quest for better education, and education is our foundation for a better future.

Philemon T. Ramatsui

Chief Education Officer
Department of Curriculum Development and Evaluation
Gaborone, Botswana

4 January, 1988

TABLE OF CONTENTS

Foreword (Philemon Ramatsui, CEO/CD&E) i

Rationale for Guidelines 1

Guidelines Rather Than Regulations 6

Format of the Guidelines 8

Section I. General Guidelines 9

1. Professional Qualifications 9
2. Political and Social Representativeness 10
3. Individual Rights 11
4. Side Effects 12

Section II. Focusing 13

1. Programme Specification 13
2. Audience Identification 14
3. Evaluation Approach 15
4. Evaluation Costs 16
5. Feasibility of Evaluation 17
6. Access to Information 18
7. Conflict of Interest 19
8. Evaluation Management 20
9. Documentation of Agreement 21
10. Acknowledgment of Limitations 22

Section III. Design 23

1. Specification of Approach 23
2. Justification of Sampling 24
3. Justification of Measurement and Observational Operations 25
4. Obtaining Cooperation 26
5. Plan for Utilisation 27
6. Sources of Error 28
7. Data Collection Plan 29
8. Review for Harmful Effects 30
9. Record Design Changes 31
10. Specification of Interim Communication Approach 32

Section IV. Instrumentation and Data Collection 33

1. Ensure Objectivity of Data 33
2. Security of Data 34
3. Documentation of Data Base 35
4. Protecting Against Data Loss 36
5. Description of Perspectives Represented in Data Sets 37
6. Reviewing Data 38

Section V. Data Analysis and Interpretation 39

1. Specification of Appropriate Analysis 39
2. Significance of Results 40
3. Causal Interpretation 41
4. Rationale for Interpretation 42

Section VI. Reporting and Dissemination 43

1. Communicating Information 43
2. Timeliness of Information and Communication 44
3. Scope and Content of Report(s) 45
4. Reporting Findings, Recommendations, and Opinions 46
5. Balanced Reporting 47
6. Prioritisation of Findings and Conclusions 48
7. Reporting of Assumptions 49
8. Feedback to Participants 50
9. Disclosure of Findings 51
10. Longterm Storage of Data 52
11. Dissemination for Decision Making 53
12. Dissemination for Clarification, Attitude Change, and/or Decision Justification/Assessment 54
13. Anticipation of Distortion 55
14. Professional Role 56

References 57

Rationale for Guidelines

As the root of the word "evaluation" indicates, an evaluation is concerned with and influences the values and attitudinal judgments of individuals concerned with a particular programme or other entity under scrutiny. When effectively carried out, evaluation provides a comprehensive perspective on a programme to inform the judgments and decisions to be made about and within that programme. In order to serve this function, the information provided by the evaluative activities must meet many criteria -- for example, importance, accuracy, reliability, relevance, credibility, timeliness, cost effectiveness, and clarity. These qualities are the procedural goals of the evaluation process; therefore, guidelines for evaluation activities are the essential performance markers for attaining these performance requirements.

By making the guidelines for the conduct of an evaluation explicit and consistent, the procedures for reaching these goals can be clarified and improved. In particular, these guidelines should enhance the capacity of Botswana evaluations to achieve eight interrelated purposes:

1. *To inform decisions which influence policy formation and development.*

   Most decisions are made by a pluralistic management community, rather than by a lone decision maker (Cronbach, *et al.*, 1980). This means that evaluation will usually operate in the context of accommodation (which implies the negotiation among various interest groups) and only rarely in the context of command (where there is a single authority who decides the course of action from the single perspective). Policy emerges from the contrasts of interests among the potential policy makers (Raizen & Rossi, 1981). The role of evaluation is to inform these interests so that some element of rationality underlies policy decisions.

2. *To recommend courses of action or changes in present activities.*

Remediation of programme efforts to improve operations or to affect conceptual reconstruction of basic premises of the intervention are typical needs in development education programmes. Evaluation can provide information that can assist in programme or design modification (developmental evaluation). Revisionist recommendations are an important part of the evaluation process. Since most development contexts can be described as "in flux," the activity of evaluation will almost automatically lead to revised or new courses of action and operational changes. Evaluation plays an important role in the provision of feedback to the change process.

3. *To clarify programme intents and reduce informational uncertainties.*

As a result of environmental presses, programme intents can shift dramatically during the course of implementation. An evaluation can chart these changes so that programme managers can ascertain the viability and acceptability of these changes. The evaluation can also help new staff better understand the programme in terms of its own historical development. Sometimes a programme can only be rationalised when the stream of events which shaped its boundaries are fully described. In the development context, there is an urgency to get involved in many of the needs and activities that surround a programme. It's not unusual for a programme to lose its original purpose and expend its resources along its new line of attack or expand its purview and spread thin its resource base. Evaluation can provide the perspective to assess these directions and evaluate the intents of the programme (goal evaluation).

4. *To elucidate and possibly alter attitudes to the programme under scrutiny.*

Attitudes are an important part of the context of programme implementation. Variation in perspective can alter the quality "seen" in the programme and influence the range of resources and opportunity available to the programme in the future. Attitudes also provide a window to implementation issues. By understanding the various orientations to the programme, we can unravel the important issues from the myriad of development problems with which any intervention must grapple. Participants and nearby observers of the programme "carry" with them a great deal of informal information about the activities of the programme. Tapping this resource can lead to greater insight into the programme. Attitudes are not necessarily directly linked to individual behaviour, but they do tend to predict general behaviour They must be dealt with to accomplish meaningful change and to fully understand the programme-in-context.

5. *To encourage commitment to and to ensure the context fit of programme activities and goals.*

A programme can hardly be expected to be worthwhile unless the participants are committed to its success and have effectively disengaged from counter-measures which might undermine its effectiveness. Programmes that emerge from international aid assistance projects are sometimes (perhaps even frequently) thrust upon the system. An evaluation may be required to sort out the interface dynamics of the programme with the dynamics of the extant system. International projects can also produce competitive strategies, either within complex projects of one donor or across several donors (e.g., Nagel & Snyder, 1987). With multiple, fragmented influences contending for acceptance and adoption by the system actors, an evaluation may be required to address the

problem of *pluralist accommodation* (Cronbach, et al., 1980). No innovation can hope to fit all contexts and be acceptable to all stakeholders. Adaptive evaluation seeks to fit or adapt the programme to a local context or situation that may have multiple cultural and political agenda.

6. *To provide insight into the programme activities and possible consequences.*

Evaluation has been described as involving both description and judgment (Stake's two "countenances," 1967). In the context of development interventions, a programme consists of a network of hypotheses (Klaus, 1974). The network reflects the interrelationships of presumed links that exist among programme components. Evaluation "describes" these components and then "judges" them in terms of the hypothesised links, which in turn lead to some set of consequences. The description must be rich and deep so that linkage diagnosis is possible, both to improve understanding of the programme and serve as a basis for remediation, if necessary. The evaluation serves as a road map of the programme. By examining the connections, it becomes possible to follow qualitatively the causal paths that programmatically bring about the accomplishment of change.

7. *To inform programme management about problems and issues confronting them.*

One of the major purposes of formative evaluation is to determine the effectiveness of operating practices (e.g., instructional materials or strategies), articulate the problems and issues in implementation, and ascertain ideas and opinions on how to improve the situation. Every programme has weaknesses and strengths once implemented. By providing feedback to programme

management, evaluation can assist in the revision of operational activities and materials. The point is to make education as efficient and effective as possible.

8. *To assess the needs which the programme addesses or should address.*

Programme evaluation is the assessment of value. Needs assessment determines the importance of the elimination or amelioration of problems found in the local setting. Obviously a programme should attend to some socially significant problem and lead to some significantly beneficial condition for the target group of the programme. Needs assessment establishes the worth of the problem area on which the programme is focused. Given the changing development context, priorities can change quickly and even the nature of a problem can be altered by the many influences and interventions (e.g., Snyder & Nagel, 1985). The assessment of needs must address the multivariate interrelationships among needs and their inherent subjectivity.

Of course, the long range goal of evaluation is to assist in the improvement of Botswana's education system. The major premise of evaluation is that better information will lead to better management of the education system, which in turn will lead to better education for the students. The validity of this assertion depends on the efficacy of the many intervening links in the information architecture. These guidelines address only the evaluation process, an essential contributor to the flow of quality information for the organisation of education.

Guidelines Rather Than Regulations

A review of the literature related to the use of evaluation standards and guidelines included critiques of three primary sources for Programme Evaluation Standards: (1) the *Standards for Evaluations of Educational Programs, Projects, and Materials* (The Joint Committee on Standards for Educational Evaluation, 1981); (2) the *Standards for Program Evaluation* (Evaluation Research Society, 1982); and (3) the *Model Program Evaluation Standards* (Foster, Williams, Lyons, Ilon, & Baghi, 1986). The standards selected for inclusion in this document are intended as guidelines rather than as regulations, a position consistent with that proposed in other statements of standards.

Evaluation guidelines are ideals. They are not intended to be construed as a set of procedures or techniques for the conduct of an evaluation. Rather, the guidelines are intended to enhance the likelihood of utility, feasibility, propriety, and accuracy of evaluation. They touch all aspects of evaluation, from the focusing and negotiating stages to the assessment of impact of evaluative feedback to the education system.

These evaluation guidelines do not emanate from or support any one specific model or approach to programme evaluation. They are intended to serve equally well for qualitative or quantitative methodologies, decision or value orientations, beginning or established interventions, and internal or external assessments. They should be revised when found incompatible or incomplete with respect to professionally recognised programme evaluation approaches or practices. The guidelines are not intended to exclude any conventional evaluation method from being considered acceptable or worthwhile when judiciously and correctly implemented. Furthermore, it is important that the guidelines be administered flexibly to accommodate rather than to exclude evaluation efforts of demonstrable utility.

These guidelines should provide a common frame of reference for both evaluators and administrators as to the appropriate expectations of an effective programme evaluation. Use of these

guidelines should sensitise evaluators and administrators to the elements of an evaluation which otherwise might be missed, and thereby contribute to higher quality programme evaluations throughout the education system.

Format of the Guidelines

Number, Name, Statement of Guideline, and References

Example --

I.1. **Professional Qualifications:** Evaluation staff should be selected on the basis of evaluation credentials and experience or trained in evaluation and supervised by professionals to ensure competence, consistency, impartiality, and ethical practice. (AERA B2; ERS 21; FSU I1)

References to related Joint AERA (American Education Research Association) / APA (American Psychological Association) / NCME (National Council on Measurement in Education) standards, listed as (AERA), to ERS (Evaluation Research Society) standards (ERS), and to FSU (The Florida State University group) standards will appear in brackets after the statement. In the above example, "AERA" refers to Joint Committee Standard B2, "ERS" refers to similar Standard #21 from the Evaluation Research Society, and "FSU" refers to similar Standard I.1. from Foster, *et al.* These references can be consulted for further information.

- **Clarification:** provides a brief explanation of the guideline.

- **Suggestions:** rules-of-thumb for the application of the guideline are also provided. Readers are referred to the Joint Committee's *Standards for Evaluations of Educational Programs, Projects, and Materials* (New York: McGraw-Hill, 1981, ISBN 0-07-032725-4) for a more extensive treatment of AERA referenced standards.

Educational Programme Evaluation Guidelines

I. General Guidelines

I. 1. **Professional Qualifications:** Evaluation personnel should be selected on the basis of credentials and experience or trained in evaluation and supervised by professionals to ensure competence, consistency, impartiality, and ethical practice. (AERA B2; ERS 21; FSU I1)

Clarification:

The formal academic credentials, professional experience, and personal characteristics of the evaluator affect to a great extent the quality of the evaluation and correspondingly, the value placed on the evaluation by the users of the information. Thus, either by selection or through training and (supervised) experience, evaluators should exhibit technical competence, substantive knowledge, integrity, and other characteristics that will inspire confidence and credibility.

Suggestions:

a. Establish explicit qualifications and job descriptions for evaluation positions.

b. Provide inservice training where competencies do not match position or task requirements.

c. Consider the skill and personality requirements of a given evaluation task when assigning personnel.

d. Obtain qualified external technical assistance when necessary.

e. Evaluation may be best carried out by a team of professionals with different skills and areas of expertise.

I. General Guidelines

I. 2. **Political and Social Representativeness:** The evaluation must be attentive to the different adversarial/advocacy groups with respect to any of the evaluative issues to ensure the respresentativeness of the various viewpoints. (AERA B2)

Clarification:

The educational development context has many constituencies that may be overlooked in the rush for problem solutions. All viewpoints must be taken into account, particularly because education has such broad impact on the society. Fortunately, Botswana enjoys a large degree of freedom of information. Any evaluation must contribute constructively to the open debate of important issues, respecting both the responsibility that freedom entails and the need to reflect all viewpoints fairly and appropriately.

Suggestions:

a. Identify the key issues and the range of viewpoints that accompany the programme.

b. Remember that information belongs to the informant, so obtain release permission for sensitive data.

c. Debate over issues should be carried out as openly as possible, such that all sides to issues understand conflicting and contrasting viewpoints.

d. Be sure that all constituencies have an adequate opportunity to participate in and react to evaluation products.

I. General Guidelines

I. 3. **Individual Rights:** Conduct all evaluation activities so that the rights, welfare, dignity, and worth of individuals are respected. (AERA D5, D6; ERS 22; FSU I2)

Clarification:

Evaluators must consider both the ethical and the pragmatic implications of all interpersonal interactions with those involved in the evaluation. To the extent that an evaluation has either positive or negative impact on the self-esteem or feelings of individuals or groups, the evaluation may be affected in a correspondingly positive or negative way.

Suggestions:

a. Attempt to understand social and cultural values of all participants, especially where they are diverse and/or different from yours.

b. Ascertain both the fears and expectations the participants have concerning the evaluation.

c. Minimise the disruption the evaluation causes in the participants' environment.

d. Be aware of local and national policies and regulations, as well as moral requirements and professional ethics.

e. When information is sensitive or embarrassing, and contributes relatively little to the evaluation, consider not collecting or utilising it.

f. Don't compromise professional standards to the extent of concealing any vital information, even if it might inadvertently prove detrimental to someone in a position of accountability.

I. General Guidelines

I. 4. **Side Effects:** The evaluator should bring suspected side effects to the attention of decision makers and other relevant audiences. (ERS 52; FSU I3)

Clarification:

Almost invariably, programmes, especially new ones, have unanticipated effects -- both positive and negative in nature. In a given situation, side effects may be relatively trivial or they may be more important than the programme goals. It is essential, therefore, that provision be made to identify and assess side effects so that they may be considered in any evaluation judgments or decisions.

The evaluation itself may have significant side effects on participants or other involved persons. Therefore, while evaluations typically focus on the goals of a programme or activity, it is also important to consider potential side effects at all phases of programme development and evaluation.

Suggestions:

a. The evaluator has a special obligation to be sensitive to potentially harmful side effects of the programme and/or the evaluation.

b. The earlier side effects are identified, the better; that is, the identification and resolution of potential implementation or operational problems during the planning stage can save considerable time, money, and frustration.

c. Side effects should be considered for students, teachers, communities, and all other parties who might be affected.

II. Focusing

II. 1. **Programme Specification:** The purposes, claims, context, characteristics, and significant forms of the programme or activity to be addressed in the evaluation should be specified as precisely as possible. (ERS 1; AREA A5; FSU II1)

Clarification:

A mutual understanding (between the evaluator, clients, and participants) of all aspects of the evaluation must be achieved. A detailed description of the above factors can be used as a basis for this understanding. Any evaluation is an evaluation of some "entity" -- i.e., a programme, project, physical object, such as instructional material or technique -- and could be of multiple versions or forms of that "thing." The form that the object of the evaluation takes, the surroundings in which it exists, and the purposes it is to achieve must all be understood.

Suggestions:

a. Get descriptions of the programme being evaluated and its social, political, and economic context from all possible sources (concerned parties, documents, observers) and compile them. Check accuracy by direct observation.

b. Ask the client to verify the scope of work and the compilation of information.

c. Sufficiently examine the programme so that the form(s) of the programme in varying contexts can be clearly identified.

d. Determine likely influences context will have upon the programme and the evaluation process itself.

e. If changes in the programme or evaluation process occur during the evaluation, document them.

II. Focusing

II. 2. **Audience Identification:** Identify clients, decision makers, and potential users of the evaluation results and clarify their information needs, expectations, and priorities. Where appropriate, evaluators also should help identify areas of public interest or concern related to the programme or activity to be evaluated. (AREA A1, A3; ERS 2; FSU II2)

Clarification:

Diverse audiences are always involved in any evaluation. It is important to identify them, and within resource limitations find out and accommodate their information needs. If evaluation results are based on information which is not relevant, important, or comprehensive enough to satisfy the audiences, the results are likely to be ignored or criticised.

Suggestions:

a. Use the most apparent and authoritative audience members to guide you to other possible audiences.

b. Contact representatives of the various identified audiences and ascertain their priorities and needs.

c. Reach an understanding with the client on the relative importance of the potential audiences and use this information, along with other input, to achieve a realistic balance between equity and influence in defining the evaluation purposes.

d. Emphasise the major concerns of each targeted audience so that you don't lose utility in generalisations.

e. Don't ignore other audiences that become apparent during the course of the evaluation.

II. Focusing

II. 3. **Evaluation Approach:** The type of evaluation best suited to the programme, to the evaluation purpose, and to the information needs should be identified and its objectives made clear; the range of evaluation activities to be undertaken should be specified. (ERS 3; FSU II3)

Clarification:

Once the nature of the programme, the setting, the circumstances, and the purposes to be served are understood, it is important to consider which of an array of alternative evaluation approaches is most appropriate. For example, does the nature of this programme and its effects suggest a qualitative, participatory approach, or would an external, quantitative approach be more appropriate? Equally important considerations are the timeline and resources available for implementing the evaluation. The evaluation approach may be dictated primarily by time and resource constraints.

Suggestions:

a. Get a clear understanding of the programme, the setting, the information requirements, the perspectives of significant audiences, and the resource constraints prior to deciding on the evaluation approach to be used.

b. For most evaluations, qualitative and quantitative methods compliment each other and can be integrated into a more compelling study than either would provide alone.

c. Deciding on a general approach helps to give focus to an evaluation. But rigid adherence to any single approach, in its pure form, is *not* a virtue in programme evaluation. Most evaluations break out into several major questions which may call for alternative approaches.

II. Focusing

II. 4. **Evaluation Costs:** When the cost of an evaluation becomes a serious concern of the client or evaluator, an estimate of the cost of the proposed evaluation and, where appropriate, of alternatives, should be provided. The estimate should be prudent, ethically responsible, and based on sound accounting principles. (ERS 4)

Clarification:

During the development of an evaluation design the evaluator may find that she/he has not fully anticipated the costs of meeting information needs. The cost estimates should be defensibly realistic and cover all elements of the proposed evaluation including costing of district and school personnel time "donated" to the evaluation.

If the client finds the evaluation too costly or if the evaluator finds the resources inadequate, both parties should consider whether the evaluation design has been pared to what is absolutely essential and necessary, or investigate whether or not a smaller scale evaluation could adequately serve the needs of the client.

Suggestions:

a. For online school evaluations, the estimate of evaluation costs may be a process of estimating the amount of time required of the evaluator, and an estimate of required school resources, including personnel time.

b. The cost breakdown of a proposed evaluation should be categorical by procedures, phases, materials, and human resources, in order to allow for scrutiny and negotiation of specific parts of the evaluation design.

II. Focusing

II. 5. **Feasibility of Evaluation:** Determine the feasibility of conducting the evaluation, either informally or through formal evaluability assessment. Reach agreement with clients and decision makers from the outset that the evaluation is likely to produce information of sufficient value, applicability, and potential use to justify its imposition and cost. (AERA B3; ERS 5, 6; FSU II5)

Clarification:

All evaluation procedures -- i.e., the particular actions taken in the process of collecting and using information about the object being evaluated -- should minimize disruption to the educational processes being evaluated while maximizing the information return for the resources expended. If evaluators do not consider the pragmatic effects of the evaluation, the evaluation procedures may be theoretically sound but unworkable.

Suggestions:

a. Select procedures in terms of known constraints, such as budget and available participants. Don't choose procedures or techniques that are good in textbook cases without thinking of their use in the actual situation.

b. Verify practicality of procedures with clients and participants.

c. Weigh accuracy and practicality. Compromise to the extent possible, but consider abandoning the evaluation if it appears results will be invalid or seriously flawed in a way that could mislead.

d. Ensure that personnel are sufficiently qualified to perform the planned procedures.

II. Focusing

II. 6. **Access to Information:** Establish, together with the client, those officials authorised to release evaluation data, the procedures for releasing the data, and restrictions on access to the data and/or results of the evaluation. (AERA C4; ERS 48; FSU II6)

Clarification:

"Right-to-know" considerations must always be balanced against privacy and, in some cases, security requirements (either ethical or legal). An evaluator must identify all possible "right-to-know" audiences, other requirements that might conflict, and then discuss these with the client. The responsibility of the evaluator and the client is to develop and/or implement procedures to disseminate evaluation information where necessary and to protect it where required. Treat all members of right-to-know audiences equally.

- *Suggestions:*

a. Advocate the public's right-to-know when possible.

b. Be aware of and knowledgeable about relevant legalities.

c. Reach formal agreement with the client on disposition of primary documents.

d. Specify early those officials authorised to release information and the evaluator's rights and responsibilities for disclosure and dissemination.

e. Don't give the client (or anyone else) unilateral authority to revise evaluation documents.

f. Don't release partial information that serves only one particular interest.

II. Focusing

II. 7. **Conflict of Interest:** Identify potential conflicts of interest, and take steps to avoid compromising evaluation processes and results. (AERA B2, C2; ERS 8; FSU II7)

Clarification:

The various audiences or interest groups that might seek to influence the evaluation toward some particular concern should be identified. These groups often conflict, or have other political agendas. The evaluator might also be considered an "interest group" if there is the appearance or reality of some "personal" stake in the evaluation. It is not always necessary to avoid conflict of interest, but it is necessary to plan how to deal with it; the evaluator must ensure that such conflict does not bias the process, findings, or interpretation of the evaluation.

Suggestions:

a. As audiences are identified, assess what advantages or disadvantages to them the evaluation might hold.

b. Assess the power structure within the audiences and the object of the evaluation.

c. Reassure interest groups that their concerns will be considered.

II. Focusing

II. 8. **Evaluation Management:** Clearly define accountability for technical and financial management of the evaluation through all phases. (AERA C8; ERS II; FSU II8)

Clarification:

To be accountable, evaluators must use funds for the purposes and procedures specified in the contract, maintain compliance with pertinent regulations, and have transactions verified by standard accounting and auditing procedures. Some of these functions may be retained by the client or delegated to a support group within the organisation concerned. However, the evaluator should maintain awareness of all aspects and know the extent to which he/she is held responsible for fiscal matters.

Suggestions:

a. Maintain adequate and accurate records of money and time.

b. Agree with the client on degree of flexibility in all budget areas.

c. Make sure all costs are specified in the budget.

d. Be aware of legal and ethical guidelines for use of funds.

e. Do not change the evaluation procedures, goals, or whatever without considering the fiscal effects.

II. Focusing

II. 9. **Documentation of Agreement:** Significant agreements reached during the negotiation phase, including purposes, objectives, schedule, obligations and involvements of all parties, as well as policies and procedures regarding access to the data, should be documented. When plans or conditions change, such changes should be documented. Consider the advisability of having these agreements in writing. (AERA C1; ERS 10; FSU II9)

Clarification:

Many evaluations are conducted under formal contract, and documentation of the above factors is required by law. However, even under the best circumstances, the process of writing such agreements will clarify understanding and protect all parties. Ambiguities will often become apparent during the documentation, and later misunderstandings can often be resolved on the basis of a written agreement.

Suggestions:

a. Have an outside party review agreements whenever it seems advisable.

b. Negotiate amendments as the evaluation proceeds, and make sure, when possible, they are on paper and not just oral agreements.

c. Don't adhere so rigidly to what is in writing that necessary changes are not considered.

d. Don't try to put every aspect on paper; a sense of mutual trust and respect is also very important.

II. Focusing

II. 10. **Acknowledgment of Limitations:** Evaluators should not accept obligations that exceed their professional qualifications and/or the resources available to them. (ERS 12; FSU II10)

Clarification:

The professional qualifications (both training and experience) of the evaluator must represent the range and depth of methods required by the evaluation. An evaluator who conducts evaluations or accepts other obligations outside of his/her professional qualifications may face questions regarding his/her credibility. The credibility of the evaluation report may also be questioned, as well as the validity and reliability of the generated data. An evaluator who accepts obligations which exceed the resources available to him/her may be placed in a position of trying to meet all obligations with fewer resources than necessary or eliminating other agreed upon obligations. Either choice may threaten the credibility of the evaluation and the evaluator.

Suggestions:

a. Botswana may not have many professional evaluators; based on an assessment of the competencies needed to carry out the evaluation and the documented credentials of those likely to carry out the evaluation, provision should be made for training and supervision within the evaluation plan.

b. If adequate time and/or resources are not available for the evaluation, suggest alternatives or options to meet the evaluation needs of the client; leave responsibility for decisions on the alternatives or options with the client.

c. Sometimes clients ask for the impossibility. The evaluability of the entity must be determined.

III. Design

III. 1 **Specification of Approach:** For all types of evaluations, a clear approach or design should be specified and justified as appropriate to the types of conclusions and inferences to be drawn. (ERS 13; AERA D3; FSU III1)

Clarification:

The procedures of an evaluation should be chosen with careful consideration as to the purpose of the evaluation. A description of both procedures and purposes is necessary at the end of the evaluation, so findings and recommendations will be applied and interpreted appropriately.

Suggestions:

a. Reach a clear understanding with the client about the purpose(s) of the evaluation -- i.e., the uses to which the information will be put.

b. Reach agreement with the client on the evaluation design.

c. Document the actual implementation of procedures as the evaluation proceeds.

d. Communicate with the client regarding major changes of purpose or procedure, and document these changes.

e. Do not assume that either purposes and procedures agreed upon at the beginning of the evaluation will remain constant or will be adhered to.

III. Design

III. 2. **Justification of Sampling:** If sampling is to be used, it should first be determined where purposive sampling is appropriate and where representative sampling is appropriate. The method and the details of the sampling methodology (choice of unit, method of selection, time frame, and so on) should be described and justified based on explicit analysis of the requirements of the evaluation, including generalisation where relevant. (ERS 15; FSU III2)

Clarification:

Sampling is often more economical than collecting data from the whole population. Random sampling is desirable (but often impractical) when it is necessary to generalise from the sample studied to some larger population. Purposive sampling is used when it is desirable to learn and gain an understanding about certain cases or types of cases. The credibility of the evaluation data, and subsequent analysis, interpretation, reporting, and ability to generalise beyond the case or sample under investigation depends in part on the validity of the sampling methodology in relation to the requirements of the evaluation.

Suggestions:

a. Select the unit of analysis, eg., school, classroom, student, etc., which will provide the most appropriate data to meet the evaluation needs.

b. Make explicit the reasons why any particular sampling strategy was chosen, and identify any distortions in the data that might result from the chosen strategy. That is, try to anticipate criticisms that might be made of a particular sampling strategy.

c. Liaise with the Central Statistics Office when contemplating national surveys.

III. Design

III. 3. Justification of Measurement and Observational Operations: The measurement procedures and instruments should be specified, described, and justified. Their reliability and validity should be estimated for the population to be measured. (ERS 16, 23; AERA D3, D5, D6; FSU III3)

Clarification:

Any measurement must be considered in light of the validity and reliability of the measurement instrument or process. A valid instrument allows sound inferences to be drawn for the defined context (population, etc.). A reliable instrument gives consistent results. Validity and reliability considerations or estimations should be described, and the choice of instruments or observational procedures justified on the basis of these considerations.

Suggestions:

a. Validity should always be defined in the specific context of the evaluation.

b. Evaluate multiple outcomes, and use multiple instruments or observational procedures to help provide indications of validity.

c. The type of reliability desired (stability over time, between instrument forms, etc.) should be specified with regard to the purpose of the measurement. Report actual reliabilities of your data as well as any published data.

d. Realise that, in many evaluations, the best that can be achieved is: 1) minimised unreliability, and 2) careful description upon which others can judge validity and reliability.

III. Design

III. 4. **Obtaining Cooperation:** The necessary cooperation of programme staff, affected institutions, and members of the community, as well as those directly involved in the evaluation, should be planned and assurances of cooperation obtained where possible. (ERS 18, ERS 11; FSU III4)

Clarification:

The cooperation and/or participation of appropriate programme stakeholders will have a direct effect on the extent to which the evaluation design is appropriate, the data collection is successful, and the interpretation is credible. Planning the necessary cooperation of persons and groups associated with the programme and evaluation will decrease the likelihood of overlooking or undervaluing a programme stakeholder at a critical stage. Obtaining assurances of the cooperating persons or groups will alert all parties as to the nature of the expected cooperation. The process of obtaining assurances will additionally alert the evaluator to the possibility of a lack of cooperation or antagonism by certain parties toward the programme and the evaluation.

Suggestions:

a. Obtain a list of ministry and programme staff, affected institutions, and members of the community who will be needed to design, plan, and carry out the evaluation.

b. Review this list with relevant administrators and programme staff for validation.

c. Be explicit about the evaluation's purpose and time frame to all parties involved with the study.

d. Obtain assurances, oral or written as appropriate, of cooperation and/or participation.

III. Design

III. 5. **Plan for Utilisation:** Evaluations should be planned and conducted in ways that encourage follow-through by members of the audiences. (AERA A8; FSU III5)

Clarification:

The impact of an evaluation (i.e., the effects it will have upon decisions and actions of its audiences) is always a primary concern. A beneficial impact, in which evaluation findings are used to improve educational programmes or products, select more cost-effective methods, or stop waste, is, of course, desired. But evaluators must not assume that a good evaluation will necessarily result in a beneficial impact. An evaluator must also consider taking a role as a change agent, and attempt to ensure that the audiences will take note of and utilise the evaluation results in a constructive fashion.

Suggestions:

a. Demonstrate to audiences how results can be useful to them in their work.

b. Involve members of the audiences in all facets of the evaluation, to the extent possible.

c. Provide interim reports, as appropriate, and always note to the audiences how these reports can apply to them.

d. Within limits of time and resources, plan to help audiences assess, interpret, and apply the final results.

e. Don't lose interest in the evaluation as soon as the final results are reported.

III. Design

III. 6. **Sources of Error:** An analysis of potential sources of error should be undertaken, and adequate provisions for quality assurance and control should be established. (ERS 24; FSU III6)

Clarification:

Errors in the design, planning, and implementation of an evaluation may threaten the generalisability of the evaluation. The most threatening possible errors should be anticipated so that analysis of potential error sources can provide a basis for quality assurance and control.

Suggestions:

a. Design and plan the evaluation to meet the model evaluation standards.

b. Critically examine the evaluation design and plan for inadequacies or inappropriateness, by using questions such as:

1) Is the focus adequate and appropriate?
2) Have the major audiences and stakeholders been identified?

c. Redesign the evaluation models and plans as necessary to control for potential sources of error.

d. Repeat the critique-analysis-redesign process as necessary through each implementation stage of the evaluation.

III. Design

III. 7. **Data Collection Plan:** A data collection plan should be developed in advance of data collection. (ERS 19; FSU III7)

Clarification:

The data collection plan provides an overall picture of the data collection preparation and tasks. It is necessary to ensure that all preparations and tasks are carried out in a timely and efficient manner. It should relate data collection to each of the evaluation questions including who will collect the data, how the data will be collected, and the schedule for data collection.

The plan should also be helpful in balancing the need for complete and accurate information with the practical realities of available resources and time constraints. The information derived through planning for data collection will also serve as the information base required for the development of additional data collection instruments and procedures, and will help to refine further the evaluation questions.

Suggestions:

a. Choose the data collection strategy or combination of strategies most appropriate to generate the data which will best answer the research questions.

b. Specify the instruments, procedures, and schedule for each strategy which will be used in obtaining the desired data.

III. Design

III. 8. **Review for Harmful Effects:** Activities and procedures that entail adverse effects or risks should be subjected to independent review, possibly by an advisory group knowledgeable in evaluation, and then used only with informed consent by parties affected. (ERS 27; FSU III8)

Clarification:

Data collection procedures should be reviewed for explicit or implicit adverse effects or risks to subjects or persons related to the evaluation. Examples of adverse effects or risks range from the utilisation of an experimental design in which a *clearly desirable* treatment is unnecessarily withheld from a control group (or a questionable treatment imposed on marginal students), to an interview form resulting in categories of responses which allow the identification and intimidation of respondents.

Procedures which may entail adverse effects or risks should be subjected to independent review by persons knowledgeable in evaluation and in the programme being evaluated. In some cases such a review may result in a clear decision by the evaluator; in other cases, the decision may be shared by ministry administrators and/or programme personnel.

Suggestions:

a. Review the evaluation design and the plan for the data collection strategies, procedures, and schedule with ministry administrators and/or programme personnel to review for potential adverse effects.

b. Review the proposed innovative programme or practices with school personnel to consider the need for procedures to identify students who might be adversely affected by the new programme so that alternatives can be provided.

III. Design

III. 9. **Record Design Changes:** Provision should be made for the detection, reconciliation, and documentation of significant departures from the original design. (ERS 20; FSU IV1)

Clarification:

Monitoring of the evaluation process should be conducted so that departures from the plan may be detected by the evaluator and/or evaluation sponsor. "Departures" may be in the areas of sources or types of data, data collection methods, and the data collection schedule. Detected departures should be reconciled so that departures which are determined to be undesirable are assessed as to their effects on the ability to address the evaluation questions, and what corrective measures can be taken. Departures which are determined to be acceptable/desirable should be demonstrated to be valid and reliable alternatives to their counterparts in the original design. All departures should be documented (as appropriate) as an "update," to be included in the final evaluation report.

Suggestions:

a. Use the data collection schedule, including sources and types of data, and data collection methods as a checklist for monitoring the data collection.

b. Note all departures and review for desirability and potential effects on the evaluation.

c. Update the data collection schedule to reflect the departures, acknowledging the desirable departures and revising the schedule as necessary to compensate for undesirable departures.

III. Design

III. 10. **Specification of Interim Communication Approach:** Provision should be made for the communication of interim information about the evaluation. Reports should be useful to the targeted audiences, and the process of feedback/informing should be appropriate (e.g., radio, executive summary reports, technical reports, video).

Clarification:

An evaluation is carried out in order to inform some group of programme stakeholders about what is going on in a programme, its progress, and its value to the people involved (and ultimately the general society). Communication is an important feature of formative evaluation in order to render the information useful and appropriate. The design of an evaluation must therefore specify the nature and process of communication to ensure the setup of appropriate mechanisms and the establishment of reasonable expectations. Good communication is frequently the most important contribution a formative evaluation can make.

Suggestions:

a. Remember that written reports are not always the best (and certainly not the only) way to communicate. Look into other ways that are appropriate and acceptable to the audiences of the evaluation.

b. Reach an explicit agreement with the client on the mechanisms and process of communicating the activities and findings of the evaluation.

c. Devote considerable resources to the communication process. It is fundamental to a useful formative evaluation.

IV. Instrumentation and Data Collection

IV. 1. **Ensure Objectivity of Data:** The data collection and preparation procedures should be protected by safeguards so that the findings and reports are not distorted by any bias of the data collectors or other interested parties. (ERS 25; AERA DII; FSU IV2)

Clarification:

Evaluation results and findings can be biased if the facts upon which they are based have not been impartially collected and selected. Considerations of validity and reliability enter into the objectivity of data, but selection of data used in analyses and the preparation of reports also affects objectivity. Errors of omission or commission can occur, either through deliberate attempts to whitewash, carelessness or ignorance, or audience pressure.

Suggestions:

a. Ensure that results include perspectives independent from those persons whose work or product is being evaluated.

b. Describe all steps taken to ensure reliability and objectivity.

c. Seek out and report on biases or prejudices which may have entered into any data collected.

d. Strive to achieve and maintain evaluator independence in reporting.

e. Do not surrender any authority for data selection or report editing to the client or an audience.

IV. Instrumentation and Data Collection

IV. 2. **Security of Data:** Data should be handled and stored so that release to unauthorised persons is prevented and access to data, especially to individual data, is limited to those with a legitimate need to know. (ERS 28; FSU IV3)

Clarification:

Restricting information from arbitrary or unauthorised review is essential to maintaining the confidentiality and confidence of data sources, the integrity of the evaluation, and often the utility of the results. Persons supplying sensitive information should be informed of procedures for maintaining confidentiality prior to data collection to increase the probability of obtaining accurate, candid information. Data should be stored so that they are not accessible to unauthorised persons. The method of data storage, e.g., paper, tape, computer file/disk, should be determined prior to data collection, and appropriate access restrictions should be in place before data storage.

Suggestions:

a. Negotiate secure storage and handling of the data prior to data collection.

b. Notify each person supplying data of the procedures for maintaining confidentiality (and anonymity where the potential for retribution exists) as a normal part of introducing the data collection materials.

c. When data are disseminated in any way, utilise group results rather than individual results to protect the anonymity of individual suppliers of data.

IV. Instrumentation and Data Collection

IV. 3. **Documentation of Data Base:** Documentation should be maintained of the source, method of selection, circumstances of collection, and processing of each set of data. (ERS 29; FSU IV4)

Clarification:

Documentation of the sources of data and the circumstances of data collection is crucial in order to establish the authenticity of the data; to allow reexamination of the data or a meta-evaluation; and/or for follow-up investigation related to the original sources of data. Documentation of circumstances of data collection and processing of data preparation are central to establishing the validity and reliability of the data collected, as well as the validity of the data analysis and interpretation.

Suggestions:

a. Use the data collection plan and subsequent updates as a basis for documenting the sources and circumstances of data collection.

b. Make additional notes following each data collection activity that are explicit enough to reflect possible distortion of the data through circumstances, and for accurately reporting data collection activities.

c. Describe the sources of information and the actual quantities of each used in the study.

d. Document process and personnel involved in the information gathering, and retain instruments used (to include in a technical appendix in the final report).

e. State the sampling procedure used to select the information sources, and an indication of the total available sources (population) of each type.

IV. Instrumentation and Data Collection

IV. 4. **Protecting Against Data Loss:** Appropriate safeguards should be employed to ensure against loss of data through human error or catastrophic events. (ERS 30; FSU IV5)

Clarification:

Lost data may threaten the validity or credibility of the evaluation, may be expensive or time-consuming to replace, or may contain data which cannot be recaptured. All reasonable safeguards should be taken to prevent damage or loss of data through such events as theft, heat/fire, electrical or water damage. Each method of data storage, such as paper, cassette tape, computer disks, has its own set of hazards and related appropriate safeguards.

Data additionally may be lost through inadequate coding techniques, ranging from codes which do not represent the full breadth and depth of the data to codes which hinder retrieval of or access to the raw data.

Suggestions:

a. Create backup copies of data files with highly restricted access.

b. Develop and use a data coding scheme based more on the breadth and depth of the data, and the mode of storage, and less on preconceived notions of the breadth and depth of the final report.

c. Consult with persons knowledgeable in each medium of data storage, e.g., cassette tapes, computer disks, about dangers and appropriate safeguards and backups.

d. Establish rules about the scoring, handling, and processing of data and train the staff accordingly.

IV. Instrumentation and Data Collection

IV. 6. **Reviewing Data:** The data collected, processed, and reported in an evaluation should be reviewed and corrected, so that the results of the evaluation will not be flawed. (AERA D7; FSU IV7)

Clarification:

While information is seldom absolutely complete, it is possible to make the data used in an evaluation accurate. There are many stages during information collection where errors can occur; each stage should be systematically controlled and reviewed to eliminate as many errors and sources of error as possible. Bad data can result in erroneous conclusions and recommendations. In addition, errors in data which are detected by clients can also render them suspicious of the entire evaluation effort.

Suggestions:

a. Remember that even highly competent professionals can make numerical transpositions, typographical errors, etc. Even machines make mistakes. Use accuracy checks.

b. Identify common types of errors and make sure all personnel are trained in their detection and/or avoidance.

c. Adopt standard procedures for error checking, data storage, and data retrieval; make sure implementation follows defined procedure.

d. Don't assume that directions on test instruments, questionnaires, etc., are always clear or will be followed by respondents.

IV. Instrumentation and Data Collection

IV. 6. **Reviewing Data:** The data collected, processed, and reported in an evaluation should be reviewed and corrected, so that the results of the evaluation will not be flawed. (AERA D7; FSU IV7)

Clarification:

While information is seldom absolutely complete, it is possible to make the data used in an evaluation accurate. There are many stages during information collection where errors can occur; each stage should be systematically controlled and reviewed to eliminate as many errors and sources of error as possible. Bad data can result in erroneous conclusions and recommendations. In addition, errors in data which are detected by clients can also render them suspicious of the entire evaluation effort.

Suggestions:

a. Remember that even highly competent professionals can make numerical transpositions, typographical errors, etc. Even machines make mistakes. Use accuracy checks.

b. Identify common types of errors and make sure all personnel are trained in their detection and/or avoidance.

c. Adopt standard procedures for error checking, data storage, and data retrieval; make sure implementation follows defined procedure.

d. Don't assume that directions on test instruments, questionnaires, etc., are always clear or will be followed by respondents.

V. Data Analysis and Interpretation

V. 1. **Specification of Appropriate Analysis:** Methods used to analyse data should be appropriate to the type of data and to the conclusions to be drawn; the methods, the reasons for choosing them, and their underlying assumptions or limitations must be described clearly. (ERS 32, 33, 34, 35, 36; AERA D8, L9; FSU V1)

Clarification:

All data collected, whether qualitative or quantitative, should be synthesised or analysed in some fashion. Since there is no set of analytic methods that are "correct" under all circumstances, evaluators must rationally defend their methodology, underlying assumptions, calculations, and conclusions. In the process of analysing programme information, the relationship between evaluation design and appropriate data analysis techniques should be considered.

Suggestions:

a. Choose analyses which are appropriate for each type of data collected and for the purpose for which the results are intended.

b. Document all processes, including categorisation of data, cross-checking of sources, computer runs, etc.

c. Verify interim analyses with original sources and/or a more experienced data analyst to confirm or clarify results.

d. Examine the results for internal consistency and reasonableness within the total context of the study (i.e., the programme, the evaluation design and procedures, and the data).

e. Strive for a reasonable balance of rigour and detail with relevance and timeliness when analysing data.

V. Data Analysis and Interpretation

V. 2. **Significance of Results:** When inferential comparisons are made, an indication should be provided of both statistical and practical significance. (ERS 37; FSU V2)

Clarification:

Statistical significance deals with the probability that differences found between groups, or pre vs. post differences for the same group, will be found for the larger population represented by these groups. Practical significance refers to the educational value or importance attached to the differences, assuming that differences reflect programme effects of the indicated magnitude. The evaluator should consider and understand the implications of both, and convey to the evaluation audience(s) an estimate of the magnitude of a given effect (and the associated implications), as well as the statistical significance.

Suggestions:

a. The traditional rule of thumb for assessing statistical significance is that the probability of rejecting the null hypothesis (the hypothesis of no difference between the population means) when there is no difference is .05 (alpha = .05). However, when group sizes are small and/or when the consequences of making a wrong decision are not costly, this probability could be increased to .10 or higher.

b. A rule of thumb for practical significance is that the standardised effect size (the mean difference divided by the standard deviation of the combined groups) should be at least .25. A standardised effect size of that magnitude indicates that the average student in the superior programme is at approximately the 60th percentile of students in the comparison programme. Depending on other factors in the specific situation, this rule could be modified.

V. Data Analysis and Interpretation

V. 3. **Causal Interpretation:** Cause-and-effect interpretations should be bolstered not only by reference to the programme rationale but also by recognition and elimination of plausible rival explanations. (ERS 38; FSU V3)

Clarification:

Most evaluations will be called on to generate valid causal interpretations. Potential rival explanations for the results that were not explicitly included by the design should be solicited and identified. Rival explanations should be addressed and eliminated; if they cannot be eliminated, this should be accounted for in the report.

Suggestions:

a. Submit the evaluation design and data analysis for review by persons associated with the programme, requesting validation of the study's interpretations as well as plausible rival explanations.

b. Review forthcoming rival explanations for plausibility, given the nature and context of the programme, as well as the nature of the evaluation design, database, and analysis.

c. Rival explanations that cannot be dismissed should be written into the final evaluation report.

V. Data Analysis and Interpretation

V. 4. **Rationale for Interpretation:** The frames, perspectives, procedures, and rationale used to interpret the findings should be carefully described, so that the bases for value judgments are clear. (AERA A4; FSU V4)

Clarification:

The purpose of an evaluation is often a value judgment; that is, rating or scaling the programme evaluated for usefulness, importance, or general worth. This valuation is based upon the evaluation results and other relevant information, and the perspectives of influential audiences. Value is a complex and controversial issue. It is difficult to determine who will make value judgments within the evaluation and what procedures will be used for making the judgments. These issues should be considered by the client and the evaluator, and decisions about the approach to be used should be described, documented, and justified whenever the evaluator is involved in the valuation process.

Suggestions:

a. Consider all relevant bases for interpretation of the results; e.g., project goals, laws or regulations, social standards, humanitarian ideals.

b. Consider who will make the evaluational interpretations; the evaluator, the client, an audience, a regulatory body, or some combination of these.

c. Consider all techniques or yardsticks that might be used; advocacy reports, Delphi convergence, evaluator/client consensus, national standards, organisation documents, etc.

d. Evaluations need not be objective to the point of being devoid of evaluational interpretations; however, the extent of such interpretation for which the evaluator is responsible should be made clear.

VI. Reporting and Dissemination

VI. 1. Communicating Information: The final report of an evaluation is only one consideration in the interaction between the programme and the evaluation. Evaluation must communicate with the appropriate audiences throughout the evaluation. Alternative mechanisms for communication can be utilised, because the evaluation serves various purposes and various audiences. Guidelines VI 2-14 refer primarily to written reports, but the same advice applies to interim communication strategies.

Clarification:

It's too late to wait for a final report to communicate with programme personnel and relevant audiences. An evaluation must establish a dialogue with its clients to enable formative and dynamic changes in the programme during the course of the evaluation. As indicated in Design Guideline III 10, communication may be the most important contribution of the evaluation.

Suggestions:

a. Establish communication links as soon as possible, and provide information as often as feasible to maintain these links.

b. Analyse the extant information architecture, even if only informally, and utilise existing flow patterns to assist in programme improvement. Evaluations can both improve the quality and quantity of information and serve as a catalyst for the establishment of new programme links.

VI. Reporting and Dissemination

VI. 2. Timeliness of Information and Communication: Release of information should be timely, so that audiences can best use the information. (AERA A7)

Clarification:

An evaluation is timely when the information is delivered to each audience at a time when they can best use it. The whole notion of formative evaluation is that the evaluation can contribute to the formation of a programme. That means that the information must be available at the appropriate time for the formative activities.

Suggestions:

a. Find out which major audiences intend to make decisions for which they want evaluative information and at what times.

b. Plan the communication approach so that there are sufficient time and resources to meet the anticipated information needs of the formative process.

c. Keep the most critical information needs in mind throughout the work, so that they can be met even if less critical needs cannot.

d. Attend to the information flow within the programme and its system context and determine how best to provide timely augmentation of information to that flow.

VI. Reporting and Dissemination

VI. 3. **Scope and Content of Report(s):** The evaluation report(s) should describe the programme being evaluated and its context, as well as the purpose, procedures, findings, and recommendations of the evaluation. This is so that the audiences will readily understand what was done, why it was done, what information was obtained, what conclusions were drawn, and what recommendations were made. (AERA A5; FSU VIII)

Clarification:

Too often, much of an evaluation is lost after the reports have been delivered. The final and interim evaluation reports may be the only source available for answering late-occurring questions, or for guiding further application of the findings. Thus, it is important to be as understandable and comprehensive as possible in any evaluation report. The report, no matter in what medium, should be characterised by:

-- clarity --
-- conciseness --
-- logical development --
-- well-defined technical terms --
-- clear tabular or graphic representations --
-- relevant examples --

Such characteristics increase audience understanding, report credibility, and application of the findings.

Suggestions:

a. When possible, supplement written reports with other forms of communication, and always provide interim information (see VI 8).

b. Address reports directly to the evaluation purposes.

c. Provide sufficient context and examples to give meaning to the evaluation as a whole.

VI. Reporting and Dissemination

VI. 4. Reporting Findings, Recommendations, and Opinions: Findings should be reported in a manner that distinguishes between the direct empirical results of the evaluation, and related opinions, judgments, recommendations, and speculation. (ERS 39, 53; FSU VII2)

Clarification:

The report should clearly distinguish between empirical findings, opinions, judgments, recommendations and speculation so that the reader is aware of what constitutes the evaluation findings. If the evaluator applies the findings of the evaluation to policy, through recommendations, then the circumstances and intent of the evaluator's policy recommendations should be made clear to the audience(s).

Suggestions:

a. An evaluation makes judgments about programme arguments; it is important to differentiate and characterise the data on which judgments are based.

b. Be careful in wording statements to keep clear the quality of the authoritative data which justifies the evaluative claims.

c. If policy recommendations are to be made, introduce them with a narrative describing the main data used by the evaluator to make such policy recommendations.

VI. Reporting and Dissemination

VI. 5. **Balanced Reporting:** Present findings clearly, completely, and in a balanced manner. The findings should be organised and stated in language understandable to decisionmakers and other audiences. Any recommendations should be clearly and explicitly related to the findings. (ERS 39, 40, 41; AERA A5, C3, C7, D10; FSU VII3)

Clarification:

A balanced evaluation is not necessarily one that generates an equal number of positive and negative findings. It is, however, an evaluation that is sensitive to both strengths and weaknesses, therefore requiring a search for side effects as well as intended outcomes. An evaluation report, even if the goal of the evaluation was to find weaknesses, should delineate both strengths and weaknesses of the programme that was evaluated. Such findings should also clearly and explicitly relate to any recommendations that are made, whether with the intent of eliminating weaknesses, using strengths to compensate for weaknesses, or retaining unexpected strengths.

Suggestions:

a. List characteristics of the programme and, using as many audience perspectives as apply, classify these factors as strengths, weaknesses, or neutral.

b. Whenever possible, generate, assess, and report plausible alternative explanations of the findings.

c. Don't ignore possible side effects outside of the particular context of the programme being evaluated. Report all foreseen implications at the school and national levels.

d. Any questionable results should be identified.

VI. Reporting and Dissemination

VI. 6. **Prioritisation of Findings and Conclusions:** Findings and recommendations should be presented in a framework that indicates their relative importance. (ERS 42; FSU VII4)

Clarification:

Presentation of the findings and recommendations in a manner which indicates their relative importance will guide the attention of the reader and subsequent discussions and actions based on the findings and recommendations. The final report should include a comprehensive, well structured discussion of results. The executive summary should draw attention immediately to the most important, relevant findings and recommendations.

Suggestions:

a. Write the executive summary as if it might be the only product of the evaluation to be read by key decision makers.

b. Include all important findings and conclusions in a logically ordered, direct statement format.

VI. Reporting and Dissemination

VI. 7. **Reporting of Assumptions:** Important assumptions in all phases of the study should be explicitly acknowledged. (ERS 42; FSU VII5)

Clarification:

Assumptions which guide the evaluation and/or are held by the evaluators might not be subject to investigation, but will influence the interpretation of data, findings, and recommendations. Consequently, assumptions should be explicitly acknowledged so that the reader will know the social, scientific, and/or programmatic foundations and premises of the evaluation and may be alerted to inherent limitations or biases of the evaluation. For example, an evaluator may be investigating factors relating to student achievement. For reasons of limited resources or time, the evaluator may choose to focus on teacher-student interaction while assuming the achievement motivation of students to be a constant. The findings of the study might be limited in their explanation of student achievement, and the reader should be aware of the study's operating assumptions.

Suggestions:

a. Consider and identify possible factors which may in some way affect the subject of the evaluation, but which the evaluator has chosen not to investigate (explicit assumptions). Acknowledge these assumptions in the report.

b. Consider factors or circumstances that other stakeholders might have introduced to the investigation, but which the evaluator may feel irrelevant or unimportant (implicit assumptions), and acknowledge these in the report.

VI. Reporting and Dissemination

VI. 8. **Feedback to Participants:** Persons, groups, agencies, and organisations who have contributed to the evaluation should receive feedback appropriate to their needs. (ERS 46; AERA A6; FSU VII6)

Clarification:

Interim feedback and dissemination of evaluation findings to participants, audiences and clients, should follow from the plans that were made during early stages of the evaluation. Dissemination plans should also be expanded to include any right-to-know audiences that were identified during the course of the evaluation. Certain right-to-know audiences are generally involved in dissemination efforts, including those who:

-- commissioned the evaluation (the client) --
-- are legally responsible for the programme --
-- funded the programme --
-- supplied substantial amounts of evaluation data --
-- programme personnel --
-- those whose professional status might be affected --

Special effort should be made to reach all right-to-know audiences. This responsibility is also shared with the client; but if conflict arises, the evaluator must be willing to relinquish some of this responsibility, and suggest getting the opinion of an appropriate third party.

Suggestions:

a. Have representatives of key audiences suggest what findings and recommendations, in what reporting form, would be of most interest and use to them.

b. Check draft reports with representatives of the audiences for clarity and accuracy.

VI. Reporting and Dissemination

VI. 9. **Disclosure of Findings:** Disclosure should follow the legal and the proprietary understandings agreed upon in advance, with the evaluator serving as a proponent for the fullest, most open disclosure appropriate. (ERS 47; AERA A5, C3; FSU VII7)

Clarification:

Evaluation acts, public pronouncements, and written reports should adhere strictly to a code of directness, openness, and completeness. Certain legal and/or regulatory restrictions may have been imposed at the outset of the evaluation, but the evaluator should strive to achieve full and frank disclosure to the extent possible. Audiences are entitled to reports that present clearly and openly both the evaluator's judgments and recommendations, and the information used to formulate them.

Suggestions:

a. Present all relevant points of view, both positive and negative.

b. Report key factors which enhance or detract from the evaluation's relation to reality, whether discovered before or during the evaluation; discuss frankly any significant implications for findings and recommendations.

c. Try to include judgments and recommendations that represent broad, balanced, informed perspectives.

d. Don't confuse full and frank with premature disclosure, causing misinterpretation and confusion.

e. Do not overemphasise the limitations of the evaluation; be frank but not falsely modest.

VI. Reporting and Dissemination

VI. 10. **Longterm Storage of Data:** The data base and associated documentation should be organised in a manner consistent with accessibility policies and procedures. (ERS 49; FSU VII8)

Clarification:

The data base, as well as the final report, should be carefully prepared prior to dissemination and should not include data and documentation which has been agreed upon to be confidential. The evaluation data base and documentation should be categorised so that it may be included in report versions in a manner which provides readers, decisionmakers, and the public with pertinent information while maintaining the confidentiality of persons associated with the evaluation.

Suggestions:

a. Keep the data base and identification of individual data sources separate from the final report, and maintain their storage in a secure place.

b. Report the data in a manner which protects the anonymity of the individual suppliers of data, for example, using group results instead of individual results.

VI. Reporting and Dissemination

VI. 11. **Dissemination for Decision Making:** Evaluation results should be made available to appropriate users before relevant decisions might be made. (ERS 50; AERA A6, A7; FSU VII9)

Clarification:

Reports should be timely; that is, delivered to audiences at a time when they can best use the information or apply the recommendations. The potential for application of evaluations that are perceived as too late, or which have caused delays in decisions, is greatly reduced. It is infrequent that an evaluation is done for the sake of the evaluative process, rather than the utility of the product. Thus, increase utility by ensuring the information is there when needed.

Suggestions:

a. During planning and at every stage of the evaluation, audiences should be asked if and when they intend to make decisions based on evaluation outcomes.

b. Allow sufficient time to meet deadlines and requests for interim reports; plan backwards from due dates.

c. Identify alternative courses of action in anticipation of unexpected delays.

d. Consider tradeoffs, such as smaller sample size or elimination of lesser goals, to achieve timeliness.

e. Always inform the client of any difficulties that may cause delays in reporting.

VI. Reporting and Dissemination

VI. 12. Dissemination for Clarification, Attitude Change, and/or Decision Justification/Assessment: Evaluations not only serve to inform decisions, but are also useful for the clarification of problems, the communication of arguments to promote attitude change, and the analysis and assessment of previous decisions.

Clarification:

Quite often the most important use of evaluation is the clarification of the problem set confronted by a programme. There may be no specific decisions to be made, but the client may just want information about the varied perspectives on the programme of the many people within and around the programme. New problems and relationships between problems can sometimes be revealed more efficiently and effectively by an external evaluator.

Sometimes a programme can be bogged down due to attitudes about the programme rather than substantive issues. Evaluation can provide information that may help in attitude change. When credible, evaluation can address directly the values that underlie certain attitudes and their relationships.

Also, in the process of examining a programme, previous decisions and their effect are assessed. This information can be useful to programme management to indicate needed changes in decision approaches or to highlight particularly effective strategies.

Suggestions:

a. Be aware in reports of the multiple purposes and impact of evaluation.

b. Use the appropriate medium of communication for the purpose of the evaluation report.

VI. Reporting and Dissemination

VI. 13. **Anticipation of Distortion:** Evaluators must anticipate and prevent misunderstandings, misinterpretations, and misuses of evaluative information. (ERS 51; FSU VII10)

Clarification:

The responsibility of the evaluator does not end with the submission of the final report. The evaluator should also be accessible to users of the report for clarification and interpretation when necessary, and for rebuttal against misinterpretation and misuse of the information and findings. The extent to which possible misinterpretation and misuse can be anticipated can provide guidance to the evaluators in writing the final report. When appropriate, incorporating interpretations of major stakeholders in the final report can lessen the likelihood of misinterpretation and misuse after the submission of the final report. As the likelihood for misinterpretation decreases, so does the extended responsibility for clarification and rebuttal.

Suggestions:

a. Submit a draft of the evaluation report to representatives of major audiences for an interpretive review.

b. Clarify the report, addressing, or including other interpretations as appropriate.

c. Be available to clients/users of the report to the extent that they use the information for relevant improvements.

d. Refer problems to the evaluation advisory committee.

VI. Reporting and Dissemination

VI. 14. **Professional Role:** Evaluators must maintain clear distinction between their role as an evaluator and any advocacy role they choose to adopt. (ERS 55; FSU VII11)

Clarification:

An advocacy role is distinguishable from a proactive role an evaluator may assume in order to promote the consideration and use of the evaluation results. If an evaluator should choose to take on an advocacy role in favour of a particular perspective or position, then she/he has a professional obligation to all parties to clearly articulate the chosen advocacy role. An advocacy role may or may not be compatible with the evaluator role, depending on the issues and contextual politics of the evaluation.

Evaluators should be aware of the apparent conflict between advocating certain positions and presenting evaluation results. Evaluators may wish to take advocacy stands, but they should not assume that they possess any special status or competence.

Suggestions:

a. Consider whether one's professional actions go beyond the evaluator's role of presentation, clarification, and interpretation of the findings.

b. If one's actions favour a particular perspective or position, then one should introduce him/herself as an advocate of that position, rather than as the evaluator.

References

Cronbach, L. J. (1982). *Designing evaluations of educational and social programs.* San Francisco, CA: Jossey-Bass.

Cronbach, L. J., Ambron, S. R., Dornbusch, S. M., Hess, R. D., Hornik, R. C., Phillips, D. C., Walker, D. F., & Weiner, S. S. (1980). *Toward reform of program evaluation: Aims, methods, and institutional arrangements.* San Francisco, CA: Jossey-Bass.

Evaluation Research Society. (1982). Evaluation Research Society standards for program evaluation. In *Standards for evaluation practice.* San Francisco, CA: Jossey-Bass.

Foster, G R., Williams, C. H., Lyons, R. M., Ilon, L. S., & Baghi, H. (19 6). *Model program evaluation standards.* Tallahassee, FL: The Florida State University.

Joint Committee on Standards for Educational Evaluation. (1981). *Standards for evaluations of educational programs, projects, and materials.* New York, NY: McGraw-Hill.

Klaus, D. J. (1974). *Evaluation plan for the DEIDS and related projects.* Washington, D. C.: American Institutes for Research.

Nagel, J., & Snyder, C. W., Jr. (in press): International funding of educational development--External agendas and internal adaptations: The case of Liberia. *Comparative Education Review.* (Paper presented at the session on International and Comparative Perspectives on Education at the annual meeting of the American Sociological Association, Chicago, August, 1987).

Raizen, S., & Rossi, P. H. (1981). *Program evaluation in education: When? How? To what ends?* Washington, D. C.: National Academy Press.

Snyder, C. W., Jr., & Nagel, J. (1985). *The struggle continues! World Bank and African Development Bank investments in Liberian educational development (1972-1985).* McLean, VA: Institute for International Research.

Stake, R. E. (1967). The countenance of educational evaluation. *Teachers College Record*, **68**, 523-540.

This version of the Guidelines was edited by C. W. Snyder, Jr. as part of the Botswana Junior Secondary Education Improvement Project.