

DOCUMENT RESUME

ED 228 464

CE 035 603

AUTHOR Rivera, William M.
 TITLE Evaluation in Adult Education: An International Perspective. Theory, Innovation, and Practice in Andragogy. No. 4.
 INSTITUTION Florida State Univ., Tallahassee. International Inst. of Andragogy.
 PUB DATE Dec 82
 NOTE 38p.; For related documents, see CE 035 600-602. Also sponsored by Simon Rodriguez National Experimental University, Caracas, Venezuela.
 PUB TYPE Viewpoints (120)
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Adult Basic Education; *Adult Education; Economic Development; *Educational Planning; Educational Research; *Evaluation Criteria; *Evaluation Methods; Evaluation Needs; Evaluative Thinking; Global Approach; *International Education; International Studies; Postsecondary Education; Professional Associations; Research Needs; Universities
 IDENTIFIERS *Andragogy

ABSTRACT

This paper discusses the breadth and direction of large-scale evaluative research and its implications for academics, their professional associations, and universities in general. The paper asks a number of questions, such as: What are the differing perceptions of evaluation at the international level? Is there a symbiosis between educational planning and evaluation, and are efficiency evaluations indicative of educational success or failure? The paper is organized into three main parts concerning perspectives, criteria, and implications of evaluation at the international level. The first part reviews definitions, approaches, and perspectives of evaluation. In the second part, the educational planning-evaluation symbiosis and its underlying socioeconomic criteria are examined. The third part underscores the implications of large-scale evaluative research in adult education for universities, professional associations, and academics, and proposes a number of steps for meeting the challenge of leadership that large-scale evaluation presents. While the paper takes a critical look at developments in large-scale evaluative research and academe's capacity to meet the challenge, its ultimate purpose is to set the stage for an era of extensive cooperation among universities, professional associations, and academics concerned with the expanding critical area of evaluative research in adult and comparative education. (KC)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED228464

EVALUATION IN ADULT EDUCATION: AN INTERNATIONAL PERSPECTIVE

William M. Rivera

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

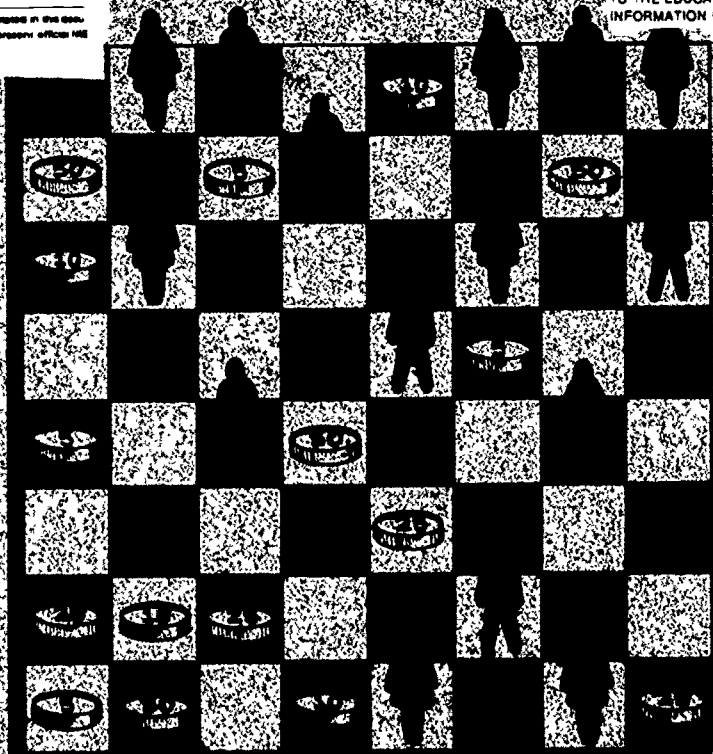
This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

ERIC

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

Points of view or opinions stated in this book
do not necessarily represent official IIE
policy.



5003603



INTERNATIONAL INSTITUTE OF ANDRAGOGY
INSTITUTO INTERNACIONAL DE ANDRAGOGIA

For further information contact

The International Institute of Andragogy
Graduate Program in Adult Education
107 Stone Building
Florida State University
Tallahassee, Florida 32306 USA

OR

Instituto Internacional de Andragogia
Apartado Postal 20.016
San Martin, Caracas 1020
Venezuela

EVALUATION IN ADULT EDUCATION: AN INTERNATIONAL PERSPECTIVE

William M. Rivéra

Tallahassee, Florida
December, 1982

ACKNOWLEDGMENTS

- Series Editors: Felix Adam and George F. Aker
- Technical Assistant: Eugenio Ormeño
- Copy Editor: Margaret Van Every
- Graphic Designer: Dan Haskin
- Published by: The International Institute of Andragogy
Florida State University Chapter
Tallahassee, Florida
United States of America
- Sponsored by: Florida State University
Tallahassee, Florida (USA)
- and
- Simon Rodriguez National Experimental
University
Caracas, Venezuela

FOREWORD

This monograph, based on a paper by Dr. William Rivera for the 1982 Comparative and International Education Society Annual Conference, highlights issues in contemporary large-scale evaluation in adult education.

Evaluation at the international level, as well as at the national level, adopts systems approaches and economic values that impose utilitarian purposes on adult education to the detriment of other aims. Rivera's paper, in responding to these positivist developments in education, undertakes three tasks. The first is to review the differing stances taken by spokespersons in the international field of adult education, comparative study, and evaluative research on such issues as the definition, present status, and future trends of evaluation in large-scale, international educational program development. Secondly, an educational planning-evaluation symbiosis is posited and then examined with reference to the contemporary focus on education for manpower development. At the same time, efficiency (cost-effectiveness) evaluation is criticized as an inadequate criterion for judging the worth of educational programs. Finally, the implications of leadership in large-scale evaluation being taken over by governmental and "nonprofit" organizations are considered against the role and purpose of the universities, professional associations, and academics in this area of applied research.

Dr. Rivera's analysis of the state of the art in large-scale international evaluation raises a number of issues and questions that should be given high priority by members of the academic community and professional associations in adult education, as well as by policy makers, planners, and administrators of adult education programs.

Dr. Rivera has worked with several international organizations, including the United Nations Educational, Scientific, and Cultural Organization (UNESCO), Organization for Economic Cooperation and Development (OECD), and World Education, Inc. In 1976 he served as U.S. Representative to UNESCO to assist in drafting the international *Recommendation on the Development of Adult Education*. At present Dr. Rivera is Associate Professor of Adult Education at The University of Maryland

Felix Adam and George F. Aker
Series Editors

CONTENTS

Perspectives of Evaluation in Education for Adults	3
Definitions	3
A Policy, Program, and Evaluation Diagram	4
International Stances Toward Evaluation in Education for Adults	7
Criteria of Evaluation in Education for Adults	10
The Policy-Evaluation Relationship	10
The Planning-Evaluation Symbiosis	11
The Experimental World Literacy Programme	13
Reviewing the Scope and Goals of Educational Planning	15
Reviewing the Significance of Cost Statistics	17
Implications for Universities, Professional Associations, and Academics	20
Trends in the Era of Big Social Science	20
Next Steps	22
Conclusions	24
Perspectives	24
Criteria	24
Implications	25
References	27

National development is a wider and more complex term than merely *economic growth*, and education is only one of the major components in the concept of national development, according to the IVth Congress of the World Council of Comparative Education Societies (WCCES, 1981). Hence, the issue is not one of education for national development but what education can do in the strategy for national development.

Education's role in national development is nevertheless a large one, and this is apparent from the major investments, particularly by developing countries, in education—investments often averaging 20 percent and sometimes exceeding one-third of national budgets. Today, education's role is recognized as going beyond schooling and formal instruction for children and youth; it extends to nonformal education activities and especially education for adults.

Adult education, broadly conceived as including all types and levels of educational programs for adults, is a significant input for meeting the development challenge. It stands out as a special priority among nations faced with the pressures to produce more in the present, that can't wait for children to grow up and economically produce in the future. Educational investment in adults and participation of adults in education are both on the rise. Some nations have afforded adult education priority status within their systems of education; others are considering formalization of adult education into a third system or fourth level, and still others conceive of education for adults as part of an integrated lifelong-education complex.

Since the 1950s and 1960s the scope and purpose of education, including adult education, have both widened and narrowed—widened in the extent of concern and planning but narrowed in regard to focusing on predominantly economic goals. With wide-range and long-term planning have come large-scale program development and, almost inevitably, large-scale evaluation. An example, and exemplary case, of large-scale program development and evaluation is the United Nations Educational, Scientific, and Cultural Organization/United Nations Development Programme (UNESCO/UNDP) Experimental World Literacy Programme (EWLP), which the present paper reviews and critiques by way of discussing the breadth and direction of large-scale evaluative research and its implications for academics, their professional associations, and universities in general.

The present paper asks a number of questions: What are the differing perceptions of evaluation at the international level? Is there a symbiosis between educational planning and evaluation? What are the criteria underlying international educational evaluations? What types of evaluation are truly educational in nature? Are efficiency evaluations indicative of educational success (or failure)? What are the implications of large-scale planning and evaluation for universities, professional associations, and academics?

The paper is organized into three main parts concerning perspectives, criteria, and implications of evaluation at the international level. The first part reviews definitions, approaches, and perspectives of evaluation. The second part examines the educational planning-evaluation symbiosis and its underlying socio-economic criteria. The third part underscores the implications of large-scale evaluative research in adult education for universities, professional associations, and academics and proposes a number of steps for meeting the challenge of leadership that large-scale evaluation presents.

While the paper takes a critical look at developments in large-scale evaluative research and academe's capacity to meet the challenge, its ultimate purpose is to set the stage for an era of extensive cooperation among universities, professional associations, and academics concerned with the expanding critical area of evaluative research in adult and comparative education.

PERSPECTIVES OF EVALUATION IN EDUCATION FOR ADULTS

DEFINITIONS

The intimate connection between evaluation and planning is made evident when one considers that the very definition of evaluation depends upon one's general philosophy of evaluation and how one intends to use the acquired evaluation data (Tyler, 1969). What is the purpose and goal of the evaluation? What is the hierarchical level at which the evaluation will take place? What type of evaluation will be undertaken?

Evaluation means different things to different people, and though some would restrict the term to one definition or another, most writers on the subject take an eclectic stance and include various meanings (House, 1978; Grotelueschén, 1980; Stake, 1974; Stufflebeam, 1977; Taylor, 1976, and Worthen and Sanders, 1973). However, even eclecticism results in distinct perspectives.

In part, the problem of definition is historical in nature. Until recently, evaluation when applied to education meant the *measurement of student achievement*. With expansion and aggrandizement of educational programs in the 1960s and '70s, however, operational questions became paramount and new evaluative concerns came to the fore. Indeed, a major dividing line can be traced to this period of program expansion when *classical* evaluation of student performance and the teaching situation (methods, techniques, and materials) began to be overpowered by program *operational* evaluation concerned with cost-effectiveness and social outcomes.

Even today, in the early 1980s, the major dividing line between classical and operational evaluation is only now becoming clear. Evaluation still tends to be defined as though this dividing line didn't exist, and specialists speak of evaluation as a time-oriented process taking place *before* program initiation (involving *needs assessment* and *institution-building analyses*); *mid-course* when the project is underway (*formative evaluation*); and *at the end* of a program or program cycle (*summative evaluation*). Or else, evaluation is considered as a process with different purposes, such as:

- documenting the congruence of learner outcomes and program objectives (Tyler, 1950)

- comparing performance data with a commonly accepted standard (Popham, 1969; Provus, 1969; Rivlin, 1971)
- specifying, obtaining, and providing relevant information for judging decision alternatives (Alkin, 1967; Stufflebeam, 1969)
- comparing actual effects of a program with a variety of demonstrated needs (Scriven, 1972)
- judging program merit against the value positions of relevant audiences (McDonald, 1974; Owens, 1973; Rippey, 1973; Stake, 1974)
- describing and interpreting the wider context in which a program functions (Parlett and Hamilton, 1976)

The above, taken from Grotelueschen (1980), is a gross compilation. However, a careful analysis shows that these descriptions of evaluation differ chiefly in the respect already mentioned—either they relate to program delivery or to program operations (both institutional and within the social context).

The above definitions imply varying purposes and goals for evaluation but also suggest distinct approaches. As noted, planning programs and measuring their impact and efficiency are significant operational concerns of administrators, whereas assessing participant performance, teaching methods, techniques, and materials are the specific concerns of those responsible for improving program delivery. These dual sets of concerns are of import not just to administrators but to policy makers and educational planners. Indeed, evaluation exists largely because social policy makers and planners require the data (Williams, 1972).

A POLICY PROGRAM AND EVALUATION DIAGRAM

As an institutional process, program development is equivalent to program planning (Cook, 1971). In this sense, it includes: (1) general policy considerations, (2) overall program operations, and (3) the realization of teaching/learning, or education activities *per se* (Rivera, Patino, and Brockett, 1982). Each of these functions—policy administration, institutional operations, and program realization—is performed usually by specific, differentiated personnel within an educational institution, although in small organizations with only one or two programs these functions sometimes overlap.

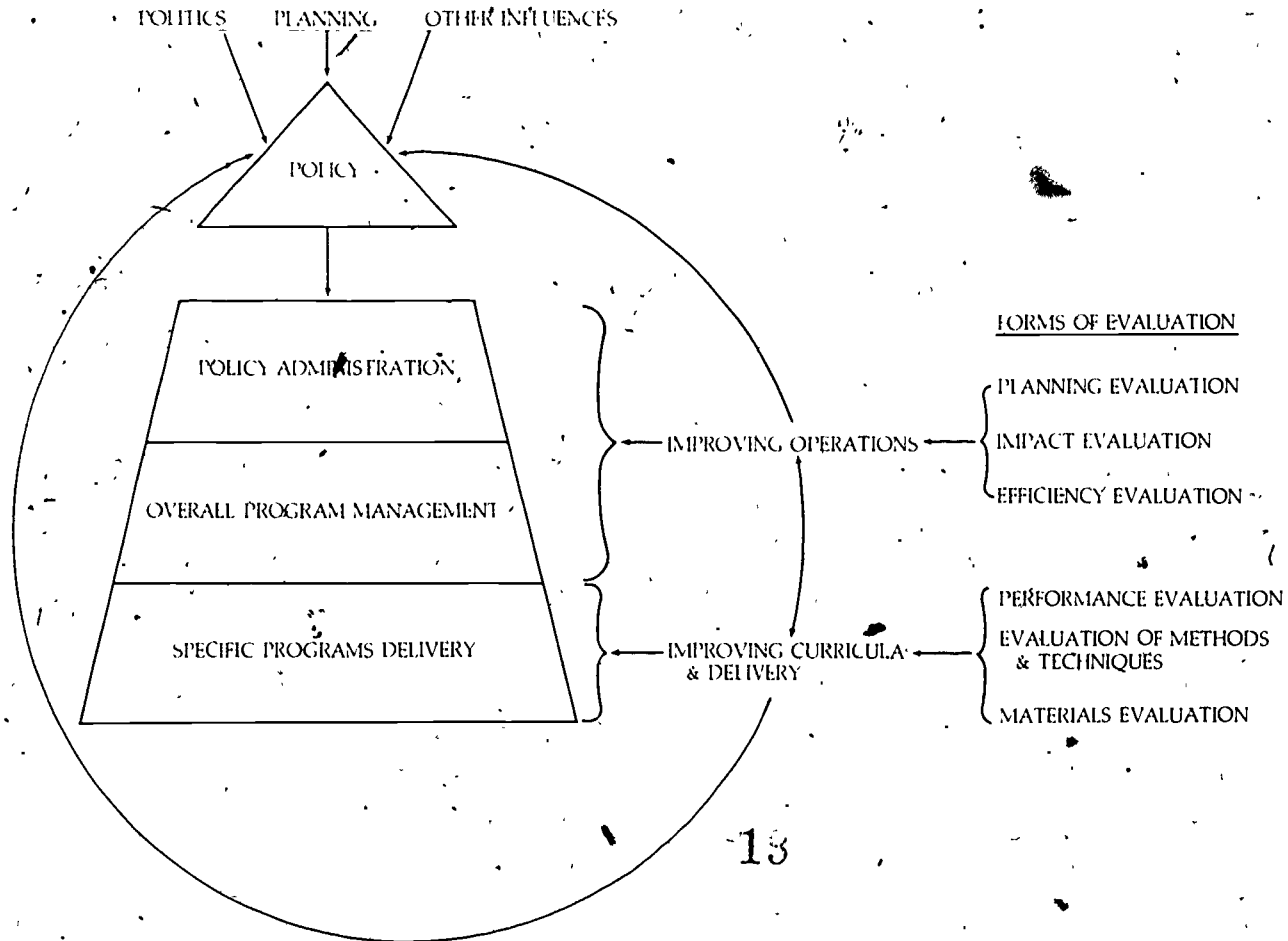
The three tiers just described comprise, as it were, the major portion of a truncated pyramid, the top of which—whether conceived as attached or separate from the pyramid base—represents policy making and planning. Thus, an image resembling that on the reverse of the U.S. dollar bill is conceptualized, a *novus ordo seclorum*, with the policy/planning “eye of God” at the top. The three program tiers in the truncated portion of the pyramid include policy administration, overall program management, and delivery of specific programs (see Figure 1).

With the main construct in place, it is a simple step to recognize *operational* concerns as having to do with the two tiers comprising policy administration and program management. The bottom tier, which refers to delivery of programs, is concerned with *classical* evaluation related to educational materials content, instructional methodology, and learner performance (Popham, 1972; Scriven, 1967).

Assuming then that the institutional process, as it refers to policy administration and overall program management, is primarily directed toward improving operations, it becomes clear that administrators will be interested in evaluative processes relating in principle to planning, impact, and efficiency or cost-effectiveness. Insofar as they are concerned with program curriculum and delivery, their interests will be in participant achievement, teacher methods and techniques, and the utility of materials. Thus, evaluations may aim at either improving program operations or program curriculum, while recognizing the relationship between the two. Nevertheless, comprehensive evaluation is rare, and more often one or another type of evaluation is undertaken at any one time.

Once an evaluation is completed, then the question arises as to its utilization—a question which, while crucial, is beyond the scope of this paper. For the present purpose, it is assumed the evaluation will serve to improve operations and/or curriculum, and in certain cases it will be carried further in its flow (feedback) to influence policy and planning for the educational program. Thus, Figure 1 indicates evaluative feedback both to improve the program (including program delivery and operations) and to aid in the formulation (including change) of policy.

Figure 1 is an idealization. The actual policy/planning, program development, and evaluation flow is shaped by many



9

13

Figure 1. Policy, program, and evaluation diagram.

different contingencies; it cannot be limited to any one set of events nor be represented by a linear arrangement. Nonetheless, the diagram may serve to clarify certain generalities about the process and make the second part of this paper clearer.

INTERNATIONAL STANCES TOWARD EVALUATION IN EDUCATION FOR ADULTS

In 1968, a UNESCO literacy specialist (Saksena) took a highly positive view toward evaluation. Referring to the Experimental World Literacy Programme (EWLP), he wrote:

Evaluation as a supporting service is now generally well accepted as an essential component of scientific planning and programming.

Another UNESCO specialist, however, in remarking on the use, or lack of use, of folk media in mass media, took the opposite stance in 1974, emphasizing the dearth of research and evaluative studies (Mathur).

In the same year, the World Bank recognized the need for evaluation and, indeed, its two-fold purpose of operational and curriculum improvement. The following statement appeared in its *Education Sector Working Paper* (December 1974):

The creation of machinery for regular evaluation is essential for the effective management of education, as it is the main channel through which research and development can be introduced into decision making. Evaluation also contributes to the better design of educational schemes by requiring a clear, operational formulation of their objectives.

In 1975, John Lowe, a specialist for the Organization for Economic Cooperation and Development (OECD) and former Professor and Chairman of Adult Education at the University of Edinburgh, wrote in his UNESCO-published *The Education of Adults: A World Perspective*:

Within recent years the literature of adult education has been crammed with enjoinders about the cardinal necessity of evaluating programmes in a systematic fashion for the sake not only of improving internal efficiency but also of

showing to sceptical officials in government departments that adult education institutions are competently managed and worth financing.

Lowe then added:

Yet there can be little doubt that the overwhelming majority of institutions make no convincing attempt to assess the effectiveness of their programmes, even in terms of their own objectives. Still less is there any attempt to calculate social or economic benefits.

In 1976, UNESCO's supreme legislative body, the General Conference, at its 19th Session held in Nairobi, Kenya, adopted an international *Recommendation on the Development of Adult Education*. This document in section IV, point 36, states:

Systematic evaluation of adult education activities is necessary to secure optimum results from the resources put into them. For evaluation to be effective it should be built into the programmes of adult education at all levels and stages.

The era of big evaluation in adult education had officially arrived, but in fact had really begun much earlier. The EWLP was conceived of in 1965 as a major evaluation research experiment as well as a new program concept—functional literacy.

So much for the steady development of evaluative research in large-scale programs. Still, there was another concern with respect to evaluation, and it was best expressed in another UNESCO document, *Learning to Be*, sometimes called the Faure Report after the former French Minister of Education, Edgar Faure, who chaired the committee responsible for the undertaking. That concern was with the original meaning and purpose of evaluation—recalling its evaluative nature rather than its significance for validation or decision making. In part 3, the core of the volume, principle 11 speaks to the issue of access to different types of education and professional employment. This principle argues that "access should depend only on each individual's knowledge, capacities and aptitudes, and should not be a consequence of ranking knowledge acquired in school above or below experience gained during the practice of a pro-

tion or in private studies" (UNESCO, 1972). The statement is clarified as follows:

Examinations should serve essentially as a means of comparing skills acquired under varying conditions by individuals of different origins, a mark not of a conclusion but of a starting-point, helping each individual to assess the effectiveness of his own study methods. *Evaluation procedures should measure an individual's progress as much as the extent to which he conforms to externally fixed standards.* (p. 204; italics mine)

Thus, the document speaks out for something other than either norm-referenced or criterion-referenced evaluation. It calls for an evaluation of individual progress in the educational setting. This sentiment is echoed in 1974 by the Government of India in its *Non Formal Education* report. In reviewing a scheme to educate young adults in the 15-25 age group in literacy, the report states:

Instruments for evaluation will have to be of two kinds, one for evaluating the progress of the adults, and one for evaluating the success and impact of the programme. (p.10)

Thus, international stances toward evaluating education for adults appear to differ in several respects; there are:

- a) *positive claims* that evaluation is alive, well, and doing its job in international arenas where education for adults is fostered;
- b) *disclaimers* that evaluation is doing what it ought to be doing and is as alive and well as some would suggest, at least in certain areas of concern;
- c) *enjoiners* for developing evaluations at all levels and stages of educational programs that serve adults; and
- d) *caveats* about the purpose of evaluation, reminding educational policy makers and planners that learning is a matter of progress and not just of meeting some criterion; and further, that evaluation is of various kinds—operational and curricular.

The last category of caveats is particularly significant because it underscores the importance of stepping back to consider the final purposes of evaluation as they relate to the criteria underlying educational policy making and planning.

CRITERIA OF EVALUATION IN EDUCATION FOR ADULTS

THE POLICY-EVALUATION RELATIONSHIP

Program development and evaluation are outgrowths usually of policy mandates. While a truism, this principle deserves reiteration because it underscores that evaluation is not the practice of collecting information for its own sake. Professor Rodney Skager of UCLA (1978) claims that educational evaluation "is always undertaken in order to facilitate decision-making or policy formulation" (p. 26). He distinguishes educational research from educational evaluation, remarking that research is often conducted to contribute to general knowledge rather than to any particular decision needs. "In contrast," Skager writes, "evaluation should always be guided by concern for how the information is ultimately to be used and for what purpose it is to be used" (p. 26). Since evaluation involves deliberate expenditure of time and resources that might otherwise go directly into the teaching and learning process, it must have a strongly utilitarian orientation.

In *The Evaluation of Literacy Programmes* (Couvert, 1979), the evaluation of a project is seen to have two fixed points:

a point of departure determined by the initial social, economic and cultural situation of the prospective participants in their natural milieu; and a point of completion, i.e., *the ultimate situation as conceived and desired by the authorities responsible for deciding on literacy action.* (p. 62; italics mine)

Thus, evaluation is both the result of policy concerns and the object of its action, at least in part, for as Skager states, it is *always* undertaken in order to facilitate decision-making or policy formulation. But like education planning, evaluation is more than just a part of the policy-making process; it often serves to change policy. And like planning, evaluation comprises an irritant function, aiming at changes in programs and systems (Eide, 1964). Nevertheless, changes in policy may be seen as part of the policy-formulation process, and the intimate relationship, even circularity, of policy making and evaluation is apparent.

THE PLANNING-EVALUATION SYMBIOSIS

Educational planning is only one of the possible influences on policy makers and policy making—often, purely political considerations determine use of resources, but, planning has experienced an "astonishing rapid development" since W.W. II, (Eide, 1964, p. 70). The trend has been toward accepting educational planning as a continuous government responsibility aimed at: a) the need for rapid adaption of government policies to changing conditions; b) the demand for greater coherence in the formulation of government policies; and c) increased use of research as an instrument towards more rational government policies (Eide, p. 70).

There is increasing use of evaluative and other applied research at governmental levels, despite concerns with lack of evaluation utilization (Boruch and Wortman, 1981; Ciarlo, 1981). As educational planning has developed, the need for data to confirm or change planning formulas becomes crucial; decision-making is a main characteristic of planning as it is for evaluation (Bhola, 1979; Spaulding, 1974, 1982). In a paper presented at the Annual Meeting of the Comparative and International Education Society (1982), Spaulding makes note of this "close symbiosis between evaluation and planning" (p. 1).

The significance of the symbiosis between planning and evaluation is rendered more clearly when one considers the criteria used for ascertaining the educational needs of society and how these criteria are translated into specific recommendations for the level and structure of expenditure on the educational system. Professor of Economics Herbert S. Parnes of Ohio State University, in examining approaches to the assessment of education needs, summarized them into five categories: (1) social demand, (2) returns to education, (3) econometric models, (4) manpower requirements, and (5) cultural requirements (1964, p. 53 ff.).

While it is not the point of this section to elaborate on these approaches, each of them suggests differing criteria and therefore differing methods of planning and ultimately of what will be evaluated, for evaluation in the main is the measurement of attainment of objectives—whether operational or curricular.

The two approaches to educational planning that have the most significance for evaluative research are the *manpower approach* and the *cultural approach*. While all approaches in a

thoroughgoing plan may be utilized to a greater or lesser extent, during the past two decades the manpower approach (with some competition from the *rates-of-return* approach) has dominated. In 1960, the OECD, in its Mediterranean Regional Project, assisted in educational planning for the governments of Greece, Italy, Portugal, Spain, Turkey, and Yugoslavia, attempting a broad-based planning operation (Parnes, 1964, p. 63). Attention was given in varying degrees both to manpower and broader cultural objectives, and to quantitative and qualitative factors in formulating recommendations for expanding and improving the educational system. Nevertheless, emphasis remained with manpower concerns.

In arguing for the use of a manpower approach as a planning device, Parnes proceeds as follows:

In the manpower approach, one postulates a given rate and character of economic growth and asks what investment in education is necessary to achieve that growth objective. The cultural approach, on the other hand, stresses education as a social "investment" to which returns cannot be calculated in money terms—an investment in values that are either indispensable or highly desirable to the society, e.g., an informed citizenry, equality of opportunity, etc.

It follows, therefore, that short of educating everyone up to his capabilities, there is no way of specifying educational needs in any absolute sense. Society needs as much education as it is able and willing to pay for. The decision is inexorably a political one, and the best the planners can do is to indicate the cost implications of alternative policy choices. (p. 60)

Parnes then adds a consideration that has certain implications for education specialists; he says:

It may be that these comments overstate the differences in the extent to which manpower and cultural objectives can yield unique estimates of educational needs. It may be, for example, that the amount and type of education necessary to produce a "qualified" citizen is just as ascertainable as the amount and type of education necessary to produce a qualified engineer. But if this is so, there is certainly not

the same consensus in the former case as in the latter. In any event, I confess that I am unable to conceive a set of operations in the cultural approach analogous to those that have been set forth above for the manpower approach. (p. 61)

It is no surprise then that educational programs have come to emphasize qualified engineers over qualified citizens, since qualified citizens cannot be measured in economic, quantifiable terms. And even at the basic levels, functional (work-oriented) literacy takes the place of traditional formats. The symbiosis of planning and evaluation is firmly established and can be further seen in the following brief review of the Experimental World Literacy Programme (EWLP).

THE EXPERIMENTAL WORLD LITERACY PROGRAMME

Since the 1960s, governmental and intergovernmental organizations have intensified their planning and expanded their policies for program activities in various fields. Intergovernmental operations in the 1970s and early 1980s are especially impressive in that large-scale operations have built-in, large-scale strategic evaluative research efforts. Currently underway is the World Health Organization's "Health for All by the Year 2000" program, which incorporates global strategies for evaluation (WHO, 1982). But certainly in education the outstanding cross-cultural program incorporating large-scale evaluative research is the UNESCO/UNDP Experimental World Literacy Programme (EWLP). In 1979, the International Development Research Center (IDRC) in Ottawa, Canada, recognized it as "a first in research and evaluation" but added that "even the cumulative efforts of the EWLP have not created the base for major decisions about literacy" (p. 6).

Until recently, literacy has been primarily a sphere of action rather than analysis, and it would appear that the EWLP has created the base for some major decisions—not the least of which are contained in the IDRC review of policy, research, and action in favor of literacy—such as the powerful role of planning and long-term goals, the significance of organization and administration, and the major factors in the achievement of literacy, which are: (1) the principle of national commitment;

(2) the principle of popular participation, and (3) the principle of coordination.

It has been learned that for a country to succeed in achieving its economic, social, and political goals, the achievement of literacy should be a stated and supported policy of a national plan. The value and objectives of a national literacy program must be viewed by the target group as being relevant and useful to them and their community. And the administrative tasks in implementing a national policy must involve various ministries, institutions, industrial enterprises, trade unions, government organizations, and individuals (Couvert, 1979, pp. 64-65; IDRC, 1979, pp. 12-13).

In addition, the planning bases for the program clearly indicate the priority given to functionality as an aspect of manpower development and socio-economic advancement. In *The Evaluation of Literacy Programmes. A Practical Guide* (Couvert, 1979, pp. 48-53), some 29 basic evaluation indicators are proposed for use in literacy projects. These indicators are categorized under the following seven headings:

1. turnover in programs
2. acquired skills
3. economic change
4. attitudes toward education
5. vocational/occupational skills
6. use of mass communication skills
7. health, hygiene and safety

The largest number of indicators fall under heading 3, indicators of economic change, which reflects the stress on productivity and the planning goals of manpower development, both of which are clearly stated in the central hypothesis of the program, to wit:

In favourable and well-ordered socio-economic conditions, a training process focussed on development objectives and problems provides the individuals concerned with the intellectual and technical means for becoming more effective agents in the process of socio-economic development.

(p. 25)

The above central hypothesis in turn reflects the functional, work-related nature of the EWLP and clarifies why one-third of its evaluation indicators focus on such components as:

- growth of output per inhabitant
- product quality
- sale prices
- unit costs of production
- changes in volume of durable goods
- changes in net global monetary income
- additions to equipment for production, maintenance, and transport
- changes in socio-economic attitudes and in the concept of the role of individuals in society (pp. 51-52),

Evaluation of a functional literacy project amounts to verification of the central (planning) hypothesis set out above. Ultimately, the purpose is to measure the efficacy of program methods, monitor the program internationally, and justify the expenditures—within the framework of manpower development and socio-economic change.

REVIEWING THE SCOPE AND GOALS OF EDUCATIONAL PLANNING

International cross-cultural projects are indeed generally dominated by the application to education (and especially to education for adults) of the assumptions used to evaluate productivity of *economic* enterprises. The reason for this lies in notions of rationality. Productivity is often equated with rationality and indeed the educational systems and adult literacy projects of participating countries are ranked by UNESCO in terms of their relative rationality—that is, in terms of productivity.

The economic, rational-man view of education is both exciting and depressing intellectually—exciting because it links adult literacy, for example, to functionality and in particular to work-oriented functionality. But it is depressing because it ignores other educational values and aims. If education is to be considered as primarily a tool for investment related to work productivity, then education becomes obviously inadequate in front of the inequalities that beset societies. Education for adults, I would argue, suffers when programs concentrate only on their

learning to be "more effective agents in the process of socio-economic development" (Anderson and Bowman, 1964, p. 9). Close analysis shows a people and their education to be more than merely part of the process of socio-economic development. Indeed, I would argue that socio-economics is, and should be, only part of the larger process of human development despite the difficulties of measuring cultural gains.

C. Arnold Anderson, Professor of Education and Sociology, and Mary Jean Bowman, Research Associate Professor of Economics, both of the University of Chicago, in examining the scope and goals of educational planning, define educational planning as "the process of preparing a set of decisions for future action pertaining to education." They add:

But this is only an initial step toward delineating the theoretical foundations of education planning. What is regarded as "education" varies, and those variations are central to any assessment of the bases or the implications of educational planning. (p. 9)

Having made that point, Anderson and Bowman make yet another even more important statement reflecting the value-laden quality of education and planning and, by extension, evaluation. They write:

It is essential in the first instance to distinguish two very different situations. We can—and this is usual— treat educational planning as an adjunct or subhead of general economic planning. Or we can deal with educational planning in its own right, with economic elements taken only as an aspect of it. In the first case educational planning derives from, or more correctly, constitutes merely an extension of, manpower planning. This approach reflects an orientation to planning of production and employment, and the goal becomes manpower production. (p. 9)

This is the approach that has dominated educational planning since the 1960s. Anderson and Bowman make a further comment, which is almost revolutionary in intimating that the power of thinking for themselves might be returned to educators. Again, I quote:

When the aims and operations of education are considered in their own right as a focus of planning, *the aim can be as manifold and complex as the functions education is expected to perform.* Manpower considerations become merely one aspect of educational planning with no necessary priority over other goals. The focus comes to be more on people, less on production of "human resources." (p. 10; italics mine)

UNESCO has made an enormous contribution to the world literacy effort, not so much in numbers of participants served but in terms of research. It has contributed to an understanding of what a truly cross-cultural analysis of educational programs can be, and especially with regard to evaluation. For this, if for nothing else, it deserves applause, appreciation, and support. At the same time it provokes consideration of other issues for it exemplifies par excellence what is happening in the world of education today: the turn toward productivity standards to define educational aims. I argue that this orientation needs to be brought more into the open for consideration by educators and society as a whole.

REVIEWING THE SIGNIFICANCE OF COST STATISTICS

This paper suggests that educational planning for manpower development needs to be reviewed because it is limiting; by contrast, an integrated educational plan balances functionality with cultural concerns. In this section a second claim is made, to the effect that cost statistics are not adequate for judging the worth of adult literacy or, for that matter, any other educational endeavor. The principal argument is drawn from the *Cost-Effectiveness Report on the Work-Oriented Adult Literacy Pilot Project in Iran* (Smyth, 1972).

Smyth arrives at surprising conclusions regarding questions of cost-effectiveness, and in particular with respect to the long-term versus short-term significance and impact of adult literacy. He writes:

Grounds for concluding that the (EWLP) project was an economic failure (or success) simply do not exist, and probably cannot be established empirically anyway. The most that can be concluded is whether the project's authorities followed correct economic principles. (p. 76)

Cost statistics are not enough, as the International Development Research Center (IDRC) also notes in reviewing the above report (1979, p. 81). Indeed, Smyth's argument gives pause for thought about cost-effectiveness evaluation in education generally and renews the perennial consideration of equity and efficiency as conflicting goals with respect to education.

In his report, Smyth also takes sides against the notion of integrating literacy with other development activities:

[O]f course, integration can be attained by restricting programmes to places of work, given on-the-job, with incentives and sanctions to encourage attendance, but that rather ignores the great mass of illiterate peasants and workers, men and women who do not earn a living in factories or large workshops. And anyway, properly "integrating" a project with other developmental activity is no assurance of greater economic benefit. (p. 70).

Smyth goes on to make this point:

From a purely economic standpoint, it is not *a priori* significant whether a programme is general or specific; what matters is that the rate of return on investment in it should be high enough, which may or may not depend on the degree of generality or specificity. And simply because a program is given on-the-job . . . [does not mean] that it is more economically successful than a general programme given in the evening in a rural primary school to a mixed bag of peasants and children. (p. 170)

Smyth's comments raise a number of conundrums. One is the question just mentioned, that of equity versus efficiency. Whereas equity is a goal, efficiency is a rationality concept. As educational researchers Anderson and Bowman (1964) point out, "efficiency is a rationality concept that implies getting the most out of the least, whatever the nature of the rewards or ends may be." But what criteria will be used? Will individuals be selected for further schooling based on how much additional productivity can be predicted for one versus another person? Will priority be given to groups or localities where proposed educational efforts will evoke the largest response in attendance and where demand for further schooling is greatest? Or, should

investment in education for adults be made where the expected ratio of gains in economic output to costs is highest? These differing criteria posed at length by Anderson and Bowman in 1964 are still pertinent, and Smyth's conclusions suggest that efficiency arguments should not be considered at all, except in measuring the efficiency of administration and management.

The second major issue raised by Smyth's comments relates to educational planning and the objectives on which evaluations will be based. Essentially the two major approaches to international planning for educational development—manpower planning and rate-of-return—though different in various respects, view education as investment in human-resource development. In essence they both treat educational planning as an adjunct or subhead of general economic planning. Neither, in other words, considers educational planning in its own right, with economic elements taken as only one aspect. However, in Smyth's case his rate-of-return approach doesn't keep him from recognizing the general good, or value, of education in and of itself, and he conceives of the larger investment in human beings as more than an immediate or short-term issue of cost-effectiveness.

The international concern with functionality, productivity, and socio-economic indicators is understandable but it nevertheless reflects a narrow approach to education. It skews the full meaning and significance of education, including education for adults. Nevertheless, there is today a strong focus on cost-effectiveness and efficiency and a trend in this direction appears likely for the coming decade. Thus, the predominance of economic over other concerns in education—such as equity, participant progress, or even achievement—will probably continue unless this trend is altered.

IMPLICATIONS FOR UNIVERSITIES, PROFESSIONAL ASSOCIATIONS, AND ACADEMICS

TRENDS IN THE ERA OF BIG SOCIAL SCIENCE

In reviewing the emerging "era of big social science," Professor Walter Williams of the University of Washington noted that a significant increase in soundly conceived and executed evaluative studies requires that social agencies, as the primary developers and users of social program evaluative results, establish large, well-trained staffs with sufficient technical and administrative skills (1972).

In reviewing the capacity of social science organizations to perform large-scale evaluative research, Williams further noted that, "as compared with universities, nonuniversity research organizations such as the Rand Corporation generally seem better able in an institutional sense to perform large-scale research, the results of which are expected to have a direct effect on social agency decisions" (p. 306). It would seem that academic social science is not yet oriented toward serving as an "instrument" of state administration.

Howard E. Freeman of UCLA and Mariam A. Solomon of the System Development Corporation (1981) observed that there is a relative decline in the number of dollar expenditures for evaluations undertaken by researchers in universities. They maintain that the profit-making firms and a few aggressive non-profit groups more and more dominate the field from the standpoint of the actual conduct of studies. Competition for government contracts is fierce. Freeman and Solomon point out that the decline in university evaluative research is due in part to government and foundation contract procedures and the short turn-around times required from when requests for proposals are advertised and when bids from prospective contractors must be submitted. Also, the time allotted for contract performance oftentimes makes it impossible for academic groups to compete. Finally, they add, the commercial sector organizations and the "nonprofits" may do a job at less cost, sometimes because they cut corners, but more probably because they have smaller bureaucracies than universities and more incentives to be efficient. As to the quality of the work carried on by profit-making firms as compared with universities, the authors suggest that

while quality in the past was superior in the universities, today "the case is an open question" (p. 16).

Freeman and Solomon suggest that the shift in the conduct of evaluations to the firm will influence the way the field develops methodologically. Methods are likely to be more practical than classical research procedures (p. 17). It appears that leadership in evaluative research is moving to government agencies and nonuniversity policy research organizations and away from universities and their research centers.

A major concern mentioned by Freeman and Solomon (p. 18) is the apparent lack of knowledge within universities about *how* to undertake and carry out successful evaluations. It would appear that the first task of the universities is to master the technical procedures before seeking to obtain or regain a leadership role in this area.

What specifically are the purpose and role of universities, professional associations, and academics concerned with comparative and international practices? Is the purpose to be an instrument of the state? Is the role to be that of technical advisor, consultant, and occasional grantee? Is it to be critically analytic? Is there a leadership role, which includes a political role, that the universities and individual faculty are willing and ready to assume? Is the answer: all of the above?

Of several major approaches to evaluation, three appear to dominate at the present time: systems analysis, behavioral objectives, and decision-making approaches (House, 1980). Of these, systems analysis is most utilized within the framework of large-scale evaluations. As noted earlier, the emphasis of educational evaluation often enough is on efficiency. The trend in the 1980s appears to be toward greater emphasis on efficiency and costs than on benefits and effectiveness.

Cost-benefit and cost-effectiveness analyses have their roots in efforts of economists to explicate the national and international consequences of major inputs; conceptual and technical developments are necessary in order to make the approach and methodology amenable to the services area. (Freeman and Solomon, 1981, p. 19)

The trend toward efficiency evaluation may be inevitable, even necessary, and educators may need to learn "to calculate

social and economic benefits," as Lowe counseled in 1975 (p. 104). But there is, nevertheless, cause for concern that academics will neglect their purpose and role to counter the prevailing cost-efficiency emphasis in large-scale evaluations. What should be their next steps?

NEXT STEPS

First, cooperation and coordination among universities, perhaps in the form of consortia, would be a logical beginning step. Certain consortia already exist, within which strategies could be developed for ways in which to cooperate and coordinate interests in comparative and adult education with evaluative research. Some consortia are government sponsored, such as the US/AID Regional Consortia for International Development. Others, such as the Southern Regional Education Board, are the outgrowth of mutual collaborations in other areas of concern. These existing consortia might serve to support new cooperative efforts among universities with concerns for large-scale national and international program analysis.

Secondly, cooperation and coordination among professional associations is long overdue. The tendency at present appears to be for each association to create separate units or committees internally to deal with specific issues such as evaluation. At the same time, independent associations of specialists, such as the Evaluation Research Society and the Evaluation Network, are cropping up. It would seem appropriate for professional associations with evaluation committees or concerns to seek to cooperate and even coordinate activities with those associations specifically dedicated to one or another of these activities: adult education, comparative education, and evaluation. Networks among associations would serve to encourage cohesiveness among professionals with overlapping interests, and perhaps serve as a means for developing specific projects that might not be feasible by one association alone.

Thirdly, academics themselves need to seek out means of collaboration within the framework of university consortia and professional association networks, and among colleagues undertaking similar efforts in comparative, adult-education evaluative research.

Fourthly, clearinghouses of information are needed to collect, analyze, and disseminate information among colleagues

about works in progress and intended evaluative research. To date, clearinghouses have tended to be insular in their concerns, serving only faculty within one university or—at best statewide. A broader perspective is needed, perhaps within the Educational Resources Information Center (ERIC) or through a government-sponsored national center for evaluative research at the national and international levels. In this regard, it is perhaps worth noting that evaluation at different levels is distinct in concept, method, and consequences, and that a clearinghouse would want to limit its efforts to comparable research efforts. Furthermore, documentation centers that already exist need to make strenuous efforts to acquire the basic literature and especially program reports of evaluations at the international level. Documents on the EWLP, for example, are almost impossible to obtain in the United States; they are not even available from the U.S. Commission for UNESCO in Washington, D.C. Even when the commissions and branches of international organizations do have some of the relevant documentation, access is difficult as they are not functioning as lending libraries.

Fifthly, interdisciplinary efforts to cooperate and coordinate thinking about evaluation are needed. Economists, sociologists, and educators need to discuss their differing criteria and methods, with a view to complementing each other's research and contributing to new ways of operating, if that were to prove feasible. Furthermore, academics in these areas need further contact with policy, planning, and program development staff as well as with program evaluation researchers and international development personnel in the field. In the age of computerization, such communication would not seem to be out of the question.

There are surely other ways for universities, professional associations, and academics to begin to seek renewed purpose and roles in the area of large-scale evaluative research, especially with regard to education for adults at the international level. The preceding suggestions are meant to stimulate thought and preliminary action.

CONCLUSIONS

PERSPECTIVES

Evaluation harbors many definitions, purposes, and criteria. Different evaluative approaches exist as a consequence of differing perspectives of education—of what should be analyzed within and as a result of an educational program. This multidimensional nature of evaluation renders the subject complex.

What seems to be agreed upon is the need for evaluation. Until recently, for example, literacy was primarily a sphere of action rather than analysis. While evaluative efforts may not yet provide the basis for major decisions in the field of literacy, a beginning has been made. Nevertheless, certain caveats exist, and they include the type of information to be gathered. Presumably, data collection will parallel the objectives laid down by policy and planning, but then the premises of policy and planning also require consideration—especially when literacy is linked almost entirely with manpower-development needs and literacy programs are judged primarily on the basis of cost statistics.

As educational evaluation has moved from considerations of participant achievement into the realm of cost analysis, and there is some logic in this move, it appears that short-term economic considerations are outweighing long-term educational payoffs. While contemporary wisdom suggests that there is little likelihood of reversing this trend, the present paper argues for educational outcomes to be put on a par with or above concerns with expenditures.

At the international level, certain commentators maintain that in judging educational, especially literacy, programs it is the progress of the participant which is crucial and not merely achievement according to some norm or established criterion. This would seem especially true for developing countries or poverty areas where people have had limited exposure to and concern for education, whether formal or nonformal.

CRITERIA

Governmental education policies, especially when based on planning approaches, tend to emphasize manpower development, i.e., the human being as an economic resource. Important

though the role of economics may be for the individual and the society, there are cultural considerations—equality, access to information, historical awareness, etc.—that form part of any integrated educational effort. To subsume these concerns or relegate them to low priority is to court disaster in the long run. Providing people with the knowledge and skills necessary to advance the productive processes of the economy represents only one dimension of a society's need for education. Another need is political, to assure the level of enlightenment required for effective and responsible citizenship. Still another is the historical dimension: to promote an understanding in the populace of their historical roots and where they sit on the branch of contemporary development. International understanding is yet another consideration, as is the sociological dimension, as is the need for self-development within modern society.

The question arises as to how to conceive of a set of operations in these various domains to compare with those set forth for manpower development. As the behaviorists have taught (Mager, 1974; Popham, 1972), anything can be transformed into behavioral objectives. The real question is, When will academics concerned with an integrated cultural approach to education get around to countering the purely manpower approach?

In addition, the question of evaluation of program expenditures, while necessary, needs to be considered within the larger framework of long-term educational goals and their payoffs. Adult basic education rates-of-return studies (Arkansas, 1981) indicate significant economic gains for participants over their lifetimes and, therefore, for society, despite what appear to be major initial economic expenditures. Evaluation based on educational outcomes can be seen as a long-term marriage, so to speak, whereas that based solely on economics is a short-term affair with limited perspectives of the future.

IMPLICATIONS

The implications of the present discussion are several. A review of the values underlying educational policy and educational planning is needed. A challenge to the ensconced manpower-development model is also needed, if only to underscore the multidimensional nature of education.

Evaluation is inevitably value laden, and approaches to it

define its final meaning. While both operational and curricular concerns confront the policy maker, planner, and program developer, priorities must be determined that underline broad-based educational concerns with individual progress and achievement in various arenas of knowledge, skills, attitudes, and aspirations.

Also, the universities, as well as professional associations and the academics who belong to both, are being squeezed out of the large-scale evaluation game, giving the lead to government agencies and private firms. The time is ripe for academics to clarify their purpose and role in large-scale evaluative efforts and to consider how their institutions and associations might ensure the kind of cooperation and coordination needed for them to be able to assume an active part. In this, the era of big social science, such is the task at hand if the current trend in efficiency-based evaluation is to be reversed.

REFERENCES

- Alkin, M.C. *Toward an Evaluation Model: A Systems Approach*. Los Angeles: Center for the Study of Evaluation, University of California, 1967.
- Anderson, C.A., & Bowman, M.J. "Theoretical Considerations in Educational Planning." In *Educational Planning*. Edited by D. Adams. Syracuse, N.Y.: Center for Development Education, Syracuse University, 1964.
- Arkansas State Education Department. *Study of the Economic and Social Impact of Publicly Funded Adult Educational Programs in Arkansas*. Little Rock, Ark.: State Education Department, 1980.
- Bhola, H.S. *Evaluating Functional Literacy*. Amersham, Bucks, England: Hulton Educational Publications, 1979.
- Boruch, R.F., & Wortman, P.M. "Implications of Educational Evaluation for Evaluation Policy." In *Review of Research in Education*, vol. 7. Edited by D. Berliner. Wash., D.C.: AERA, 1979.
- Ciarlo, J.A. *Utilizing Evaluation: Concepts and Measurement Techniques*. Beverly Hills, Calif.: Sage Publications, 1981.
- Cook, D. *Educational Project Management*. Columbus, Ohio: Charles Merrill, 1971.
- Couvert, R. *The Evaluation of Literacy Programmes: A Practical Guide*. Paris: UNESCO, 1979.
- Eide, K. "Organization of Educational Planning." In *Educational Planning*. Edited by D. Adams. Syracuse, N.Y.: Center for Development Education, Syracuse University, 1964.
- Freeman, H.E., & Solomon, M.A. "The Next Decade in Evaluation Research." In *Evaluation Research and Practice: Comparative and International Perspectives*. Edited by R.A. Levine et al. Beverly Hills, Calif.: Sage Publications, 1981.

- Grotelueschen, A.D. "Program Evaluation." In *Developing, Administering and Evaluating Adult Education*. Edited by A.B. Knox. San Francisco: Jossey-Bass Publishers, 1980.
- House, E.R. "Assumptions Underlying Evaluation Models." *Educational Researcher*, 1978, 7, 4-12.
- House, E.R. *Evaluating with Validity*. Beverly Hills, Calif.: Sage Publications, 1980.
- India. *Non Formal Education*. New Delhi: Ministry of Education, 1974.
- International Development Research Center. *The World of Literacy: Policy, Research, and Action*. Ottawa, Canada: IDRC, 1979.
- Lowe, J. *The Education of Adults: A World Perspective*. Toronto: Ontario Institute for Studies in Education, 1975.
- Mager, R.F. *Preparing Instructional Objectives*. Belmont, Calif.: Fearon-Pitman, 1974.
- Mathur, K.B. *Folk Media and Development: Review of UNESCO/Government of India Seminar on Integrated Use of Folk Media and Mass Media in Family Planning*. Institutional Technology Report No. 12. Wash., D.C.: Academy for Educational Development, 1975.
- McDonald, B. "Evaluation and the Control of Education." Unpublished paper. Centre for Applied Research in Education, University of East Anglia, Norwich, England, 1974.
- Owens, T.R. "Educational Evaluation by Adversary Proceedings." In *School Evaluation: The Politics and Process*. Edited by E.R. House. Beverly Hills, Calif.: Sage Publications, 1973.
- Parlett, M., & Hamilton, D. "Evaluation as Illumination: A New Approach to the Study of Innovative Programs." In *Evaluation Studies Review Annual*, vol. 1. Edited by G. V. Glass. Beverly Hills, Calif.: Sage Publications, 1976.

- Parnes, H.S. "Assessing the Educational Needs of a Nation." In *Educational Planning*. Edited by D. Adams. Syracuse, N.Y.: Center for Development Education, 1964.
- Popham, W.J. "Objectives and Instruction." In *Institutional Objectives*. American Educational Research Association Monograph Series on Curriculum Evaluation, vol. 3. Edited by R.E. Stake. Chicago: Rand McNally & Co., 1969.
- Popham, W.J. *An Evaluation Guidebook: A Set of Practical Guidelines for the Educational Evaluator*. Los Angeles: The Instructional Objectives Exchange, 1972.
- Provus, M. "Evaluation in Ongoing Programs in the Public School System." In *Educational Evaluation: New Roles, New Means*. 68th Yearbook of the National Society for the Study of Education, Part II. Edited by R.W. Tyler. Chicago: University of Chicago Press, 1969.
- Rippey, R.M. (Ed.) *Studies in Transactional Evaluation*. Berkeley, Calif.: McCutchan Publishing Corp., 1973.
- Rivera, W.M., Patino, H., & Brockett, R. "A Conceptual Framework for Program Development in Adult Education." In *Methods and Materials in Continuing Education*. Edited by C. Klevins. Los Angeles: Klevins, 1982.
- Rivlin, A.M. *Systematic Thinking for Social Action*. Wash., D.C.: Brookings Institution, 1971.
- Saksena, H.P. "Evaluation of the Experimental Literacy Program." *Convergence* (Toronto), September 1968, p. 74.
- Scriven, M. "The Methodology of Evaluation." In *Perspectives on Curriculum: Evaluation*. American Educational Research Association Monograph Series on Curriculum Evaluation, vol. 1. Edited by R.E. Stake et al. Chicago: Rand McNally & Co., 1967.
- Scriven, M. "Pros and Cons About Goal-Free Evaluation." In *Evaluation Comment*. Los Angeles: Center for the Study of Evaluation, University of California, 1972.

- Skager, R. *Lifelong Education and Evaluation Practice*. New York: Pergamon Press, 1978.
- Smyth, J. *Cost-Effectiveness Report on the Work-Oriented Adult Literacy Pilot Project in Iran: Synopsis*. Paris: International Institute for Educational Planning, 1972.
- Spaulding, S. "Life-long Education: A Modest Model for Planning and Research." *Comparative Education*, 1974, 10, 101-113.
- Spaulding, S. "Evaluation of Adult Nonformal Education Programs: An International Perspective." Paper presented at the Annual Meeting of the Comparative and International Education Society, New York, March 1982.
- Stake, R.E. "Nine Approaches to Educational Evaluation." Unpublished paper. Center for Instructional Research and Curriculum Evaluation, University of Ill., Urbana, 1974.
- Stufflebeam, D.L. "Evaluation as Enlightenment for Decision-making." In *Improving Educational Assessment and An Inventory of Measures of Affective Behavior*. Edited by W. H. Beatty. Wash., D.C.: Association for Supervision and Curriculum Development, National Education Association, 1969.
- Stufflebeam, D.L. Untitled memo presented to the Evaluation Network Meeting, St. Louis, Mo., 1977.
- Taylor, D.B. "Eeeny, Meeny, Miney, Meaux: Alternative Evaluation Models." *North Central Association Quarterly*, 1976, 50, 353-358.
- Tyler, R.W. *Basic Principles of Curriculum and Instruction*. Syllabus for Education No. 305. Chicago: University of Chicago Press, 1950.
- Tyler, R.W. (Ed.) *Educational Evaluation: New Roles, New Means*. 68th Yearbook of the National Society for the Study of Education, Part 2. Chicago: University of Chicago Press, 1969.

- UNESCO *Looking at UNESCO*. Paris: UNESCO, 1973.
- UNESCO. *Learning to Be: The World of Education Today and Tomorrow*. Paris: UNESCO, 1972.
- UNESCO/UNDP. *The Experimental World Literacy Programme: A Critical Assessment*. Paris: UNESCO/UNDP, 1976.
- UNESCO. *Recommendation on the Development of Adult Education*. Paris: UNESCO, 1976.
- Williams, W. "The Capacity of Social Science Organizations to Perform Large-Scale Evaluative Research." In *Evaluating Social Programs*. Edited by P.H. Rossi and W. Williams. New York: Seminar Press, 1972.
- World Bank. *Education Sector Working Paper*. Wash., D.C.: World Bank, 1974.
- World Bank. *Education Sector Working Paper*. Wash., D.C.: World Bank, 1980.
- World Council of Comparative Education Societies, IVth Congress. *Newsletter*, vol. 9, March 1981.
- World Health Organization. *Health for All by the Year 2000: Plan of Action for the Implementation of Regional Strategies*. Wash., D.C.: Panamerican Health Organization/WHO, 1982.
- Worthen, B.R. & Sanders, J.R. *Educational Evaluation: Theory and Practice*. Belmont, Calif.: Wadsworth Publishing Co., 1973.