

INTRODUCTION AND COMPARISON OF DIFFERENT PROGRAM EVALUATION APPROACHES

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ABSTRACT

Evaluation is a tool which can be used to help teachers judge whether a curriculum or instructional approach is being implemented as planned, and to assess the extent to which stated goals and objectives are being achieved. A variety of evaluation approaches emerged during the 20th century. The main aim of this descriptive study, which based to literature reviewing model, is to review comparatively the different program evaluation approaches frequently mentioned in the international literature. The study firstly, introduces different program evaluation approaches in international literature , then compares and discusses each program evaluation approach ,and finally, presents some suggestions on standards to guide development of better evaluation approaches and planning, developing and applying of effective program evaluation approaches for the theoreticians, program directors , evaluation trainers , the practitioners of evaluation ,and program evaluators .

Key Words: Program evaluation; education; approach; comparison; international literature.

Çeşitli Program Değerlendirme Yaklaşımlarının Karşılaştırılması

ÖZET

Değerlendirme, öğretmenlerin bir program veya öğretim yaklaşımının planlandığı gibi uygulanıp uygulanmadığına karar vermelerine ve tasarlanmış amaç ve hedeflere ulaşma derecesini belirlemelerine yardımcı olarak kullanılabilen bir araçtır. Birçok değerlendirme türü 20. yüzyılda ortaya çıkmıştır. Literatür taraması modeline dayalı olarak gerçekleştirilen betimsel nitelikteki bu çalışmanın temel amacı, uluslararası literatürde yer alan çeşitli program değerlendirme türlerini karşılaştırmalı olarak incelemektir. Çalışmada öncelikle uluslararası literatürde yer alan çeşitli program değerlendirme türleri tanıtılmakta, daha sonra her bir değerlendirme türü karşılaştırmalı olarak inceleme konusu yapılmaktadır. Çalışmanın son kısmında ise, teorisyenler, program yöneticileri, değerlendirme konusunda eğitim veren uzmanlar, değerlendirme uygulayıcıları ve program değerlendirmecilerin daha iyi değerlendirme yaklaşımı geliştirmeleri ve etkili program değerlendirme yaklaşımları tasarlama, geliştirme ve uygulamalarına yönelik temel sonuçlar ve önerilere yer verilmiştir.

Anahtar Sözcükler: Program değerlendirme; eğitim; yaklaşım; karşılaştırma; uluslararası literatür.

1. INTRODUCTION

Evaluation is a tool which can be used to help teachers judge whether a curriculum or instructional approach is being implemented as planned, and to assess the extent to which stated goals and objectives are being achieved . The evaluation requirement had two purposes: (1) to ensure that the funds were being used to address the needs of disadvantaged children; and (2) to provide information that would empower parents and communities to push for better

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education. The evaluation process can be described as involving six progressive steps. These steps are the following:

- 1: Defining the Purpose and Scope of the Evaluation
- 2: Specifying the Evaluation Questions
- 3: Developing the Evaluation Design and Data Collection Plan
- 4: Collecting the Data
- 5: Analyzing the Data and Preparing a Report
- 6: Using the Evaluation Report for Program Improvement

Evaluations of educational programs have expanded considerably over the past 30 years. A variety of evaluation approaches emerged during the 20th century. According to Stufflebeam (1999) evaluation approaches included, in chronological order, publications by “Tyler (1942, 1950), Campbell and Stanley (1963), Cronbach (1963), Stufflebeam (1966), Tyler (1966), Scriven (1967), Stake (1967), Stufflebeam (1967), Suchman (1967), Aklin (1969), Guba (1969), Provas (1969), Stufflebeam et al. (1971), Parlett and Hamilton (1972), Eisner (1975), Glass (1975), Cronbach and Associates (1980), House (1980), and Patton (1980)”. These and other authors/scholars began to project alternative approaches to program evaluation. In the ensuing years a rich literature on a wide variety of alternative program evaluation approaches developed [see, for example, “Cronbach (1982); Guba and Lincoln (1981, 1989); Nave, Misch, and Mosteller (1999), Nevo (1993); Patton (1982, 1990, 1994, 1997); Rossi and Freeman (1993); Schwandt (1984); Scriven (1991, 1993, 1994a, 1994b, 1994c); Shadish, Cook, and Leviton (1991); Smith, M. F. (1989); Smith, N. L. (1987); Stake (1975b, 1988, 1995); Stufflebeam (1997); Stufflebeam and Shinkfield (1985); Wholey, Hatry, and Newcomer (1995); Worthen and Sanders (1987, 1997)”.

2. EDUCATIONAL PROGRAM EVALUATION APPROACHES IN INTERNATIONAL LITERATURE

The following approaches are frequently mentioned in the evaluation literature;

1) Traditional Evaluation (TE): The 1960s were a very successful period for the natural sciences. Achievements such as putting a man on the moon helped create an almost unshakable faith in the natural sciences, and led social scientists to adopt these methods to tackle society's ills. Patton (1997 :7) refers to this as “a new order of rationality in government – a rationality undergirded by social scientists” .With the application of scientific methods to program evaluations, traditional evaluation (TE) was born. Traditional evaluation is characterized by its emphasis on scientific methods. Reliability and validity of the collected data are key, while the main criterion for a quality evaluation is methodological rigor. TE requires the evaluator to be objective and neutral and

to be outcome-focused (Torres & Preskill, 2001). This leads to a preoccupation with experimental methods, numbers (as opposed to words), statistical tools, and an emphasis on summative evaluations rather than formative ones.

2)Behavioral Objectives Approach: This approach focuses on the degree to which the objectives of a program evaluation, product, or process have been achieved. The major question guiding this kind of is, “Is the program, product, or process achieving its objectives?”

3)Responsive Evaluation: This approach calls for evaluators to be responsive to the information needs of various audiences or stakeholders.

4)Goal-Free Evaluation: This approach focuses on the actual outcomes rather than the intended outcomes of a program. In a goal-free evaluation approach the evaluator has minimal contact with the program managers and staff and is unaware of the program’s stated goals and objectives .

5)Adversary/Judicial Approaches: These approaches adapt the legal paradigm to program evaluation. Thus, two teams of evaluators representing two views of the program’s effects argue their cases based on the evidence (data) collected. Then, a judge or a panel of judges decides which side has made a better case and makes a ruling.

6)Consumer-Oriented Approaches: The emphasis of this approach is to help consumers choose among competing programs or products. Consumer Reports provides an example of this type of evaluation.

7)Expertise/Accreditation Approaches: The accreditation model relies on expert opinion to determine the quality of programs. The purpose is to provide professional judgments of quality.

8)Utilization-Focused Evaluation : This approach assumes that stakeholders will have a high degree of involvement in many, if not all, phases of the evaluation.

9)Theory-Driven Evaluation: This approach to evaluation focuses on theoretical rather than methodological issues. The basic idea is to use the “program’s rationale or theory as the basis of an evaluation to understand the program’s development and impact”(Smith, 1994:83).By developing a plausible model of how the program is supposed to work, the evaluator can consider social science theories related to the program as well as program resources, activities, processes, and outcomes and assumptions (Bickman,1987).

10)Success Case Approach: This approach to evaluation focuses on the practicalities of defining successful outcomes and success cases and uses some of the processes from theory-driven evaluation to determine the linkages, which may take the form of a logic model, an impact model, or a results map.

11)Organizational Learning: Some evaluators envision evaluation as a catalyst for learning in the workplace (Preskill & Torres, 1999). Thus,

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evaluation can be viewed as a social activity in which evaluation issues are constructed by and acted on by organization members. This approach views as ongoing and integrated into all work practices.

12) Participative approaches: These approaches are found in the literature are:

a) Stakeholder-based evaluation (SBE),

b) Empowerment evaluation (EE),

c) Self-evaluation (SE).

a) Stakeholder-Based Evaluation (SBE): In stakeholder-based evaluations, the (external) evaluator is the expert on evaluation methods. She designs the process, collects the data, and writes up the report. In contrast to TE, however, there is a recognition that the stakeholders are the experts on their own program. In SBE, they have significant input when it comes to the selection of the evaluation criteria and the interpretation of the findings. The primary objective of SBE is to provide the stakeholders with feedback for program improvement while not sacrificing any rigor, validity, or objectivity in the process, so that the needs of the main client (e.g. the funding agency) are met.

b) Empowerment Evaluation (EE): This approach, as defined by Fetterman (2001:3), is the “use of evaluation concepts, techniques, and findings to foster improvement and self-determination” Fetterman (2001) is the most vocal proponent of the empowerment approach to evaluation (EE). In the words of Torres and Preskill (2001; 388), the goal is to “facilitate learning and change” rather than merely evaluate after the fact. The role of the evaluator, therefore, changes from content expert to facilitator.

c) Self-Evaluation (SE): One could argue that self-evaluation (SE) no longer qualifies as evaluation because there are no guarantees that any kind of rigor or systematic approach is safeguarded. It is included here because it is one intended outcome of empowerment evaluation and because it can be very useful to the program’s staff and other stakeholders.

13) Pragmatic Approaches: In spite of the continued paradigm war, which tends to polarize the field between two alternatives (objectivist or constructivist assumptions; quantitative or qualitative methods; summative or formative purpose; etc.), the literature shows an increase in popularity of pragmatic approaches (Bengston & Fan, 1999; Pratt et al., 2000). These approaches essentially ignore the paradigm debate and show no hesitation to mix approaches in ways that loyalists to either paradigm would never do out of fear of compromising their findings.

14) Realistic Evaluation Approach: Possibly the best justification for calling the advent of mixed-method approaches a trend is the work by Henry, Julnes, and Mark (1997) and Mark, Henry and Julnes (2000). These authors attempt to give the pragmatic approach more legitimacy by providing a theoretical basis for it, called emergent realism.

15. Postmodern Evaluation Approach: Hlynka and Belland (1991) present multiple perspectives on postmodernism and related evaluative perspectives such as critical theory. They criticize the field of educational technology for overemphasizing modern technologies and positivist modes of inquiry. They point out that educational technology can be viewed as a series of failed innovations including motion pictures, television, programmed instruction, instructional systems design, computer-based instruction, and intelligent tutoring systems. They recommend the postmodern perspective as an approach to revealing the political agendas hidden in each of these “innovations.”

Hlynka and Yeaman (1992:1,2) described how to be a postmodernist:

1. Consider concepts, ideas and objects as texts. Textual meanings are open to interpretation.
2. Look for binary oppositions in those texts. Some usual oppositions are good/bad, progress/tradition, science/myth, love/hate, man/woman, and truth/fiction.
3. “Deconstruct” the text by showing how the oppositions are not necessarily true.
4. Identify texts which are absent, groups who are not represented and omissions, which may or may not be deliberate, but are important.

16) Approaches to Evaluation in Instructional System Development (ISD) : These approaches assume that a substantial amount of instruction will be created and that considerable resources are available. The team will likely engage in the production of original and selection of existing materials. The decision regarding the delivery system is based on the infrastructure for instructional delivery. The amount of front-end analysis and try-out and revision is great. Some of the models that fall into this category are listed here with the date of their last revision: Gagné, Briggs, and Wager Model (1992), Smith and Ragan Model (1994), Gentry Model (1994), Kemp, Morrison, and Ross (1994), Seels and Glasgow (1997), Dick and Carey Model (2004). Although they vary in the number and sequence of steps, they all contain the core elements described earlier, including the evaluation component. The evaluation piece generally consists of both formative and summative evaluation. The formative evaluation is an ongoing process, evaluating the program during the development and revision stages. The summative evaluation is conducted at the end of the program and varies in its purpose and approach. The field of instructional systems development employs five primary approaches (the Decision Making Model; the Accreditation Model; Goal-Based Model; Goal-Free Model; Responsive (Contingency) Model:) to program evaluation that differ in their beliefs about the intent of evaluation and their focus (Seels and Glasgow, 1998; Shambaugh and Magliaro, 1997; Gentry 1994; Gagné, Briggs, and Wager 1992; Hannum and Hansen, 1989; Stake, 1967).

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17) Foundational Approaches for 21st Century Evaluations : Stufflebeam (1999) classified 22 program evaluation approaches into four categories; The first category includes approaches that promote invalid or incomplete findings (referred to as pseudoevaluations), while the other three include approaches that agree, more or less, with the employed definition of evaluation (i.e., Questions/Methods–Oriented, Improvement/Accountability, and Social Agenda/Advocacy).

17.1. Pseudoevaluations: First group of program evaluation approaches includes what he has termed pseudoevaluations:

Approach 1: Public Relations-Inspired Studies

Approach 2: Politically Controlled Studies.

17.2. Questions/Methods-Oriented Approaches: The second category of approaches includes studies that are oriented to (1) address specified questions whose answers may or may not be sufficient to assess a program's merit and worth and/or (2) use some preferred method(s). These approaches are the followings:

Approach 3: Objectives-Based Studies

Approach 4: Accountability, Particularly Payment By Results Studies

Approach 5: Objective Testing Programs

Approach 6: Outcomes Monitoring/Value-Added Assessment

Approach 7: Performance Testing

Approach 8: Experimental Studies

Approach 9: Management Information Systems

Approach 10: Benefit-Cost Analysis Approach

Approach 11: Clarification Hearing

Approach 12: Case Study Evaluations

Approach 13: Criticism and Connoisseurship

Approach 14: Program Theory-Based Evaluation

Approach 15: Mixed Methods Studies.

17.3. Improvement/Accountability-Oriented Evaluations: The third set of approaches involves studies designed primarily to assess and/or improve a program's merit and worth. These are labeled Improvement/Accountability-Oriented Evaluations. These approaches are the followings:

Approach 16: Decision/Accountability-Oriented Studies

Approach 17: Consumer-Oriented Studies

Approach 18: Accreditation/Certification Approach

17.4. Social Agenda/Directed (Advocacy) Approaches: The approaches in this group are quite heavily oriented to employing the perspectives of

stakeholders as well as experts in characterizing, investigating, and judging programs. These approaches are the followings:

Approach 19: Client-Centered Studies (or Responsive Evaluation)

Approach 20: Constructivist Evaluation

Approach 21: Deliberative Democratic Evaluation

Approach 22. Utilization-Focused Evaluation.

3. A COMPARATIVE REVIEW OF THE DIFFERENT PROGRAM EVALUATION APPROACHES

Although traditional evaluation(TE)is still widely used today, it is not the only available approach to program evaluation. Competing approaches have since been developed, mostly in response to one of TE's most serious drawbacks – the fact that many TE reports are not used or even read (Torres & Preskill, 2001; Fetterman,2001). One of the earliest alternatives to TE is what is known as Responsive Evaluation(Stake,1973). The major questions of different evaluation approaches are different: For example the major question guiding behavioral objectives approach evaluation is, “Is the program product, or process achieving its objectives?”The major question guiding the responsive evaluation is, “What does the program look like to different people?”In a goal-free evaluation approach the evaluator has minimal contact with the program managers and staff and is unaware of the program's stated goals and objectives. The question Adversary/Judicial Approaches of evaluation addresses is, “What are the arguments for and against the program?”The major question addressed by Consumer-Oriented Approaches of evaluation is, “Would an educated consumer choose this program or product?” The question addressed in Expertise/Accreditation Approaches of evaluation is, “How would professionals rate this program?” According to Patton (1997:23), “utilization-focused program evaluation is evaluation done for and with specific, intended primary users for specific, intended uses”. The major question being addressed is,“What are the information needs of stakeholders, and how will they use the findings” The major focusing questions for the Theory-Driven evaluation are, “How is the program supposed to work? What are the assumptions underlying the program's development and implementation?”Evaluators using success case approach gather stories within the organization to determine what is happening and what is being achieved. The major question this approach asks is, “What is really happening?”Some evaluators envision evaluation as a catalyst for learning in the workplace (Preskill & Torres ,1999). Thus, evaluation can be viewed as a social activity in which evaluation issues are constructed by and acted on by organization members. This approach views evaluation as ongoing and integrated into all work practices. The major question in this case is, “What are the information and learning needs of individuals, teams, andthe organization in general?”

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Many of the articles reviewed report their experiences with participative evaluation. Though not all report unequivocal success (Schnoes, Murphy-Berman, & Chambers, 2000), many of them do, collectively building evidence in favor of the utility and credibility of participatory program evaluations

(Thayer & Fine, 2000; Johnson, Willeke, & Steiner, 1998; Unrau, 2001. Johnson et al. (1998) describe their experiences with stakeholder-based evaluation (SBE). On the one hand, they found that involving stakeholders indeed improved the evaluation's credibility among stakeholders. Other reported advantages are: a focus on goals rather than activities; staff development; and improved respect for cultural diversity. On the other hand, they found that it was very time-intensive and that it was driven mostly by program staff, while involvement from the clients remained limited. While Unrau (2001) reports that involving stakeholders in the formulation of the Program Logic model may improve the evaluation, Quintanilla & Packard (2002) found that involving stakeholders increased their sense of ownership of the evaluation process, which in turn facilitated its integration into the daily activities of the program.

Although empowerment evaluation (EE) approach has received a lot of press, empirical studies are limited. Schnoes et al. (2000) report on their attempt to implement EE. They ran into problems, including disagreement among participants and the amount of time required of everyone involved. EE is not suitable for each evaluation context (nor is it intended to be), and successful implementation requires foresight and a significant amount of work in advance of the process. EE puts the program stakeholders in the center of the process while the evaluator assists and coaches them. The major question characterizing empowerment evaluation (EE) approach is, "What are the information needs to foster improvement and self-determination?" Paton, Foot, and Payne (2000) worked with several non-profits that assessed their own programs' quality by self-administering existing quality assessment instruments. The results were mixed: on the one hand, the instruments were not used as intended by its authors, thereby undermining the validity of its outcomes. On the other hand, they did serve to generate dialogue, which in itself was considered very useful. The main differences between the three relate to the primary goal(s) of the evaluation and the relationship between the evaluator and the stakeholders. The "hardening" of TE and the concurrent "softening" of the participative approaches strongly imply that the field of evaluation practice has diversified. This is in line with other authors' observations (Smith, 2001).

An examination of the spectrum of available approaches shows that the role of the evaluator as well as other variables change according to the evaluation approach, as summarized in Table 1. The vertical line in Table 1 (between SBE and EE) represents the parting line in the paradigm war, suggesting that the debate has not yet been settled. Smith (2001) agrees, saying

that the debate “is and was about differences in philosophy and “world view” . While the argument originally revolved around incompatible philosophical positions on knowability and objectivity, it now focuses on the espoused purpose of program evaluation. Those who argue for social justice are the former constructivists and those who still subscribe to the assessment of value or worth generally fall into the objectivist camp.

Table 1: Comparison of Different Evaluation Approaches

	TE	SBE	EE	SE
Stakeholders’ influence	None	In design and reporting only	Throughout	Throughout
Extent of evaluators’ control	Complete	Majority	Shared with stakeholders	None
Image(s) of evaluators	Doctor; scientist; professor	Chief executive; policy-maker	Mentor; facilitator; teacher; coach	n/a
Purpose	Summative only	Mostly summative	Mostly formative	Formative only
Utilization rate	Very low	Low	High	Very high
Basis for credibility	Evaluator expertise; methodological rigor	Evaluator expertise and stakeholder involvement	Utilization of findings and evaluator endorsement	Usefulness of findings

One might even speculate that pragmatic approaches are appearing because of the persistence of the paradigm war – its abstract debates have not addressed the questions and problems that evaluators in the “real world” wrestle with, and may have led to the advent of “mixed-method approaches” .For example, Johnson, McDaniel, and Willeke (2000) argue that assessments of portfolios can satisfy psychometric demands of reliability. In a similar vein, MacNeil (2000) introduces the reader to the possible utility of including poetic representation in evaluation reports.

Approaches of Instructional System Development (ISD) are based on the classical curriculum evaluation models as presented by Stufflebeam and Shinkfield (1990) and modified to address the specific aims and audiences of instructional systems development. Accordingly, program evaluation paradigms in ISD may be viewed as:

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The Decision Making Model: collecting information about education/training programs for the purpose of decision making focus (Seels and Glasgow, 1998; Gagné, Briggs, and Wager, 1992; Hannum and Hansen, 1989), based on the Stufflebeam model;

The Accreditation Model: forming professional judgements about the processes used within education/training programs (Shambaugh and Magliaro, 1997; Kemp, Morrison, and Ross, 1994; Hannum and Hansen, 1989);

Goal-Based Model: determining whether pre-stated goals of educational/training programs were met (Shambaugh and Magliaro 1997; Hannum and Hansen 1989), based the Tyler model;

Goal-Free Model: uncovering and documenting what outcomes were occurring in educational/training programs without regard to whether they were intended program goals focus (Seels and Glasgow, 1998; Shambaugh and Magliaro, 1997; Gagné, Briggs, and Wager, 1992; Hannum and Hansen, 1989), based on the Scriven model;

Responsive (Contingency) Model: comparing what was intended for instruction to what actually was observed (Gentry, 1994; Stake, 1967), based on the Stake model .

Table 2 summarizes the ISD models discussed and their primary approaches to program evaluation, whether the model developers explicitly reference the traditional curriculum evaluation model or the approach is implicit in the model.

Table 2: The ISD Models and Their Primary Approaches to Program Evaluation

ISD Model	Primary Program Evaluation Approach
Gagné, Briggs, and Wager (1992)	Scriven and Stufflebeam (explicit)
Smith and Ragan (1993)	Scriven (formative and summative aspects) (explicit)
Gentry (1994)	Stake (explicit)
Kemp, Morrison, and Ross (1994)	Accreditation and Tyler (implicit)
R2D2 (1995)	None
Dick and Carey (1996)	Tyler and Scriven (implicit)
Seels and Glasgow (1997)	Scriven and Stufflebeam (implicit)

According to Stufflebeam (1999) most promising and best approaches for 21 st century evaluations are the followings:

1) Improvement/Accountability-Oriented Evaluation Approaches

Approach 16: Decision/Accountability-Oriented Studies

Approach 17: Consumer-Oriented Studies

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Approach 18: Accreditation/Certification Approach

2) Social Agenda-Directed (Advocacy) Approaches

Approach 22: Utilization-Focused Evaluation

Approach 19: Client-Centered Studies (or Responsive Evaluation)

Approach 21: Deliberative Democratic Evaluation

Approach 20: Constructivist Evaluation

3) Questions/Methods-Oriented Evaluation Approaches

Approach 12: Case Study Evaluations

Approach 6: Outcomes Monitoring/Value-Added Assessment.

They are listed in order of merit, within the categories of Improvement/Accountability, Social Mission/Advocacy, and Questions/Methods evaluation approaches. The ratings are in relationship to the Joint Committee *Program Evaluation Standards* and were derived by the author using a special checklist keyed to the *Standards*.³ All nine of the rated approaches earned overall ratings of Very Good, except Accreditation, which was judged Good overall. The Utilization-Focused and Client-Centered approaches received Excellent ratings in the standards areas of Utility and Feasibility, while the Decision/Accreditation approach was judged Excellent in provisions for Accuracy. The rating of Good in the Accuracy area for the Outcomes Monitoring/Value-Added approach was due not to low merit of what this approach's techniques, but to the narrowness of questions addressed and information used; in its narrow sphere of application the Outcomes Monitoring/Value-Added approach provides technically sound information. The comparatively lower ratings given to the Accreditation approach results from its being a labor intensive, expensive approach; its susceptibility to conflict of interest; its overreliance on self-reports and brief site visits; and its insular resistance to independent metaevaluations. Nevertheless, the distinctly American and pervasive accreditation approach is entrenched. All who will use it are advised to strengthen it in the areas of weakness identified. The Consumer-Oriented approach also deserves its special place, with its emphasis on independent assessment of developed products and services. While this consumer protection approach is not especially applicable to internal evaluations for improvement, it complements such approaches with the outsider, expert view that becomes important when products and services are put up for dissemination. The Case Study approach scored surprisingly well, considering that it is focused on use of a particular technique. An added bonus of this approach is that it can be employed as a component of any of the other approaches, or it can be used by itself. As mentioned previously in this paper, the Democratic Deliberative approach is new and appears to be promising for testing and further development. Finally, the Constructivist approach is a well-founded, mainly qualitative approach to evaluation that systematically engages interested parties to help conduct both the divergent and convergent stages of evaluation.

4. DISCUSSION

The last half of the 20th century saw considerable development of program evaluation approaches. Many of the approaches introduced in the 1960s and 1970s have been extensively refined and applied. The category of social agenda/advocacy models has emerged as a new and important part of the program evaluation cornucopia. There is among the approaches an increasingly balanced quest for rigor, relevance, and justice. Clearly, the approaches are showing a strong orientation to stakeholder involvement and use of multiple methods. The 1970s were characterized by a predominantly social-scientific approach to program evaluation. Other approaches were not generally accepted as valid or scientific, so the variety of methods at the evaluator's disposal was limited. Of course, much has happened since the 1970s; as the subsequent sections aim to show, the 1980s and 1990s were characterized by a host of developments both in the political realm and in the academic realm.

It seems fair to say that while TE has "hardened" because of its shift in emphasis from activities and outputs to outcomes and results, the competing approaches have "softened" because of the evaluator's gradual move from content expert to methodological expert and, finally, coach and mentor. The erosion of the legitimacy of TE in evaluation practice and the calls for more transparency and democracy in scientific research have resulted in an increased popularity of more participative approaches in program evaluation (Thayer & Fine, 2000; Mertens, 2001) alternatively called community-based (Cockerill, Myers, & Alman, 2000), collaborative (Brandon, 1998), participatory (Quintanilla & Packard, 2002), empowerment (Fetterman, 2001) evaluations. As a result, evaluators have a more diverse set of tools to tackle evaluations, and the days of the one-type-fits-all approach to evaluation are past. Thus far, there are no articles reporting on an application of realistic evaluation philosophy and approach to program evaluation. Time will tell whether or not emergent realism will catch on in the field. If this trend continues, it may have profound implications for program evaluation as an emerging field of practice. For one, philosophically oriented academicians who subscribed to a particular position in the paradigm debates are essentially being ignored by peers and practitioners who go their own way under the "whatever works" motto.

What are the lessons of the postmodernist perspective for designers of interactive learning systems? Basically, instructional designers should not automatically assume that their systems models and instructional technologies are the best methods for establishing conditions for teaching and learning. Further, they should constantly examine and re-examine their motives and methods to ensure that minority perspectives are included. They should attend to critics of educational technology such as Cuban (1986) and Postman (1995). In addition, designers of interactive learning systems should invite alternative views

that can be used to rethink and deconstruct the programs and products they develop (Cuban, 2001).

Not surprisingly, critics of the postmodernist model see it as anti-technology, anti-progress, and anti-science. Postmodernists respond that positivism and science have had their chance to perfect the world and have failed miserably. Postmodernists seek to empower the disenfranchised in contemporary society, especially female, third-world, and non-white interests (Anderson, 1994). It is difficult to be postmodernist within the context of instructional design and evaluation because postmodernism largely rejects such systems-oriented modes of development and inquiry. Instructional systems design (ISD) is criticized as a tool of positivists who hold onto the false hope of linear progress. Further, criticism is valued over evaluation because of its emphasis on identifying “dysfunctions as well as functions” (Hlynka & Yeaman, 1992:2). Although the incongruency between instructional design and postmodernism is certainly problematic, there is some value in the postmodernist perspective as a method of checking interactive learning systems for aspects that may be racist, sexist, and/or culturally insensitive.

Constructivist and postmodern philosophies are infiltrating the ISD field, causing many in the field to re-examine their positions about how and if instructional systems development can survive (Wilson, Teslow and Osman-Jouchoux, 1998; Bednar, Cunningham, Duffy, and Perry 1998; Wilson and Osman, 1998). As the debate between the objectivists and constructivists ensues, some ISD professionals and academics are looking for ways to marry the old with the new (Wilson, 1998), while others are anticipating a revolution in the field (Bednar, Cunningham, Duffy, and Perry, 1998). The main problem with the questions/methods-oriented studies is that they often address questions that are more narrow in scope than the questions needing to be addressed in a true assessment of merit and worth. However, it is also noteworthy that these types of studies compete favorably with improvement/accountability-oriented evaluation studies and social agenda/advocacy studies in the efficiency of methodology and technical adequacy of information employed. The social mission/advocacy studies are to be applauded for their quest for equity as well as excellence in the programs being studied. They model their mission by attempting to make evaluation a participatory, democratic enterprise. Unfortunately, many pitfalls attend such utopian approaches to evaluation. Especially, these include susceptibility to bias and political subversion of the study and practical constraints on involving, informing, and empowering all the stakeholders. For the evaluation profession itself, the review of program evaluation models underscores the importance of evaluation standards and metaevaluations (Stufflebeam, 1999). The literature is absent of discussion regarding the evaluation of programs in the new paradigm, and speaks only of evaluation of learning and student-oriented evaluative strategies.

5. CONCLUSIONS AND SUGGESTIONS

As a basic tool for curriculum and instructional improvement, a well planned evaluation can help answer the following questions: How is instruction being implemented? To what extent have objectives been met? How has instruction impacted on its target population? What contributed to successes and failures? What changes and improvements should be made? Evaluation involves the systematic and objective collection, analysis, and reporting of information or data. Using the data for improvement and increased effectiveness then involves interpretation and judgement based on prior experience. It is important to remember that initiating an evaluation cannot wait until developing and teaching an instructional unit is completed. Theoreticians should diagnose strengths and weaknesses of existing approaches, and they should do so in more depth than demonstrated here. They should use these diagnoses to evolve better, more defensible approaches and to help expunge the use of hopelessly flawed approaches; they should work with practitioners to operationalize and test the new approaches; and, of course, both groups should collaborate in developing still better approaches.

There is clearly a need for continuing efforts to develop and implement better approaches to program evaluation. This is illustrated by some of the authors' hesitancy to accord the status of a model to their contributions or inclination to label them as utopian. There are some approaches that in the main seem to be a waste of time or even counterproductive. An evaluation should be incorporated into overall planning, and should be initiated when instruction begins. In this manner, instructional processes and activities can be documented from their beginning, and baseline data on students can be collected before instruction begins. While the literature is replete with ISD models, there are few major distinctions among them (Gustafson and Branch, 1997). Many models, and consequently, their program evaluation components, are merely restatements of earlier models. The evaluation components are clearly offspring of the classic curriculum evaluation models presented by Stufflebeam and Shinkfield (1990), although the more recently developed models tend not to mention the roots of their summative evaluation process in their presentation of the model. The curriculum evaluation models of the 1960s and 1970s are clearly the foundation of the program evaluation components of the most popular ISD models today.,

The trend toward a constructivist approach to ISD presents a need to examine a new approach to the program evaluation component, missing now in the literature. Although some mention has been made of Eisner's "expressive objectives" (Kemp, Morrison, and Ross, 1994: 91) and "connoisseurship" (Kemp, Morrison, and Ross, 1994: 283), these approaches have been with eye toward formative, not summative evaluation processes. The discussion of a postmodern or constructivist view of ISD suggests that traditional models (and

therefore their evaluation process) cannot be applied to the new constructivist paradigm and appears to ignore the program evaluation component (Wilson, Teslow and Osman-Jouchoux, 1998; Bednar, Cunningham, Duffy, and Perry, 1998; Wilson 1998). If we extrapolate this trend, however, another possible implication becomes clear: that the purpose of evaluation – subject of debate as argued above – will be determined not by academic evaluators but by evaluation stakeholders, in particular those who are funding the evaluation efforts. With no clear guidance or agreement from academia on how to properly conduct evaluations, decision-makers are most likely to approach those evaluators whose views of evaluation most fit their needs. For example, a program director looking for program improvement may look to an empowerment evaluator, while a funder may look to a traditional evaluator or program staff may not agree with the choice of evaluator that the program funder has made.

A critical analysis of program evaluation approaches has important implications for the practitioner of evaluation, the theoretician who is concerned with devising better concepts and methods, and those engaged in professionalizing program evaluation. Evaluation training programs should effectively address the ferment over and development of new program evaluation approaches. Evaluation trainers should directly teach their students about the expanding and increasingly sophisticated program evaluation approaches. A main point for the practitioner is that evaluators may encounter considerable difficulties if their perceptions of the study being undertaken differ from those of their clients and audiences. If evaluators are ignorant of the likely conflicts in purposes, the program evaluation is probably doomed to failure from the start.

The evaluators should regularly train the participants in their evaluations in the selected approach's logic, rationale, process, and pitfalls. They should use the standards to guide development of better evaluation approaches. They should apply them in choosing and tailoring approaches. They should engage external evaluators to apply the standards in assessing evaluations through the process called metaevaluation. The moral is, at the onset of the study, evaluators must be keenly sensitive to their own agendas for an evaluation study as well as those that are held by the client and the other right-to-know audiences. Further, the evaluator should advise involved parties of possible conflicts in the evaluation's purposes and should, at the beginning, negotiate a common understanding of the evaluation's purpose and the appropriate approach. Professional standards are needed to obtain a consistently high level of integrity in uses of the various program evaluation approaches. All legitimate approaches are enhanced when keyed to and assessed against Professional standards for evaluations. In addition, benefits from evaluations are enhanced when they are subjected to independent review through metaevaluations. Every evaluation that asserts that certain results flow from

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program activities is based on a model, whether implicit or explicit. Program evaluators should develop and selectively apply evaluation approaches that in the particular contexts will meet the conditions of utility, feasibility, propriety, and accuracy.

With no underlying theory of how the program causes the observed results, the evaluator would be working in the dark and would not be able to credibly attribute these results to the program. This is not to say that the model must be fully formed at the start of the evaluation effort. Generally, it will be revised and refined as the evaluation team's knowledge grows. The various disciplines within the social sciences take somewhat different approaches to their use of models, although they share many common characteristics.

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