USING A TRANSACTIONIST MODEL IN EVALUATING DISTANCE EDUCATION PROGRAMS

Mary F. Kennedy Blair W. Kettle

Abstract: The purpose of this study was to select and apply an appropriate evaluation methodology for a particular program - the Distance Education for Literacy Providers (DELP) Course. DELP was a federally and provincially funded pilot project designed to assist community-based adult literacy tutors acquire skills and knowledge to help them in the delivery of literacy programs.

Stake's Responsive Evaluation Model was used as the guiding methodology. It was chosen because it had been modified for use in similar programs (Letpradist, 1990; Janes, 1993); it is the most widely used of the transactionist approaches; it offers a flexible, rigorous, and context-sensitive methodology for audience identification, concerns and issues identification, and standards development.

In implementing Stake's model a qualitative approach was used. Data indicated that the particular transactionist approach was suitable for evaluating this type of program, and, incidently, that the DELP course was a success.

Résumé: Cette étude visait à sélectionner et appliquer une méthode d'évaluation appropriée pour une programme déterminé · le cours de Distance Education for Literacy Providers (DELP). DELP, un projet pilote, était financé par le gouvernement fédérai et provincial. Ce cours était destiné à assister les instructeurs en alphabétisation dans leur formation afin qu'ils acquièrent des habiletés et des connaissances utiles dans la livraison des services d'alphabétisation.

Le Stake Responsive Evaluation Mode1 (SREM) servait de guide méthodologique. Ce modèle d'évaluation fut choisit puisqu'il avait déjà été adapté pour son utilisation dans des programmes d'alphabétisation similaires (Lertpradist, 1990; Janes, 1993) en plus d'étre l'approche transactionniste la plus utilisée. SREM offre une méthodologie qui est à la fois flexible, rigoureuse, et sensible au contexte pour bien identifier l'audience, les craintes et les problématiques ainsi que le développement du niveau à atteindre.

Nous avons utilisé une approche qualitative lors de l'implantation du SREM. Les données ont indiqué que l'approche transactionniste était valable pour l'évaluation de ce type de programme, et, en plus, que le cours DELP était une réussite.

INTRODUCTION

The increasing emphasis being placed on community and regionally appropriate educational development programs, particularly those being delivered through distance technology mode, has required the identification of effective and practical means to determine the merit and worth of such programs. The Distance Education for Literacy Providers (DELP) course is one such program.

DELP was initiated as a pilot project, utilizing the technical resources of Memorial University of Newfoundland's Telemedicine and Educational Technology Resources Agency (TETRA). The program was to deliver, via distance, an educational development program to adult literacy practitioners in volunteer, community college, and community-based sectors of Newfoundland and Labrador. The principal instructional media used were audio teleconference, video, and print, with video and print materials being mailed to all participants prior to the course.

The thrust of the program was the delivery of a semester-long and non-credit course through the provincial teleconference network, which would be accessible to all regardless of geographic location. DELP was intended to serve a wide audience of literacy providers, including both volunteers - some of whom had previous training in adult literacy development - and professionals in the field of adult education, who worked primarily in community colleges.

THE STUDY

This study attempted to find a rigorous and thorough evaluation model that would be consistent with, and supportive of, the spirit and context of the DELP course. One of the desired outcomes of the DELP course was that community-based literacy providers should take ownership of literacy education, and refine and promote it to maximize its usefulness and application. Nevo (1986) describes this as the socio-political function of evaluation. Selection of an evaluation approach, then, was governed in part by its ability to foster the social empowerment engendered by the DELP course - that it be congruent with the socio-political function of that course.

The study was also focused on establishing the efficiency and effectiveness of the DELP course. Course designers and implementers were obviously interested in finding an evaluation model that could be applied beyond the pilot experience, but they were also interested in the outcome of the evaluation - the merit and worth of the DELP course in its pilot offering. Thus testing of the evaluation model should also have resulted in comprehensive data to support a judgement of success or failure of the DELP course.

EVALUATION MODELS

Evaluation has traditionally been given higher priority in distance education settings than in conventional education settings (Alvarado, D'Agostino, and Bolanos, 1991). But what does evaluation of distance education programs consist of? Frequently, in the case of conventional institutions such as Memorial University of Newfoundland, distance educational evaluation activity consists of no more than distribution of a computer-generated and scored evaluation form to be completed by students at the end of a course - as students call these, "happy sheets."

Figure 1
A Taxonomy of Major Evaluation Models (House, 1978, p. 12)

Model	Proponents	Audiences	Assumes Consensus on	Method- ology	Outcome	Typical Questions
Systems Analysis	Rivlin	Economists/ Managers	Goals,known cause/effect, quantified variables	PPBS; cost- benefit analysis	Efficiency	Are expected effects achieved? What are most efficient programs?
Behavioral Objectives	Tyler, Popham	Managers, Psychologists	Prespecified objectives, quantified outcome variables	Objectives, achievement tests	Account- ability, productivity	Are students meeting objectives?
Decision- Making	Stufflebeam, Alkin	Aministrators/ Managers	General goals, criteria	Surveys, questionnaires	Quality control effectiveness	Is the program effective?
Goal-Free	Scriven	Consumers	Consequences, criteria	Bias control logical analysis	Consumer choice, social utility	What are all the effects?
Art Criticism	Eisher, Kelly	Connoiseurs, Consumers	Criteria, panel procedures	Critical review	Improved standards	Would a critic approve of this program?
Accreduatuib	North Central Association	Teachers, Public	Procedures, judgement	Self-study, panel review	Professional acceptance	How would professionals rate this program?
Adversary	Owens, Levine, Wolf	Jury	Negotiations, activities	Quasi-legal procedures	Resolution	What are arguments for and against this program?
Transaction	Stake, Parlett- Hamilton	Clients Practitioners	Negotiations, activities	Case studies, interviews, observations	Undertanding, diversity	What does the program look like to different people?

Educational program evaluation is much more complex than opinion sheets from a single source - the students. In the past few decades various approaches to program evaluation have been developed by a number of theorists, resulting in a wide range of evaluation models. House (1978) developed a taxonomy of program evaluation models, comparing each model on principal components, major audiences, principal evaluation measures, methodology, typical questions, and outcomes (See Figure 1).

House's ordering of models was particularly useful to the authors, because it provided a rationale for selecting the evaluation approach for the DELP course. House (1978) states:

In the taxonomy the models are related to one another in a systematic way. Generally, the more one progresses down the column of major audiences, the more democratic or less elitist the audience becomes. The more one moves down the consensus column, the less consensus is assumed on goals and other elements. The more one moves down the methodology column, the more subjective and less objective the research methodology becomes. The more one moves down the outcomes column, the less overall concern becomes social efficiency and the more it becomes personal understanding (p. 5).

THE TRANSACTIONIST APPROACH

The most democratic of all approaches, and inherently qualitative (House, 1980), the transactionist approach seeks opinions of a broad cross-section of people who have been involved in the program that is being evaluated. It attempts to provide findings which reflect the diversity of audience opinions. Methodologically, reliance is placed on interviews with program audiences, and on-site observation. The approach engages program participants and stakeholders as if they are collaborators in a process which culminates in a judgement about a program.

Among principal proponents of the transactionist approach is Stake's Responsive Model. Evaluators applying the Responsive Model usually "negotiate with the client as to what is to be done... and respond to what different audiences want to know" (House, 1980, p. 40). It is an emergent form of evaluation "that takes as its organizer the concerns and issues of stakeholding audiences" (Guba and Lincoln, 198 1, p. 23).

AN EVALUATION MODEL FOR THE DELP PROGRAM

As indicated earlier, Stake's Responsive Model was chosen to evaluate the DELP program. This model, with its extremely democratic thrust and its qualitative approach, was deemed by evaluators to be the most suited to the unique context of the DELP program, and it had been adapted for use in a similar circumstance by Lertpradist (1990).

The Responsive Model has an underlying framework of qualitative research, although implementation of the model does not preclude the collection of quantitative data. Patton (1980) notes that the same assumptions undergird qualitative research and responsive evaluations, including:

The importance of understanding people and programs in context; a commitment to studying naturally occurring phenomena without introducing external controls or manipulation; and the assumption that understanding emerges most meaningfully from an inductive analysis of open-ended, detailed, descriptive, and quotive data gathered through direct contact with the program and its participants (p. 55).

Stake himself states, "An evaluation is responsive (1) if it orients more directly to programme activities than to programme intents, (2) if it responds to audience requirements for information, and (3) if the different value perspectives present are referred to in reporting the success and failure of the program" (p. 163).

An inherent belief of the responsive approach is that standards and criteria against which the evaluator judges a program should emerge from the concerns and issues of all stakeholding audiences, and that these concerns and issues should be gathered from interviews with persons associated with the program. Standards for a responsive evaluation, then, are whatever the program participants deem to be indicators of success.

In the responsive rubric, evaluations can serve many purposes, but the purpose for any given evaluation is defined by the information needs of all program audiences or groups. It is this relating of purpose and information needs that increases the usefulness of the findings, and hence increases the actual implementation of the recommendations. Where evaluation sponsors or clients desire an evaluation that serves and speaks to the community at large, approaches such as the responsive model are highly favorable. The responsive approach recognizes that some programs, more than others, hold great interest to many individuals and groups within a community, and that any effort to establish the worth of such programs should focus on considering community information needs. This was certainly the case with the DELP program, which purported to train community-based literacy providers.

The Responsive Model would offer program participants, the neighborhood and community literacy providers for whom it was designed, as much input in determining the concerns and issues on which the evaluation would focus as it would any other group, including the evaluation sponsors. It would therefore provide all audience groups with results that would not only demonstrate wide consultation, but would also offer feedback for improving the DELP program to make it suit the practical realities of life, work, and economics for literacy providers in rural communities and urban neighborhoods in Newfoundland and Labrador. In short, the Responsive Model suited better than any other approach the historical, cultural, and emancipative spirit in which the DELP program was conceived and the social context in which it would be delivered.

EVALUATION PROCEDURES

The evaluation of the DELP course was undertaken using a modified version of Stake's original Responsive Model. Lertpradist (1990) used the Responsive Model in the evaluation of the Community-based Artificial Fish Breeding Training Program in Thailand - a program designed by the Department of Fisheries, Thailand and offered at numerous rural sites by the Extension Service of that department.

In designing the evaluation Lertpradist made modifications to the Responsive Model, as indicated in Figure 2. The modifications mainly consisted of combining certain activities, and of being less specific in delineating procedures before entering the setting. It should be noted that activities described in

Figure 2
Comparison of Original Stake Evaluation Events with Lertpradist Modifications

STAKES EVENTS	LERTPRADIST EVENTS	
Talk with clients, program staff, audiences	Identify audiences, program scope	
Identify program scope	Identify concerns, issues	
Overview program activities	Set standards	
Discover purposes, concerns	Select/develop instruments and methods	
Conceptualize issues, problems	Observe program transactions, outcomes	
Identify data needs re issues	Apply criteria and standards	
Select observers, judges, instruments, if any	Summarize data, prepare reports	
Observe designated antecedents, transactions, and outcomes	HALV SHOT ING SUBTRIBUTE	
Thermatize, prepare portrayals and case studies		
Validate, confirm, attempt to disconfirm		
Winnow; format for audience use		
Assemble formal reports, if any		

the Responsive Model are usually placed in the form of a clock face, so that they can be read and followed in a clockwise, counter-clockwise, or crossclockwise fashion.

AUDIENCE IDENTIFICATION

Preliminary interviews with program developers and coordinators identified all audience group that had a stake in the evaluation. They were categorized in three groups (See Figure 3), and all audience members were contacted through either face-to-face interviews, telephone interviews, or short questionnaires. The purpose of this initial contact was to gather the concerns and issues of all participants in and around the program.

Figure 3
Audience Groups Consulted in Determining Concerns and Issues

Curriculum Committee	Program developers Curriculum advisors Program administrators Program instructors	
Course Participants	Volunteers (no training) Volunteers (short course training) Professionals (degrees) Professionasl (degrees + short course training	
Course Sponsors	Provincial government representatives Federal government representatives Literacy agency representatives	

The initial contact with all audiences yielded over thirty concerns and issues, which, on analysis, could be categorized in seven general areas as follows: knowledge gains for both groups of literacy tutors - the untrained volunteers and the extensively trained literacy personnel; positive attitude gains for both groups; program versatility in terms of other delivery modes; relevance of program for intended audience; efficacy of distance delivery mode; efficacy of combination of media used; cost implications of teleconference approach.

EVALUATION STANDARDS AND CRITERIA

The concerns and issues, plus an analysis of all program documents (including original proposals for funding) provided evaluators with the basis to develop a comprehensive set of standards and criteria (See Figure 4). These standards were ratified by all audiences as valid and acceptable measures for evaluators to employ in the process of making judgements. It should be noted that not all standards could be measured during the implementation of the

DELP program. Several standards would require follow-up evaluation activity with participants.

Figure 4
DELP Evaluation Standards and Criteria

Standard Criteria:	Curriculum meets participants' needs Provide participants with increased knowledge Meet expectations of various participant groups Can achieve stated program goals and objectives Participants want to complete program				
Standard Criteria:	Objectives are clearly deineated Stated in writing in course materials Meet expectations of various audiences				
Standard Criteria:	Participants able to apply knowledge to tutoring practice Future literacy tutoring assimilates new techniques Participants can verbalize how they can use new knowledge/skills				
Standard Criteria:	Knowledge beneficial to tutors and low-literacy learners Low-literate learners attest to positive change in literacy tutoring				
Standard Criteria:	Goals and objectives feasible and achievable All goals/objectives met six months after program ends				
Standard Criteria:	Sufficient opportunity in program for participant interaction Regular time scheduled for discussion weekly Activities encourage interaction/sharing Teleconference leaders promote interaction Opportunity for participation deemed adequate by participants				
Standard Criteria:	Instructional content suits participants' prior knowledge levels Participants attest to suitability of curriculum content and method or presentation				
Standard Criteria:	Media combination used suited to content and participants Text materials modularized to match weekly teleconference sessions Text materials deemed easy to read and attractive in format Videotapes interesting and informative, and relevant to course modules Teleconference sites accessible Frequency of teleconferences deemed suitable by participants Length of teleconferences deemed suitable by participants Participants comfortable with delivery systems				
Standard Criteria:	Course suited for future delivery through other modes Course suited for total packaging i.e., audiotapes Participants able to implement parts of course for other literacy tutors All support materials complete and self-instructional				

DATA COLLECTION TECHNIQUES

The DELP program was offered through teleconference one night weekly over a ten week period to fifteen sites around the province. Observations were conducted by evaluators each week, and for one week evaluators visited three different sites so that they could assess conditions at the more remote sites. Observations were conducted with the aid of observation forms and checklists, to ensure that data relevant to the standards and criteria were collected.

A number of instruments were also used throughout the evaluation period. These consisted of an open-response questionnaire to elicit concerns and

issues, a semi-structured questionnaire for literacy tutors enroled in the program, an interview guide to allow indepth exploration of a sample number of literacy tutors for case profiles, an attitude scale, and a post-program semi-structured interview guide administered by telephone six months after the DELP program had ended. In addition to the observational data, the data from interviews, written questionnaires and scales, the evaluators collected and analysed data from all documents and records generated in the design and implementation of the DELP program.

AN ANALYSIS OF THE RESPONSIVE EXPERIENCE

The evaluators analysed a number of evaluation models that were exemplary of the eight major evaluation frameworks as delineated by House (1978). They chose, as most fitting for the evaluation of the DELP program, the Stake 'Responsive Model. Following the adaptation made by Lertpradist (1990) they applied the model to the implementation of the program.

The Responsive Model was chosen in the expectation that (a) its emergent and naturalistic approach would allow evaluators to be flexible and sensitive to programs where the social setting or context plays an integral role; (b) its democratic stance would ensure that the information needs of all groups in and around the program would be considered; and (c) results would provide meaningful information to a diverse group of people.

The Responsive Model proved to be applicable to any small to medium community-based adult education program. The approach was designed to emphasize evaluation issues that are important to all program participants. The consultative process of setting standards and criteria, based on the concerns and issues expressed by all of the diverse program audiences, ensured that the data summarized and reported on addressed the information needs of all.

Democracy and participative management are important considerations in the evaluation of programs which are intended to support community-based economic, educational, and social development activities. The DELP program was intended to provide volunteer and professional literacy tutors with the skills and tools with which to reduce the level of adult literacy within their communities. The Responsive Model provided those individuals who were closest to the front lines of the literacy problem with a sense that they were full and significant players in the direction of their programs. It gave the literacy providers a sense of control and ownership of their unique problems, and ultimate resolutions. In sum, it encouraged, recognized, and respected self-determination by placing value on and responding to the needs of the audiences of the DELP program.

The Responsive Model gave evaluators the opportunity for prolonged interaction with and exposure to the DELP training program. Evaluators observed

the whole program as implemented over a ten week period in four different sites. Such prolonged interaction gave them a true picture of the program, and dissipated the possibility of events as observed being isolated occurrences.

The Responsive Model provided a surfeit of data gleaned from a variety of techniques. Rich data, according to Guba and Lincoln (1981) are one of the major advantages of Stake's model. Evaluators estimated that they gathered much more data than that needed to minimally address each evaluation standard. However, the duplication of data served the purposes of grounding the study and triangulating findings. Data gathered through one technique or source were compared and contrasted with that from other sources, establishing consistency and credibility.

The Responsive Model, with its emphasis on detailed description of all program components as opposed to emphasis solely on program outcomes, proved to be valuable to program administrators. In most cases where program evaluation is implemented, the purpose is not to determine the continuance or cancellation of the program, but to seek means of improving it. Evaluations that rely heavily on description provide program administrators with the detailed data on program strengths and weaknesses, and pinpoint those areas in need of improvement.

Most of all, the Responsive Model did ensure that all of the data needed to weigh against the standards and their criteria were collected. At the end of the evaluation period, evaluators were able to state, and support with summarized data, that every criterion of every standard had either been attained or had not been attained.

CONCLUSIONS

The application of the Responsive Model to the DELP course was a gratifying experience for evaluators and for all program audiences. However, certain caveats should be considered.

- 1. The evaluators selected one model for application. No other models were tried in the DELP course setting, hence it is possible that other evaluation approaches would have yielded good data and strong results. However, the evaluators do believe that only the transactionist approach in particular the Responsive Model could have provided all participant groups with an equal voice in the evaluation, and the empowerment that accompanies such recognition.
- 2. The evaluation context was more ideal than is usually the case. The DELP program was planned and created by a group of instructional developers, who were cognizant of the benefits of a comprehensive evaluation. Hence they consulted evaluators prior to program implementation so that evaluation plans could be made well in advance. They also provided as much time as the implementation of the approach required,

- including time for follow-up six months later. Lack of time to implement any evaluation model well is the norm in evaluation contracts, in these authors' experience.
- 3. The program administrators (paying clients) permitted the evaluators to select whichever approach that they deemed most suitable, and were willing to accept as standards indicative of success concerns and issues of other participant groups. They were also willing to accept the kinds of data and information that the Responsive Model usually produces very qualitative data reported in the participants' own language.

It is the experience of the authors, who have completed numerous evaluations using a variety of models and approaches, that the DELP program was an ideal evaluation context. Maybe the circumstances, as much as the Responsive Model itself, were responsible for the success of the evaluation. Incidently, the DELP course itself proved to be very successful, achieving all evaluation standards.

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AUTHORS

- Mary F. Kennedy is Associate Professor, Faculty of Education, Memorial University of Newfoundland, St. John's, Newfoundland.
- Blair W. Kettle is an Educational Technology Consultant and holds an M.Ed. in Educational Technology. He is a graduate of Memorial University of Newfoundland, St. John's, Newfoundland.