Appendix I Evaluation Framework

Underlying Principles

The evaluation framework is intended to be:

- An accountability tool - accounts for program delivery and outcomes
- Formative in function - aims to improve performance
- Dual purpose - measures educational and financial outcomes
- Adaptable - usable in a variety of institutional settings
- Flexible - allows short and long range time frames
- Action based - findings inform practical decisions
- Responsive - the process is transparent, visible and accountable
- Understandable - conducted and written using everyday language.

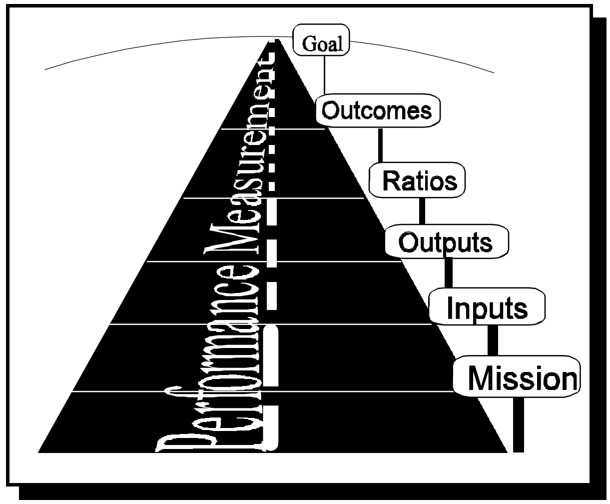
Rationale and Purpose of Evaluation Framework

Traditionally evaluation has focused on assessment at the output level. In CE, for instance, it may determine if a unit is fulfilling its mission in terms of students served, class sizes, courses, programs, staff or advertising. This form of traditional accountability, however, is no longer sufficient for CE/CT units, in part because of BC government initiatives to enhance accountability for performance in the public sector.

The unit's ability to generate results must be assessed and this is best done using performance indicators. The purpose of this framework is to guide and evaluate the development of a Performance Measurement system.

The Evaluation Framework

Figure 1
Performance Measurement

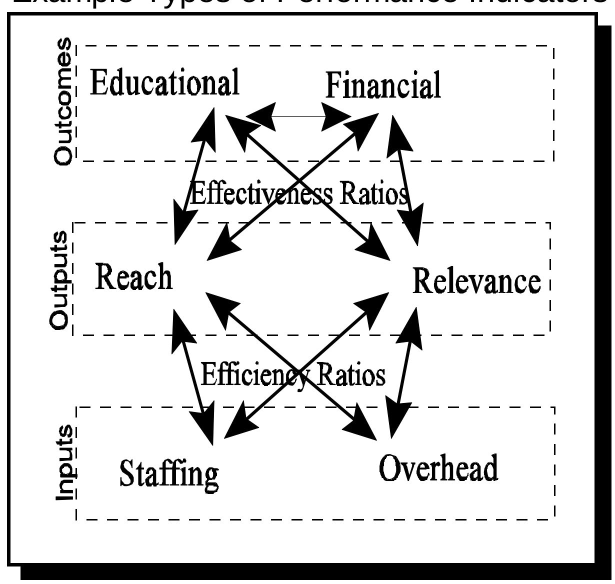


The framework uses the analogy of a road, leading from the unit's mission to its goal. Performance Measurement is the road. Sign posts are measures of what the unit does or achieves. Besides the mission and ultimate goal, these sign posts include inputs, outputs, ratios and outcomes.

Evaluation is a vehicle which assesses the road, determines how far the road goes and along the way notes the sign posts, performance indicators and areas for improvement.

Performance Measurement

Figure 2
Example Types of Performance Indicators



Performance Measurement is the identification and measurement of carefully chosen indicators to provide periodic feedback on performance.

Performance indicators include all the inputs, outputs, outcomes or ratios (shown as arrows) in Figure 2 and many more. There are almost infinite possibilities for indicators, so careful selection is important.

Staffing and overhead are examples of inputs. Reach and relevance (see Glossary) are examples of outputs. Educational and financial outcomes are examples of outcomes. Inputs are not true performance indicators, but are included here because they form half of the efficiency ratios.

Initially, units may select a modest number of the most important indicators to observe. A suggested upper limit is 40 performance indicators for a unit. Any individual employee or department should not be working on more than 10 at any given time.

Performance Measurement Matrix

A Performance Measurement system can be shown as a matrix. The matrix is a key piece of data when the time comes to assess the PM system.

	Objective	Activity	Perform-ance Indicator	Perform-ance Measure	Target and Date
Output					
Outcome					
Ratio					

The rows contain outputs, outcomes and ratios (see Appendix V Tables 1 and 2 for examples).

The objectives, in the first column, are components of the mission which state what will ultimately be done, e.g. to provide access to courses across the region. They are grouped into output, outcome and ratio objectives by row. There may be several objectives for outputs and similarly many for outcomes and ratios.

The second column lists the activities. Activities are statements of the procedure or practice used to implement the objective. e.g. regional delivery strategy. There may be several activities for each objective.

The third column lists Performance Indicators, which are the variables which indicate achievement of an objective, e.g. offerings at remote campuses. There should be one main indicator for each activity, but there may be additional minor indicators.

The fourth column, Performance Measure, will contain the precise operational definition of the indicator to be measured. It should be stated in units that will be comparable year to year and site to site e.g. percent of total courses offered remotely. There should be one performance measure for each performance indicator.

The last column, Target and Date, indicates the level of the measure to be achieved by a certain date. The target should be realistic and attainable. It may be expressed in absolute (e.g. headcount) or relative terms (e.g. % increase).

The application of the matrix will depend on the CE/CT unit and how developed its PM system is. It takes time to create a mature PM system, up to three or four years. A unit with a partially implemented PM system will add more rows to the upper half of the matrix (outputs and possibly ratios). A unit with a fully implemented PM system will expand the whole matrix (outputs, outcomes and ratios).

Appendix II **Check Lists - Steps 1-8**
Suggested Outline of Final Report

EVALUATION CHECKLIST			
STEP	RESPONSIBILITY	TIME LINE	✓
1. PLAN FOR THE EVALUATION • Define the purpose. • Devise a communication plan. • Review unit's mission. • Establish a time line. • Identify costs and establish a budget. • Establish a task list and responsibility list. • Assess resources. • Review data on hand. • Develop orientation statement. • Plan for final product. • Plan next steps.			
2. FORM STEERING COMMITTEE • Decide on list of potential committee members. • Send out invitations and notice of first meeting. • Provide orientation to the committee. • Find needed resources. • Assign roles and responsibilities.			

EVALUATION CHECKLIST			
STEP	RESPONSIBILITY	TIME LINE	✓
3. DECIDE ON BOUNDARIES OF THE EVALUATION • Define interest of those receiving the report. • List important issues. • Identify pressures. • Review relevant external policy/planning issues • Identify other ongoing review processes. • Select indicators. • Assess existing information. • Identify key assessment factors.			
4. GATHER/CREATE OBJECTIVES, PERFORMANCE INDICATORS, ETC. • Review definitions in glossary. • Create items listed in Step 3 above. • Identify data sources. • Ensure data collection systems are in place. • Review/gather existing data.			
5. GATHER/CREATE PM MATRICES • See Appendices III & IV.			
6. EVALUATE PM MATRICES • Collect data. • Apply the four program standards. See Appendix V. • Review and interpret data. • Develop conclusions and recommendations.			
7. DECIDE ON NEXT STEPS TO PM SYSTEM • Identify gaps in information. • Determine priorities. • Develop new systems.			

Evaluation Checklist			
STEP	RESPONSIBILITY	TIME LINE	✓
8. Write and Revise Evaluation Report • Write draft report. • Revise as appropriate and submit/present final report.			

SUGGESTED OUTLINE FOR FINAL REPORT

I. EXECUTIVE SUMMARY

II. INTRODUCTION

Type of evaluation used and the rationale for selection
Rationale and context for the review

III. DESCRIPTION OF CONTINUING EDUCATION OR CONTRACT TRAINING UNIT OR FUNCTION

Mandate, purpose and relationship to the institution
Brief history of the unit or function
Type and number of employees
Type and number of locations
Equipment and major resources
Type and number of clients, students or stakeholders
Type and number of programs, services or activities
Types and dates of previous evaluations

IV. UNIT/FUNCTION REVIEW COMMITTEE

Names, affiliations, capacities and roles of all Review Committee members
Dates of committee meetings

V. METHODOLOGY USED TO REVIEW UNIT/FUNCTION

Scope of the review: issues and indicators addressed and rationale for choices
Description of review plan including types of data, sources of information, documentation reviewed and standards applied

VI. REPORT SIGNIFICANT FINDINGS

Significant findings supported by data

VII. CONCLUSIONS AND RECOMMENDATIONS

Data and rationale to support conclusions and recommendations

Appendix III Worksheets

Worksheet 1 Mission, Goals, Objectives and Inputs

CE/CT Mission Statement	
Goals	1. 2. 3.
Objectives	1.1 2.1 3.1
Inputs	1. Staff 2. Space 3. Funding 4. Overhead costs 5.

Worksheet 2 Performance Indicators, Outputs, Outcomes Ratios

Performance Indicators	Outputs	Outcome Ratios

Worksheet 3

Performance Measurement Matrix for CE/CT

	Category of Indicator	Objective	Activity or Strategy	Performance Indicator	Performance Measure	Target and Date
Output						
Outcome						
Ratio						
other						

Appendix IV Evaluation Standards

Four major standards for evaluating the evaluation have been developed by professional groups[1] in this field. These standards should be kept in mind from the initial planning stage of the evaluation through to its completion and should be used as check points. Application of the standards will provide validation of the processes. Those standards are:

Utility

An evaluation should not be done at all unless there is a clear purpose for the evaluation and an intended audience. The evaluation must be useful to that audience. Implementing this standard ensures that the evaluation will meet the information needs of the intended users. Factors to be considered include:

- stakeholder identification
- definition of information scope and selection
- report clarity
- report timeliness and dissemination to intended users
- evaluation impact.

Feasibility

The evaluation should only be done if it is possible to conduct it

- politically
- cost effectively and
- using practical procedures.

Propriety

The evaluation should be conducted fairly, legally, and ethically. Respect for those involved in the evaluation and those whom the results will affect should be maintained. Some of the specific issues to consider are:

- the rights of human subjects
- a complete and fair assessment
- access to the findings by the participants
- freedom from conflict of interest
- fiscal responsibility and accountability.

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[1] Adapted from Program Evaluation Standards, The Joint Committee on Standards for Educational Evaluation, Western Michigan University, Kalamazoo, Michigan (1994).

Accuracy

The determination of the worth and merit of the program must be based on technically accurate information. The following check list is helpful:

- Program documentation should be clear and accurate.
- Information sources should be defensible.
- Information should be valid, reliable and collected systematically.
- Qualitative and quantitative information should be analysed appropriately and systematically.
- The conclusions should be justified .
- The reporting should be impartial.

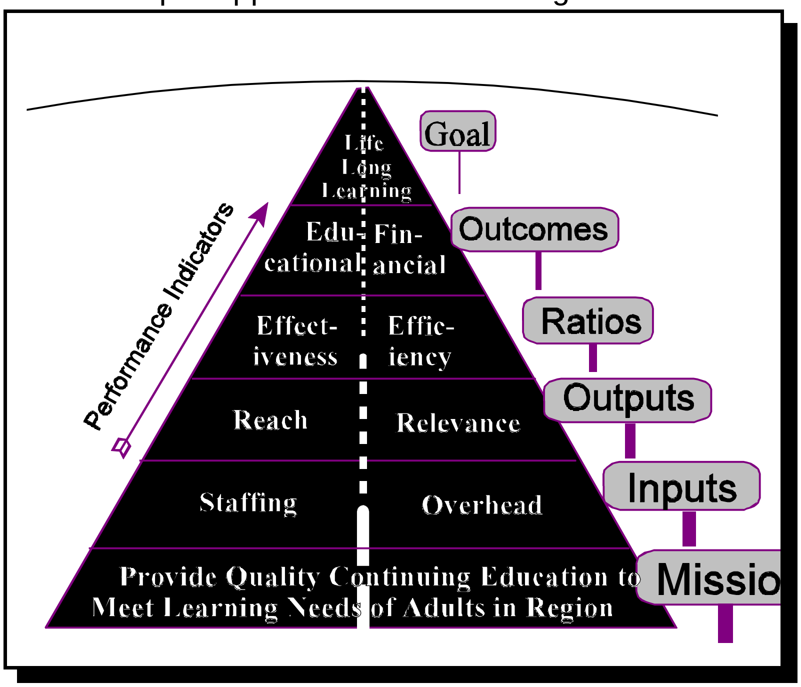
Appendix V **Examples from CE and CT Performance Measurement Matrices**

Examples

Application to Continuing Education Unit

The example begins by identifying the elements of Performance Measurement. The example <u>mission statement</u> reads: "To provide quality continuing education to meet learning needs of adults in the region."

Figure 3
Example Application to Continuing Education



The mission is operationalized through inputs devoted to activities. Inputs include staffing and production expenses, as well as other resources devoted to activities, such as building space. Inputs are already measured and reported in CE units as required by the BC government.

Two possible types of inputs are staffing which includes salaries, professional development and other staff resource costs, and overhead which includes direct costs, production costs and similar expenses.

<u>Outputs</u> are the straightforward counts of service delivered, advertisements placed, classes taught, programs offered, teacher hours spent in the classroom, etc. These are measures of activities in the control of the unit. For example, *courses offered* is an output; *completion rate*, however, is an outcome rather than an output because it is not in the control of the unit. Outputs are already measured and reported as required by MAETT.

Two possible types of outputs include reach (e.g., range and scope of offerings, area or population served, response to requests, community served, etc.) and relevance (e.g., the appropriateness of programming, types of courses, certification, laddering, etc.)

Outcomes are of two types: educational and financial. These are the short or long term impacts of the division's programming, and are the desired results as defined by the unit. Educational outcomes are the human results and include, for example, grades, literacy levels, English achievement scores and computer competencies. Financial outcomes are the fiscal results and include, for example, the annual profit or loss for the unit or its programs.

A note of caution about outcomes: in some cases desired educational outcomes may overlap other programs offered by the institution, in which case it makes sense to evaluate impacts at the institutional level. This is true for financial outcomes as well, especially in cases where unit revenues/expenses are inseparable from those of other units.

Performance indicator ratios are of two types. Effectiveness ratios look at reach or relevance outputs to achieve an outcome, either financial or educational (e.g., job placement rate). Efficiency ratios look at inputs spent to achieve an output or outcome, either financial or educational (e.g., production cost as a ratio to revenue generated).

The goal in this example is "To enhance lifelong learning." Each unit's goal may be somewhat different and CT goals will differ from those of CE.

Performance Measurement Matrix

The example PM matrix (Table 1) uses a set of hypothetical objectives for CE. The objectives are specific statements of aspects of the goal. For each objective there is an activity, performance indicator, measure and target. The data are merely hypothetical. In a real world situation, each objective of the matrix would require more rows, more activities, more indicators and multiple measures. As well, the matrix may include other types of outputs, outcomes and ratios.

Table 1
Example of Performance Measurement Matrix for Continuing Education

	Category of Indicator	Objective	Activity or Strategy	Performance Indicator	Performance Measure	Target and Date
Output	e.g., Reach	To provide access to courses across the unit's region	Regional delivery strategy	• Offerings at remote campuses	• Percent of total courses offered remotely	• 30% by year end 1999
	e.g., Relevance	To provide training in most current software type and version	Software use survey	• Software currency	• Percent of population using software taught	• 80% by year end 1999
Outcome	e.g., Educational Outcomes	To increase competencies in certificate programs	Certificate programs curriculum revisions	• Graduating students certified by external body	• Number of students passing provincial exam	• 75% by year end 1999
	e.g., Financial Outcomes	To generate surplus liquid funds at year end	Cost Recovery plus	• Profitability of unit	• Year end profits	• $1,000,000 for fiscal year 1999/2000
Ratio	e.g., Effectiveness Ratio	To increase successful job placements	Job placement interviews and screening	• Job placement rate	• Ratio of students placed to students graduated	• 80% by year end 1999
	e.g., Efficiency Ratio	To reduce course production cost while maintaining enrolments	Streamlining initiative	• Course production efficiency	• Ratio of cost of production to enrolment	• $90 per FTE by year end 1999
Other	e.g., Other Performance Measures	To implement consistent registration system	Train staff in use of new registration software	• Staff training	• Percent of staff trained in use of software	• 60% by year end 1999

Application to Contract Training Unit

In the case of Contract Training, clients rather than students are identified in the mission statement.

Inputs include staff, administrative costs, institutional overhead, etc.

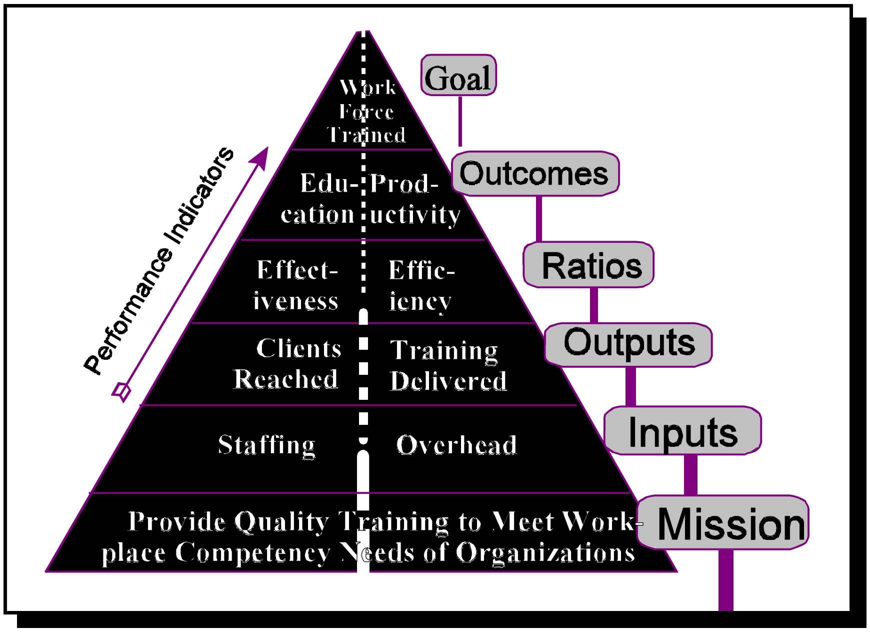


Figure 4 - Example Application to Contract Training

Outputs include the CT division activities such as advertising, promotions, client contacts, and response to inquiries.   They also include training delivered, in terms of sessions, course, offerings, etc.

Outcomes may include changes at both the educational and productivity levels. The former might include, for example, increase in the trainee's speed of typing measured in words per minute after a word processing training.   However, productivity on the job is an outcome measured at the client level and would include indicators such as the number of reports typed each month after retraining.

Ratio measures of effectiveness describe the outputs per outcome. These include hours of training delivered per unit increase in productivity of retrained workers. Efficiency compares inputs, such as number of staff, to the number of clients reached, as in the case of promotional efforts.

For this example applied to CT, the goal is a trained work force.

Performance Measurement Matrix

An example PM matrix (Table 2), provides a set of hypothetical objectives for Contract Training. For each one there is an activity, indicator, measure and target.

Table 2

Example of Performance Measurement Matrix for Contract Training

	Category of Indicator	Objective	Activity or Strategy	Performance Indicator	Performance Measure	Target and Date
Output	e.g., Clients Reached	To promote contract training to organizations across the region	Promotional mailings	• Awareness of the CT unit among industry	• Percent of total employers who respond to promotions	• 20% for 1999
	e.g., Training Delivered	To provide rapid response to requests for training	Streamline and systematize response process	• Speed of process from inquiry to delivery	• Days from inquiry to signed contract	• 10 days for 1999
Outcome	e.g., Educational	To enhance the competence of trainees	Competency based practical training	• Accuracy and speed of typing	• Words per minute of trained word processors	• 65 w.pm. for 1999
	e.g., Productivity	To enhance the productivity of employees on the job	Competency based practical training	• Reports produced	• Rreports produced per typist per month	• 25 reports
Ratio	e.g., Effectiveness	To increase the effectiveness of word processing instruction	Daily testing	• Speed increase per day of training	• Average speed increase per day of training	• 5 w.p.m. per day
	e.g., Efficiency	To increase the efficiency of promotions efforts	Office automation of promotions	• Promotional reach per staff member	• Number of promotional flyers delivered per staff member	• 2,000 per staff member per month
Other	e.g., Other Performance Measures	To enhance familiarity with clients	Seasonal social events/receptions for clients	• Use of client first name	• Number of clients addressed by first name	• 200 clients

Appendix VI Literature Analysis

METHODOLOGY

Definitions

The term "continuing education" is only one of many that describe this particular educational experience. "Adult Education", "Adult Learning", "Adult Programmes", "Life Long Learning" are all terms that describe what we have called "continuing education".

For the purposes of this bibliographic study, a single definition was needed to encompass all the activities implicit in the terms noted above. The following definition was used:

> Adult or Continuing Education is providing or coordinating purposeful learning activities for adults. (Easterby-Smith, 1994, p. 6)

Evaluation also has many applied meanings. Again a working definition is required.

> Evaluation is the appraising or judging of persons, organizations or things in relation to stated objectives, standards or criteria. (Easterby-Smith, 1994, p11)

Search Strategies

(a) Library Resources:

An initial search was made of local library and information resources including Okanagan University College and Okanagan Regional Library.

Using the Electronic Library Network (ELN) UBC, SFU and UVic libraries were searched for material. This search was augmented by searching the OUTLOOK database which covers all colleges, university colleges and public libraries in British Columbia.

The Ohio Centre for Library Catalogues (OCLC) WorldCat database was used to search for North American material. This search was complemented by a search of the National Library of Canada's AMICUS database and the University of California's Melvyl system.

Using these resources book material on the topic was identified, and once identified could be accessed.

(b) Database Searches

A number of general and specific databases were searched to find periodical material on the topic. The general databases consulted included The Academic Database (EBSCO Corp), Canadian MAS database (EBSCO Corp), the Humanities and Social Sciences Index Online (Wilson Corp) and CARL database (Colorado Association of Research Libraries).

(c) Web Searches

A traditional hierarchical search strategy was used moving through ever more specific search engines to try and isolate material available on the World Wide Web.

META Search Tools

The following multi-threaded search engines were used to search multiple databases simultaneously using a single interface:

Inference Find	(http://www.infind.com)
Profusion	(http://www.profusion.com)
Dogpile	(http://www.dogpile.com)

This search led to a number of subject guides and the following were consulted:

Galaxy	(http://www.einet.com)
Looksmart	(http://www.looksmart.com)
Magellan	(http://www.mckinley.com)

Following the use of the subject guide resources to identify specific subject sites these clearinghouses were used:

The Argus Clearinghouse	(http://www.clearinghouse.net)
The Mining Company	(http://miningco.com)
Voice of the Shuttle	(http://humanitas.hscb.cdn)

(d) Personal Contacts

A number of individuals were contacted in the search for relevant material. These included the teaching staff of Okanagan University College's Education Department and the School of Library, Information and Archival Studies at U.B.C. Library staff at the Education Library at the University of Victoria were also contacted as were the staff of LERN (www.lern.org).

REVIEW OF THE LITERATURE

The purpose of the study was to identify resources that described evaluation models for Continuing Education organizations. This involved examining two distinct areas of literature: the literature of institutional evaluation and that of adult or continuing education.

Within the evaluation sphere, there are multiple streams of literature related to planning, evaluation, evaluation utilization, strategic planning, organizational learning and evaluation methodology. Within the sphere of continuing education is the evaluation of continuing professional education, vocational education, literacy, continuing training programs and special education.

Locating continuing education evaluation models within the literature of the two fields is neither easy nor straightforward. While the literature on individual program evaluation is plentiful, even overwhelming, the literature of models of evaluation in a larger institutional context is correspondingly slim. There is no ideal search strategy that will do the subject justice and a number of subject areas within the two main streams of the literature need to be reviewed. Even within a subject area not all of the work might be specifically on the subject; some parts may be germane, while others have little relevance. All resources, therefore, had to be requested and examined.

The bibliography which follows begins with the literature of evaluation. Models that could be applied to the continuing education field are presented and discussed. These models focus on larger organizations usually in the public or non-profit sector. The articles and books included demonstrate a variety of approaches to evaluation models and some, but not all, tend towards the theoretical. Arnold Love's Internal Evaluations, Building Organizations from Within (1991) is an example of this approach.

A second stream of the literature includes continuing education evaluation as part of the evaluation of larger educational organizations. In some cases, the models used can be applied equally well to parts of the organization as to the whole. In the works considered, continuing education receives some special consideration. This approach also encompasses the attempt to set global educational standards and provide a model to evaluate them. Easterby-Smith (1994) is an excellent example of this type of work.

The third section covers models that are designed for continuing education within disciplines or for other branches of education. While the models focus on unique attributes of the field, some can be applied to the larger continuing education context, most notably those in the professional and vocational education fields. For example, Peden and Rose (1992) present a theoretical framework for continuing nursing evaluation. Griffiths (1994) does the same thing for vocational education.

The fourth section examines existing models. They fall into three categories. One group deals directly with the topic of evaluation for continuing education. A second deals with the subject as part of the accreditation of an overall institutional endeavour. A third group includes models that have been developed for non-profit or public organizations that have some similarity to the educational field. These have significant practical value. An example of such work is Health Canada's <u>Guide to Project Evaluation</u> (1996).

Lastly, the sources gleaned from searches of the World Wide Web are summarized. The following Annotated Bibliography summarizes the relevant literature using the above mentioned categories.

ANNOTATED BIBLIOGRAPHY

1. <u>Evaluation Models from the Evaluation Field</u>

Jorjani, Hamid. (1975). Demystifying Result-Based Performance Measurement. <u>Canadian Journal of Program Evaluation</u>, <u>13</u>(1), 61-95.

The authors provide a broad perspective on one of the most effective evaluation models: results-based performance measurement. They outline how one system works and can be implemented. The authors stress the value of RBPM for public sector and non-profit organizations.

Love, Arnold J. (1991). <u>Internal Evaluation: Building Organizations from Within</u>. London: Sage. 160 p.

Internal evaluation is defined by Love as the process of using staff members to evaluate programs which have direct relevance to the organizations' goals. The work has three sections, all of which are germane to the current study. They are:

1. Presentation of a coherent theory of evaluation and how it fits with other aspects of the organizational environment;
2. Delineation of the essential steps of evaluation;
3. Description and evaluation of methods which, while general in focus, have a strong applicability to educational activities.

Palumbo, D. J., & Nachmais, D. (1983) The Preconditions for Successful Evaluation: Is there an Ideal Paradigm Policy? <u>Sciences</u>, <u>16</u>(1), 77-83.

This early article surveys the successes and lack of success in a number of evaluation models. The author's define the set of conditions that must be present to contemplate success.

Rowe, Wendy E., & Jacobs, Nancy F. (1988) Principles and Practices of Organizationally Integrated Evaluation. Canadian Journal of Program Evaluation, 13(1), 115-138.

The more recent thinking on institutional evaluation suggests that it should be continuous and integrated into the operation of the organization. This article provides 20 guiding principles for engaging in an organizationally integrated model for evaluation. The article focuses on complex organizations with multiple outcomes and suits the educational environment.

2. **Evaluation Models of Larger Educational Units**

Burnham, Byron B. (1995) Evaluating Human Resources, Programs and Organizations:Professional Practices in Adult Education. Melbourne, Australia: Krieger. 130p.

This book focuses on evaluation in its most important and widest context. Chapter 1 looks at the context of evaluation within adult education and Chapter 6 explores the evaluation of organizations. A valuable work that covers the topic well.

Cousins, J. B., & Earl, L. (1992) The Case for Participatory Evaluation. Education Evaluation and Policy Analysis, 14(4), 397 - 418.

A participatory model in evaluation is presented as an extension of a stakeholder-based model focusing on the increased participation of primary users. Twenty-six empirical studies from educational institutions that support an organizational learning justification of the model are reviewed and classified. The article also discusses the requirements for participatory evaluation.

Dixon, S. (1996) Towards Self-Assessing Colleges. FE Matters. (FEDA Paper No. 14), London, England: Further Education Development Agency. 30 p.

This publication focuses on self-assessment models that will promote quality assurance systems. The first section makes suggestions for quality policies and definition. The second, and more relevant, explores the development of an evaluative model that assesses defined performance measures against standards. A third section focuses on planning cycles, improvement targets and reporting mechanisms.

Easterby-Smith, M. (1994) Evaluating Management Development, Training and Education (2nd ed.). Brookfield, VT: Gower. 194 p.

While much of this work does not apply, Part III concentrates on the settings in which evaluation may take place. Taken as a whole, these settings provide a model for overall continuing education evaluation.

Gowdy, E. A. (1995) Post-Secondary Program Evaluation: A Pragmatic Model in Evaluation Methods. In Arnold J. Love (Ed.), Sourcebook II (pp 66-78). Canadian Evaluation Society.

The article provides a pragmatic model and practical set of steps to evaluate divisions or departments within a post-secondary institution. Using Mount Royal College in Calgary as a template this "how to" article provides a good starting point for those entering into an evaluation exercise.

3. **Continuing Education Evaluation Within Disciplines or Specific Education Areas**

Brett, K & Mathews, C. (1996) Building an Evaluative Climate in Continuing Professional Development. Australian Journal of Adult and Community Education, 36(3), 181-189.

The author promotes the use of project management techniques as a foundation to the evaluative process. Using an approach called Project Management Body of Knowledge (PMBOK), eight tools and techniques of evaluation are outlined in the evaluation of continuing education.

Cervero, R. M. & Rottet, S. (1984) Analyzing the Effectiveness of Continuing Professional Education: An Exploratory Study. Adult Education Quarterly, 34(3),135-146.

A conceptual framework to link continuing professional education and performance was developed and tested on a continuing nursing education programme. This study was the only one encountered that attempted to quantify the change in outcomes that resulted from a continuing education programme. Even though it is a dated study, its approach is unique.

Elson, R. E., Strickland, D. C. & Oliver, D. J. (1991) A Look at Planning and Evaluation Linkages Across the Nation. Berkeley, California: National Center for Research in Vocational Education, 25 p.

Although focusing on vocational programs, the project outline called for the linkingof planning and evaluation. It lists the disincentives that hinder this linkage and explores the factors that facilitate and accommodate the use of models that link planning with evaluation.

Griffiths, C. (1994) Performance Standards Cores Measures. Washington, D.C.: Office of Vocational and Adult Education. 133 p.

Griffith analyses the annual performance reports of 49 states to see how and to what extent states have implemented their accountability systems. The work includes summaries of each state's performance measures and system of establishing standards, the evaluation process, incentives, adjustments, modifications and future actions.

Iowa State Department of Education. (1993) Performance Indicators of Program Quality for Iowa's Adult Basic Education Programs. 66 p.

This article presents a complete analysis of the evaluation of Adult Basic Education programs. The methods, process and content are applicable to any continuing education endeavor. The nine performance indicators include programme planning, curriculum and instruction, staff development, support services, recruitment and retention.

Osigweh, C. and Yg, A.B. (1986) An Evaluation Model of Training Outcomes for Higher Education. Educational Evaluation and Policy Analysis, 8(2), 167-178.

This article examines a performance evaluation model that addresses the need for measuring the effectiveness of continuing education training outcomes in institutions of higher education. The model emphasizes outcomes by assessing the quality of changes that occur in the program.

Peden, A.R., Rose, H. et al. (1990) Transfer of Continuing Education to Practice: Testing an Evaluation Model. Journal of Continuing Education in Nursing, 21(2), 152-155.

The authors outline a theoretical framework for the evaluation of a programme of continuing education for nursing. They use the model developed by Cervero and Rottet (1984) and test its value as a vehicle to predict the success of a continuing education programme.

4. **Practical Models of Evaluation in Similar Fields**

Hatry, H., Houten, T., Plantz, M.C., et al. (1996) Measuring Program Outcomes: A Practical Approach, United Way of America Task Force on Impact. 170 p.

This manual was developed by the United Way to evaluate performance on the basis of stated outcomes. The practical approach provides an excellent non-technical approach to institution evaluation. Although focusing on non-profit agencies, the process has relevance to educational endeavors, particularly as it applies to the definition and analysis of outcomes measures.

Health Canada. (1996) Population Health Directorate. <u>Guide to Project Evaluation: A Participatory Approach</u>. Health Canada. 70 p.

The introduction to the Guide states its purpose and its goal: to provide an easy to use, comprehensive framework for project evaluation. The work covers all aspects of program and project evaluation. Included are practical tables, sample questionnaires, and key indicator question lists, all of which could be applied to the evaluation of any organization.

Manson, R. C. (1993) Preparing for Adult Education Evaluation. <u>New Directions for Adult and Continuing Education</u>, <u>60</u>, 79-85.

This article discusses the pre-conditions necessary and the types of preparation that are required to ensure successful institutional evaluation. Mason identifies specific areas for evaluation, standards and criteria, and stakeholders who must be consulted. This article builds on some of the work done by Palumbo and Nachmais in 1983.

Sherman, J. D. and Condelli, L. (1991) <u>Evaluation Framework for the State Adult Education Program</u>. Washington, D.C.: Pelavin and Associates. 88p.

Although not concerned with the definition of a model for the overall evaluation of continuing education, this article is included because it provides a complete matrix of content items for program evaluation which may form part of an evaluation model.

Vernon, S., Marsick, V. J., et. al. (1993) Satisfying Accountability Needs with Non-traditional Methods. In Patricia Mulcrone, (Ed.), <u>Current Perspectives on Administration of Adult Education Programs</u>. San Francisco: Jossey-Bass. 107 p.

The authors adopt the position that limited resources, a rapidly changing economic base, ever-evolving technological dependence and shifting demographics require a different paradigm for accountability and evaluation. This approach poses five basic questions that are required for accountability including what tools and strategies are used. These are then applied to three situations: community-based education, workplace based education and higher education.

Underwood, S. J. & Underwood, D. G. (1996) Assessing Continuing Education:

Difficult But Not Impossible. Paper presented at the Annual Forum for Institutional Research. Albuquerque, NM. 19p.

This paper outlines a model for continuous evaluation of continuing education and attempts to provide a broad framework for this evaluation. Of interest is the distinction between "process" outcomes and "standards" outcomes, and the components that make up the latter. The paper also lists the key goals that must be met to make up a successful evaluation model.

5. **Selected World Wide Web Sites**

Web access is at best problematic. The longevity of any site and its address are always open to question. Criteria for inclusion is the status of the organization behind the site and the known quality, applicability and ease of use of the site itself As the content of web sites is constantly changing, only general remarks on content have been included.

American Evaluation Association.

This site is primarily concerned with the field of evaluation but has many useful access points. Of interest is the collection of online publications and documents. Of particular interest are the Topical Interest Groups (TIG's) that include extension education evaluation and assessment in higher education.

http://www.eval.org

Canadian Evaluation Society

This site includes information about the society, conference workshops and general information about Canadian evaluation activities. It has an index of articles in the Canadian Journal of Program Evaluation, and includes the statement of ethics for the society and an online newsletter.

http://www.unites.ugam.ca/ces-sce.html

Eric Clearinghouse on Assessment and Evaluation

This site is the most complete resource on educational assessment that could be located. It includes listservs, organizations, qualitative research and statistics, as well as links to all the ERIC Services, a full text library and links to other assessment sites.

http://ericae.net/

The Evaluation Center: Western Michigan University

This is the home location for CREATE, the Consortium for Research on Educational Accountability and Teacher Evaluation. It includes online publications, a directory of support services including an evaluation bibliography, and instruments, models and tools.

http://www.wmich.edu/evalcrt/

American Educational Research Association

This site is primarily aimed at education researchers. The site includes some online articles, online indexes and abstracts from six educational research journals with search engine access. Of value is a page of resources for researching.

http://aera.net/

Learning Resources Network (LERN)

LERN states on its homepage that it is the leading association in lifelong learning. Much of the site requires access through a username and password. Once an individual is a member ($145 U.S.), Internet services are extensive, including a publication chatroom, a limited database, brochures and surveys. Response to individual research queries is prompt and complete.

http://www.Lern.org