

**CANADIAN EVALUATION SOCIETY PROJECT
IN SUPPORT OF ADVOCACY AND PROFESSIONAL DEVELOPMENT**

LITERATURE REVIEW

October 2002

Prepared by Martha McGuire

Zorzi & Associates

722 Windermere Ave.
Toronto, ON M6S 3M1
tel: 416-761-1024
fax: 416-761-1609
rochelle.zorzi@sympatico.ca

Canadian Evaluation Society Project in Support of Advocacy and Professional Development

LITERATURE REVIEW ON THE BENEFITS, OUTPUTS, PROCESSES, AND KNOWLEDGE ELEMENTS OF EVALUATION

Benefits of Evaluation

Much of the information about the benefits of evaluation in the literature can be gleaned from discussions regarding what evaluation should and should not be, as well as what it potentially can be if done properly. This summary of the literature suspends judgment on what evaluation should be and looks at how it has been used beneficially and what it potentially can be from the perspective of the client and the client's clients. In other words, if the client is a funding agency, their clients would be funded programs. If the client is a program, their clients would be users of their programs.

The various definitions of evaluation include statements about the benefits of evaluation. Earlier literature often provides more restrictive definitions of evaluation. For example, in 1980 Scriven defined evaluation in the following way: "*Evaluation is what it is, the determination of merit or worth, and what it is used for is another matter.*"¹ He later states: "*Bad is bad and good is good and it is the job of evaluator to decide which is which.*"²

However, evaluators such as Carol Weiss saw broader benefits to evaluation than merely defining what is good and bad:

The purpose of evaluation research is to measure the effects of a program against the goals set out to accomplish, as a means of contributing to subsequent decision-making about the program and improving future programming.³

Later definitions of evaluation consistently reflect a broader approach, with greater emphasis on the various benefits that can be gained through evaluation. In 1994, Wholey, Newcomer and Hatry point out:

One of our major themes throughout this work is that evaluation . . . should not only assess program results, but also identify ways to improve the program performance."⁴

¹ Scriven, M. The Logic of Evaluation, Edgepress, 1980. p.7

² Scriven, M. "New Frontiers on Evaluation" Evaluation Practice, 1986.

³ Weiss, Carol H. Evaluation Research: Methods of Assessing Program Effectiveness

⁴ Wholey, Joseph S., Harry P. Hatry and Kathryn E. Newcomer. Handbook of Practical Program Evaluation, Jossey-Bass, 1994.

In 1997, Michael Quinn Patton provides the following definition of evaluation:

*“Program evaluation is the systematic collection of information about the activities, characteristics and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future programming.”*⁵

Shadish, Cook and Leviton provide a definition that focuses even further on the benefits:

*“Intrinsic to evaluation is an idealized problem-solving sequence for (a) identifying a problem; (b) generating alternatives to reduce its symptoms; (c) evaluating these alternatives; and then (d) adopting those that results suggest will reduce the problem satisfactorily.”*⁶

Rossi, Freeman and Lipsey reinforce the trend towards defining evaluation in terms of the benefits:

*“More specifically, evaluation researchers use social research methods to study, appraise and help improve social programs in their important aspects, including the diagnosis of the social problems they address, their conceptualization and design, their implementation and administration, their outcomes and their efficiency.”*⁷

Both Chelimsky and Patton provide three key areas of benefits. In looking at the literature almost all other benefits specified are subcategories of these three areas. Cheliminsky states:

“These different purposes, along with the questions they seek to address, seem to fall naturally into three general perspectives:

- *Evaluation for accountability (e.g. the measurement of results or efficiency)*
- *Evaluation for development (e.g., the provision of evaluative help to strengthen institutions)*
- *Evaluation for knowledge (e.g., the acquisition of a more profound understanding in some specific area or field”*⁸

Patton identifies a menu for using findings:

Making Overall Judgments
Facilitating Improvements
*Generating Knowledge*⁹

These categories are quite similar and have been used to organize the more detailed benefits that have been put forward by others:

⁵ Patton, Michael Quinn. Utilization Focused Evaluation: The New Century Text, Sage Publication, 1997. p. 23

⁶ Shadish, William R. Jr., Thomas D. Cook, Laura C. Leviton. Foundations of Program Evaluation: Theories of Practice, Sage Publications, 1995. p. 21

⁷ Rossi, Peter H., Howard E. Freeman and Mark Lipsey. Evaluation: A Systematic Approach, Sage Publications, 1999. p. 21

⁸ Chelimsky, Eleanor & William Shadish. Evaluation for the 21st Century: A Handbook, Sage Publications, 1997. p. 10

⁹ Patton p. 65

Accountability/Making Overall Judgments

- Analyze efficiency and effectiveness
- Measure and account for the results of public policies and programs
- Determine the efficiency of programs, projects and their component processes
- Increase agency responsiveness to the public
- Assess program benefits relative to their cost
- Verify that planned programs do provide services
- Analyze cost compared to outcome
- Determine program quality
- Provide timely and convincing evidence of program effectiveness
- Measure and account for the results of public policies and programs
- Determine the efficiency of programs, projects and their component processes

Development/Facilitating Improvements

- Identify program's strengths and weaknesses
- Make programs less vulnerable
- Strengthen institutions and improve managerial performance
- Monitor how well programs are functioning
- Examine results
- Provide information needed to maintain and improve quality
- Gain direction for improving programs
- Help agency managers run their programs
- Help policy makers and managers improve their programs while they are underway

Knowledge/Generating Knowledge

- Provide evidence of what works and what does not
- Understand how organizations learn
- Expand results or efficiency measurement from that of local or national interventions to that of global interventions
- Assessment of program impact
- Devote resources to meeting unmet need
- Determine which services produce the best results
- Select the types of programs that offer the most needed services
- Help policy makers and managers decide realistically what their programs can do
- Gain explanatory insights into social and other public problems and efforts to address them

Patton has expanded on his three categories, stating that the evaluation process itself is a benefit:

Process use, then, refers to and is indicated by individual and group changes in thinking and behaviour, and program or organizational changes in procedures and culture, that occur among those involved in an evaluation-type activity (regardless of whether it is so named) as a result of the learning that occurs during that activity.¹⁰

¹⁰ Patton, Michael Quinn, "Organizational Development and Evaluation" The Canadian Journal of Evaluation, Special Edition, 1999. p.108

Wholey and Chelimsky both make reference to other benefits that are somewhat different from the three main categories and are more related to advocacy.

- Shaping public opinion about government
- To reform governments through the free flow of valuable information

As early as 1975, Stake pointed out that “*People expect evaluation to have many different purposes*”¹¹. This continues to be the case, with increased emphasis on the responsibility of evaluators to understand the benefits that the clients are expecting from the evaluation and designing the evaluation to meet those expectations.

Discussion questions:

1. Do you believe all of the benefits have been covered – is anything missing?
2. Are there any benefits that you would question? Is everything listed really a benefit? If not what is it?
3. Do you know of any examples that you can share of instances where these benefits have been realized?

¹¹ Stake, R.E. Evaluating the Arts in Education: A Responsive Approach, Merrill, 1975. p. 15

The Outputs and Processes of Evaluation

This review could easily be titled, “The Challenge of Defining Outputs”. One of the challenges in conducting a literature review on the outputs and process of evaluation is that ‘outputs’ is not a term that is commonly used in the literature; hence this review is based on extrapolation and inference, rather than direct reference to outputs. There is a much more substantial body of literature on ‘process’, with Patton’s work emphasizing that the process is at least as important as the outputs¹². Perhaps the perspective put forward by Joe Hudson almost a decade ago is a good starting point for thinking about outputs and processes: “*No one approach to evaluation is likely to be suitable for all purposes, all potential information uses, and users, nor is any particular evaluation approach necessarily suitable for the different developmental stages of programs.*”¹³ In other words, outputs and processes are dependent on what a particular evaluation is attempting to achieve.

A second challenge is defining the terms ‘outputs’ and ‘processes’. The literature refers to various types of outputs and processes, generally without defining the terms. For example, a comprehensive evaluation text such as Rossi, Freeman and Lipsey’s¹⁴ identifies key concepts for each of the chapters. Some of the concepts are clearly outputs and processes, but are not identified as such. King, Stevahn, Ghore and Minnema, in their article on evaluator competencies¹⁵, indicate a number of things that evaluators must be able to do. In other words, competencies are defined by the outputs and processes that an evaluator must do, in addition to certain knowledge, skills and personal characteristics. For the purpose of this review, ‘outputs’ is defined as the information, ideas or results that are produced by an evaluation, either formally or informally. ‘Processes’ are the means by which the outputs are achieved. Processes also produce benefits on their own.

A third challenge is attempting to get a sense of ‘good practice’ in regard to outputs and processes. Which returns us to the notion that there are ever-growing number of potential outputs and processes that are able to produce benefits only if they are applied in the right way to the right situation. There are no clearly defined ‘best practices’. As pointed out by Patton:

*“From a systems point of view, a major problem with many ‘best practices’ is the way they are offered without attention to context. Suppose automobile engineers identified the best fuel injection system, the best transmission, the best engine cooling system, the best suspension system, etc. . . . Let us further suppose, as is likely, that these best subsystems . . . come from different car models (Lexus, Infiniti, Audi, Mercedes, etc). When one had assembled all the ‘best’ systems from all the best cars, they would not constitute a working car.”*¹⁶

¹² Patton, Michael Quinn. Utilization Focused Evaluation: The New Century Text, Sage Publication, 1997

¹³ Hudson, Joe, John Mayne and Ray Tomlinson. Action-oriented Evaluation in Organizations: Canadian Practices, Wall and Emerson, 1992. p.129

¹⁴ Rossi, Peter H., Howard E. Freeman and Mark W. Lipsey. Evaluation: A Systematic Approach, Sixth Edition. Thousand Oaks: Sage Publications, 1999.

¹⁵ King, Jean A., Laurie Stevahn, Gail Ghore and Jane Minnema. “Toward a Taxonomy of Essential Evaluator Competencies” American Journal of Evaluation, V.22, No.2, Spring-Summer 2001 pp233-235.

¹⁶ Patton, Michael Quinn. “Evaluation, Knowledge Management, Best Practices, and High Quality Lessons Learned”, The American Journal of Evaluation. V.22, No. 3 Fall, 2001, p. 331.

A fourth challenge is distinguishing outputs and processes from benefits and knowledge. There seems to be substantial overlap with both. Patton's example provides a warning about the negative side of using knowledge to produce an output without placing the process in context. Under such conditions, the output cannot benefit anyone. Conversely, knowledge that is used to produce an output or process within the context of the situation is much more likely to create something beneficial.

The proposed evaluation standards for the Government of Canada demonstrate the interconnectedness between benefits, outputs/processes and knowledge, covering all three with the various standards. The standards that speak directly to outputs and processes are:¹⁷

- *Evaluation work must incorporate sufficient and appropriate consultation and, where appropriate, apply the advice and guidance of specialists and other knowledgeable persons.*
- *Evaluation work must produce timely, pertinent and credible findings and conclusions that managers and other stakeholders can use with confidence, based on practical, cost-effective and objective data collection and analysis.*
- *Evaluation reports must present the findings, conclusions and recommendations in a clear and objective manner.*

Mark, Henry and Julnes¹⁸ outline four inquiry modes (yet another taxonomy for looking at outputs and processes) and perhaps most importantly discuss how to make choices between weaker and stronger options. Unfortunately, the selection of outputs is much more complex than they imply. Most often there are more than two choices of outputs or processes. And as pointed out by Patton, getting the right combination for the particular context is of paramount importance. This leads to a situation where evaluators must choose among a seemingly endless numbers of combinations and permutations of options.

Once one determines the primary purpose of the evaluation, it is possible to get guidance on how to proceed. For example, Nutter sets out steps for ongoing evaluation, which indicate what the processes and outputs are to be:

- Determine who is the client for the evaluation
- Discover the client's most important evaluation questions
- Discover or develop the program logic or structure model
- Confirm the logic and structure model with the evaluation client
- Develop a formal information system that contains performance indicators that will adequately address the client's evaluation questions
- Develop an analysis and reporting system to supply the evaluation client with reports that answer the client's questions.¹⁹

On the other hand, if the primary goal is empowerment, then Fetterman suggests a different approach. His steps (outputs and processes) in conducting an empowerment evaluation are:

¹⁷ Treasury Board of Canada Secretariat. Evaluation Policy, February 1, 2001, pp 7-10

¹⁸ Mark, Melvin M., Gary T. Henry, and George Julnes. "Toward an Integrative Framework for Evaluation Practice", The American Journal of Evaluation, v.20, No. 2, Spring-Summer, 1999, p.193

¹⁹ Nutter, Richard W. "Program Monitoring: The Case of Ongoing Evaluation Systems", Action-oriented Evaluation in Organizations: Canadian Practices, Wall and Emerson, 1992, p. 137.

- Taking stock
- Setting goals
- Developing strategies
- Documenting progress
- Creating a dynamic community of learners²⁰

One way of making sense of this is to think of the outputs and processes as tools that one selects that through products produce benefits, and the more choice one has, the more likely one is to find the right set of tools for the particular situation. The following table outlines output, processes and products which serve as tools that are appropriate for the various stages of planning and implementing an evaluation. It synthesizes information from a number of different sources.²¹

Processes	Outputs	Products
<ul style="list-style-type: none"> • Discussions about the program • Designing the evaluation • Developing data collection instruments • Data collection • Interpreting the data • Action planning • Communicating the results 	<ul style="list-style-type: none"> • Identification of gaps • Information about the impacts and effects of the program • Information about value for money of the program • Information about why a program/ activity is effective/ineffective • Information about what programs/ activities are effective • Information about harmful/unwanted program effects • New questions regarding programs • Suggestions of good practices • Performance results 	<ul style="list-style-type: none"> • Logic models • Research/evaluation questions • Research methods • Data collection frameworks and tools • Analytical frameworks • Literature reviews

Knowledge and skills are what the evaluator brings to the project. *Processes* are what the evaluators do with their knowledge and skills to produce information, ideas, and results, which we are calling outputs. *Outputs* are normally (although not necessarily) delivered through *products*, such as graphs or figures or reports. This project has not been particularly concerned with products, but it is probably important to consider what one is trying to produce. The client *benefits* from the outputs when he/she uses the information to increase his/her understanding or to make decisions.

The importance of choosing the right outputs and processes for the right situation is described by Rossi, Freeman and Lipsey:

²⁰ Fetterman, David. "Reflections on Empowerment Evaluation: Learning from Experience". The Canadian Journal of Program Evaluation, Special Issue, 1999, p.16

²¹ King, Jean A., Laurie Stevahn, Gail Ghore and Jane Minnema. "Toward a Taxonomy of Essential Evaluator Competencies" American Journal of Evaluation, V.22, No.2, Spring-Summer 2001 pp233-235.
 W.K. Kellogg Foundation. Evaluation Handbook, 1998.

Evaluation must tailored to the political and organizational context to be evaluated. It typically involves assessment of one or more of five program domains: (a) the need for the program, (b) the design of the program, (c) the program implementation and service delivery, (d) the program impact on outcomes, and (e) program efficiency. Evaluation requires an accurate description of the program performance or characteristics at issue and assessment of them against relevant standards or criteria.”²²

Owen and Rogers summarize all the complexities quite simply: “. . . *evaluation as the process of*

- *Negotiating an evaluation*
- *Collecting and analyzing evidence to produce findings*
- *Disseminating to identified audiences”²³*

From this literature review, it seems that the following state exists:

- Nobody has defined the term output. Process has received much more attention, but primarily in terms of its direct relationship to benefits.
- No single output or process is going to be appropriate for all situations and all purposes. The literature does not provide much guidance in this area and this project, which attempts to link outputs/processes and benefits, appears to be breaking new ground if, in fact, the interconnectedness works.
- It is hard to separate outputs from benefits, and it is also hard to separate outputs from knowledge/skills.

Discussion Questions

1. Why is it, given that the plethora of literature on seemingly just about every other aspect of evaluation, that outputs are not spoken of in this way?
2. Given that, does it make sense to use the term?
3. If not, what other term makes sense, given there is a certain logic in thinking about the outputs necessary to attain benefits?

²² Rossi, Peter H., Howard E. Freeman and Mark W. Lipsey. Evaluation: A Systematic Approach, Sixth Edition. Thousand Oaks: Sage Publications, 1999, p.35

²³ Owen, John and Patricia Rogers. Program Evaluation Forms and Approaches, Thousand Oaks: Sage, 1999, p.63

The Knowledge Elements of Evaluation

What is the core body of knowledge required by evaluators to enable them to conduct evaluations competently and ethically? The literature addressing this question is both informative and thought-provoking. Several themes emerged:

- The knowledge required varies, depending on the purpose of each specific evaluation;
- Evaluation is an evolving field, so the knowledge required is constantly changing;
- Despite the variety and evolution of evaluation, inventories of knowledge elements have been developed and there appears to be a fairly high degree of agreement on some basic elements
- The variety and evolution of evaluation implies a need for evaluators to engage in personal life-long learning

This literature review will explore each of these themes in more detail.

Determining What Knowledge is Required

The knowledge required for any given evaluation depends on the methods that are to be applied. Michael Quinn Patton articulates the complexities of determining methods:

“There are no universal and absolute standards for judging methods. The consensus that has emerged within evaluation, as articulated by the Joint Committee on Standards (1994) and the American Evaluation Association’s Guiding Principles (Shadish, et al, 1995), is that evaluations are to be judged on the basis of appropriateness, utility, practicality, accuracy, propriety, credibility and relevance. These criteria are necessarily situational and context bound.”²⁴

The Canadian Evaluation Society (CES) Guidelines for Ethical Conduct indicate:

Evaluators are to be competent in their provision of service.

1.1 Evaluators should apply systematic methods of inquiry appropriate to the evaluation.

1.2 Evaluators should possess or provide content knowledge appropriate for the evaluation.

1.3 Evaluators should continuously strive to improve their methodological and practice skills.²⁵

²⁴ Patton, Michael Quinn. Utilization-Focused Evaluation, Edition 3, Sage Publications, Thousand Oaks, 1997, p. 249.

²⁵ Canadian Evaluation Society. *Guidelines for Ethical Conduct*.

The American Evaluation Association's (AEA) Guiding Principles for Evaluators indicate:

Competence: Evaluators provide competent performance to stakeholders.

1. *Evaluators should possess (or, here and elsewhere as appropriate, ensure that the evaluation team possesses) the education, abilities, skills and experience appropriate to undertake the tasks proposed in the evaluation.*
2. *Evaluators should practice within the limits of their professional training and competence and should decline to conduct evaluations that fall substantially outside those limits. When declining the commission or request is not feasible or appropriate, evaluators should make clear any significant limitations on the evaluation that might result. Evaluators should make every effort to gain the competence directly or through the assistance of others who possess the required expertise.*
3. *Evaluators should continually seek to maintain and improve their competencies, in order to provide the highest level of performance in their evaluations. This continuing professional development might include formal coursework and workshops, self-study, evaluations of one's own practice, and working with other evaluators to learn from their skills and expertise.*²⁶

Both the CES and AEA guidelines imply that evaluators must first have the skills and knowledge to determine what is required to conduct a particular evaluation and second must have sufficient insights into their own knowledge and skills to determine whether they can undertake a specific evaluation. The AEA guidelines make explicit the expectation that no single evaluator is expected to have the full range of skills, rather that evaluators must be able to form teams with the requisite abilities for any given assignment. This is reinforced by J. Bradley Cousins: *"Approaches to evaluation and applied social research are increasingly relying on members of the research community (e.g. trained evaluators) working in collaboration with members of the community practice (e.g., program managers or implementers)."*²⁷

Whitehead and Avison further support that the selection of methods must be appropriate to the circumstances: *"Two principal conclusions can be drawn from this analysis of evaluation frameworks. First, not only do different types of analyses produce different information, but that information differs in scope and validity. . . The second conclusion is that although not all evaluations need to do everything, if they are to be accurate and useful it is nevertheless important that there be a reasonable balance of scope and validity. The framework that we call comprehensive evaluation can be used as the basis for making choices and trade-offs in selecting the circumstances, what needs to be done, and how it will be used."*²⁸

The Kellogg Foundation provides advice on what to look for in an evaluator, depending on what the evaluation is intended to do. *"If the evaluation purpose is to determine the worth or merit of*

²⁶ American Evaluation Association. *Guiding Principles for Evaluators*.

²⁷ Cousins, J. Bradley. *Do Evaluator and Program Practitioners Perspectives Converge in Collaborative Evaluation?*, The Canadian Journal of Program Evaluation, Vol 18, No. 2, 2001, p. 114

²⁸ Whitehead, Paul C. and William R. Avison. *Comprehensive Evaluation: The Intersection of Impact Evaluation and Social Accounting*", The Canadian Journal of Program Evaluation, Vol. 14, No. 1, 1999, p. 81

a program, you might look for an evaluator with methodological expertise and experience. If the evaluation is focused on facilitating program improvements, you might look for someone who has a good understanding of the program and is reflective. If the primary goal of the evaluation is to design new programs based on what works, an effective evaluator would need to be a strong team player with analytical skills. Experience tells us however that the most important overall characteristic to look for in an evaluator are the ability remain flexible and to problem-solve.”²⁹

In order for the evaluator to produce the benefits expected by the client, as well as any unanticipated benefits, it is essential first to assess those expectations in the context of the program in order to determine the appropriate evaluation approach and methodology. The selected approach and methodology determine the knowledge required by the evaluation team.

Evaluation: A Constantly Changing Field

Evaluation is a relatively new and quickly changing area, making it both exciting and challenging at the same time. This is reflected in discussions regarding the changes as well as in thinking about the future. The Canadian Journal of Program Evaluation devoted the special issue in 2001 to reflecting on the development of evaluation in provinces across Canada. The American Journal of Evaluation devoted the fall issue to reflections on the future of evaluation. The American Evaluation Association also publishes *New Directions for Evaluation*, a journal entirely devoted to changes in evaluation.

Arnold Love pointed out, *“During the past 30 years, evaluation has made enviable strides in theory and practice around the globe. Evaluation is becoming increasingly diverse and reflects an ever-changing socio-economic and political context. To remain relevant, however, evaluation must innovate.”*³⁰ This implies that evaluation will continue to change.

What are some of these changes? As indicated by Les McLean, *“Case studies, performance indicators, logic models, high-tech measurement, critical theory – none of these were discussed widely, if at all, even 20 years ago. The theory and practice of program evaluation are both rich and varied in ways no one predicted, as the annual conferences of the CES and AEA attest. What we can safely predict is that they will continue to evolve and grow in exciting ways.”*³¹

New terms are constantly coming into use. Meta-evaluation, evaluability assessment, economic evaluation, and data mining all represent changes in evaluation within recent years. Changes in technology have changed the ways in which data is gathered and analyzed. Any comprehensive discussion on surveys must include e-based methodologies. The notion of comparative research takes on a different meaning as the potential for global data bases become reality. User-friendly, PC compatible statistical packages make it possible for anyone with the skills to collect and analyze relatively large quantitative data bases. It can also make it possible for those without adequate skills to have access to tools that may be misused. The technological advances place increased responsibility on evaluators to know the limits of their abilities.

²⁹ Kellogg Foundation. *Evaluation Handbook*, 1998, pp. 59-60

³⁰ Love, Arnold. *The Future of Evaluation: Catching Rocks with Cauldrons*, American Journal of Evaluation, Vol 22, No. 3, 2001, p.441

³¹ McLean, Les. *Reflections on Program Evaluation, 35 Years On*, The Canadian Journal of Program Evaluation, Special Issue, 2000, p. 189

A review of evaluation practices across Canada reinforces the evolving nature of the field. Mark Season concludes, *“The message is clear: evaluation is evolving at the provincial level. As Bradley argues, evaluation practice will survive where it is perceived to add value to public-sector management and enhances the learning environment. Further, evaluation must adapt to the prevailing political and administrative culture if it is to survive”*.³²

As evaluation changes, so do the expectations of the users of evaluations. Valerie J. Caracelli points out, *“These changes in practice expanded the roles and responsibilities of evaluators, with confident changes occurring in our understanding of the multi-dimensional aspects of use”*³³ Clients are becoming more knowledgeable and expecting more. The related field of evaluation capacity building (ECB) is being developed, which can only serve to raise expectations even further. *“ECB is the intentional work to constantly co-create and co-sustain an overall process making quality evaluation and its uses routine in organizations and other systems . . . The ECB practitioner’s orientation is to a longer-term, ongoing process of co-creation and co-sustentation rather than to completing discrete, isolated evaluation studies.”*³⁴

This constant evolution means that the knowledge required to carry out evaluations must be expected to expand.

Inventory of Knowledge

Determining the knowledge required to carry out evaluation feels a bit like shooting a high-speed missile with a musket – no matter how close we come we can never be fully on target. Despite this challenge, a significant portion of the literature speaks to the skills, knowledge, abilities and attributes required to conduct evaluation. It also shows progression from the asking of questions to the development of taxonomies that can serve as useful tools to both evaluators and those who use evaluators.

In 1991, Shadish, Cook and Leviton listed questions related to knowledge construction. Although aimed at the evaluator, they can also be useful to those making decisions about engaging an evaluator. Perhaps more importantly, their questions provide a context in which to explore the knowledge required. Their overview questions are summarized as follows:

- (1) *What criteria are you going to use in deciding what constitutes acceptable knowledge?*
- (2) *What kind of knowledge does the client who paid for the evaluation want? (this could include a funder or an organization)*
- (3) *What kind of knowledge, if any, do you think should be most important in the evaluation?*
- (4) *Can you produce the required knowledge, at the desired level of certainty, in the time available?*

³² Seasons, Mark. *Epilogue*, The Canadian Journal of Program Evaluation, Special Issue, 2001, p. 118

³³ Caracelli, Valerie. *Evaluation Use at the Threshold of the Twenty-first Century*, The Expanding Scope of Evaluation Use, Jossey-Bass, San Francisco, 2000, p. 105

³⁴ Compton, Donald W., Michael Baizerman and Stacey Hueftle Stockdill, *New Directions for ECB*, The Art, Craft and Science of Evaluation Capacity Building, Jossey Bass, San Francisco, 2002, p.114

(5) *What arrangements will you make to carry out critical evaluation of your own evaluation?*³⁵

Daniel Caron outlined what he felt were the nucleus of courses for a study program in evaluation. The four key modules he suggested are:

Module 1: Understanding the Investigation Environment

Module 2: Research Methods

Module 3: Design and Analysis

*Module 4: Management and Communication*³⁶

The functional table of contents from The Program Evaluation Standards, 2nd Edition,³⁷ outlines the major tasks of program evaluation, and can be viewed as a starting point for determining evaluation competencies and complete the picture when combined with the associated guidelines and standards.

In its paper on evaluation competencies, the Australian Evaluation Society³⁸ outlines four key areas of competence:

- Knowledge or cognitive competence (e.g. models, theories, context, research methodology, project management, communication, organizational processes)
- Functional competence (e.g. focus, design, data collection, analysis, planning, reporting)
- Personal or behavioural competence (e.g. problem-solving, analytical thinking, conceptual thinking, self-control, self-confidence, tenacity, initiative, professional development)
- Values/ethical competence (e.g. personal, professional)

Consistent with the functions outlined in the standards is a taxonomy of essential competencies developed by King, Stavahn, Ghere and Minnema³⁹, based on their exploratory study on the extent to which evaluation professionals could reach agreement on essential evaluator competencies. They concluded that there may be more agreement on the competencies needed by evaluators than initially anticipated, based on finding a 78% agreement on the competencies in their taxonomy. They also concluded that the areas where consensus did not emerge reflected the role- and context-specific nature of evaluation practice, thus supporting the notion that the knowledge depends on the expected benefits and the outputs necessary to gain those benefits. Their table of essential evaluator competencies is comprehensive and shows areas of agreement and disagreement.

³⁵ Shadish, William R., Thomas D. Cook, and Laura C. Leviton. Foundations of Program Evaluation: Theories of Practice, Sage, Newbury Park, 1991, p.463.

³⁶ Caron, Daniel. *Knowledge Required to Perform the Duties of an Evaluator*, The Canadian Journal of Program Evaluation, 1993, p.75.

³⁷ Sanders, James R. The Program Evaluation Standards, 2nd Edition, Sage, Thousand Oaks, 1994.

³⁸ Australian Evaluation Society. *Evaluation Competencies*, no date.

³⁹ King, Jean A., Laurie Stavahn, Gail Ghere and Jane Minnema. *Toward a Taxonomy of Essential Evaluator Competencies*, American Journal of Evaluation, Vol. 22, No. 2, 2001

Essential Evaluator Competencies: Means and Ranges⁴⁰

<i>Competencies</i>	Domains		Categories		Items	
	Mean	Range	Mean	Range	Mean	Range
I. Systematic Inquiry	95.10	60-100				
IA. Able to do research-oriented activities*			87.10	50-100		
IA1. Framing the research questions					94.03	10-100
IA2. Research design						
IA3. Measurement					90.23	50-100
IA4. Research methods (quantitative, qualitative and mixed methods)					80.00	20-100
					92.65	70-100
IB. Able to do evaluation-oriented activities			97.26	70-100		
IB1. Evaluation theory, models, and underlying philosophical assumptions					86.61	0-100
IB2. Needs assessment						
IB3. Framing the evaluation questions						
IB4. Evaluation design					91.58	60-100
IB5. Evaluation processes					99.97	99-100
IB6. Making judgments*						
IB7. Developing recommendations*					97.32	80-100
IB8. Meta-evaluation					97.61	90-100
IC. Able to do activities common to both research and evaluation					74.68	10-100
IC1. Literature review*					82.16	50-100
IC2. Sampling						
IC3. Instrument construction			94.58	75-100	78.06	10-100
IC4. Data collection						
IC5. Data analysis					80.58	10-100
IC6. Data interpretation					82.16	0-100
IC7. Reporting results					94.90	50-100
					95.71	80-100
					94.65	80-100
					97.90	80-100
					96.45	80-100

⁴⁰ Ibid. pp233-235

<i>Competencies</i>	Domains		Categories		Items	
	Mean	Range	Mean	Range	Mean	Range
II. Competent Evaluation Practice	94.35	55-100				
IIA. Able to serve the information needs of intended users			96.54	50-100		
IIB. Able to do situational analysis						
IIB1. Knowledgeable about organizational development, change and politics			95.48	75-100	87.29	0-100
IIB2. Able to analyze the political context of an organization					93.87	80-100
IIB3. Respectful of the uniqueness of the evaluation site and client					91.94	50-100
IIB4. Open to others' input						
IIB5. Able to adapt/change study as needed						
IIC. Able to organize and manage evaluation projects					93.23	50-100
IIC1. Able to respond to a request for proposal					96.45	50-100
IIC2. Able to write formal agreements						
IIC3. Able to budget an evaluation			98.06	80-100		
IIC4. Able to access needed resources (information, personnel, instruments)					78.71	10-100
IIC5. Able to supervise others					84.65	0-100
IIC6. Able to train others					87.58	0-100
IIC7. Able to conduct the evaluation in a non-disruptive manner*					95.29	50-100
IIC8. Able to complete work in a timely manner						
IIC9. Able to deal with stress during a project*					79.42	0-100
					81.71	0-100
					90.65	50-100
					94.06	50-100
					89.52	50-100
III. General Skills for Evaluation Practice	91.61	60-100				
IIIA. Logical and critical thinking skills			97.58	50-100		
IIIB. Written communication skills						
IIIC. Verbal communication skills			92.90	60-100		
IIID. Interpersonal competence						
IIID1. Negotiation skills						
IIID2. Conflict resolution skills*			95.71	60-100		
IIID3. Group facilitation skills						
IIID4. Group processing skills			94.19	75-100		
IIID5. Teamwork/ collaboration skills					90.13	75-100
IIID6. Cross-cultural skills*					86.45	50-100
IIIE. Computer application skills*						
					87.10	0-100
					87.26	0-100
					96.61	75-100
					90.32	50-100
			84.84	50-100		

<i>Competencies</i>	Domains		Categories		Items	
	Mean	Range	Mean	Range	Mean	Range
IV. Evaluation Professionalism	88.39	60-100				
IVA. Knowledge of yourself as an evaluator*			89.45	50-100		
IVB. Ethical conduct			99.52	85-100		
IVB1. Ensures the honesty and integrity of the evaluation					98.87	85-100
IVB2. Is able to convey to potential clients your evaluation approach and skills					91.77	65-100
IVB3. Respects the security, dignity and self-worth of the respondents, program, participants, clients and other stakeholders					98.71	90-100
IVB4. Is responsible for contributing to the general and public welfare*					73.19	40-100
IVC. Knowledge of professional standards (e.g. Joint Committee Standards, AEA Guiding Principles)			78.55	0-100		
IVD. Application of professional standards						
IVE. Professional Development			86.13	0-100		
IVE1. Is aware of needs for professional growth			91.19	70-100		
IVE2. Reflects on practice*					92.42	50-100
IVE3. Networks*					93.23	50-100
IVE4. Updates personal knowledge in the evaluation field (e.g. workshops, conferences, journals)					80.81	40-100
					89.68	0-100
IVE5. Updates knowledge in relevant content areas*						
IVE6. Contributes to the knowledge base of evaluation*					89.52	50-100
					60.84	0-100

Note: Bold and asterisk (*) indicate “real” disagreement on perceived importance: see text for explanation

Donna Mertens⁴¹ provides a slightly different taxonomy, categorizing the knowledge and skills into the following areas: research methodology; borrowed from other areas; and unique to specific disciplines. As with others, she emphasizes the importance of a range of skills and knowledge set in the context of the ethics and values. Torres, Preskill and Piontek reinforce the importance of the range of competencies presented by King in their discussion of the breadth and depth of knowledge required by evaluators pointing to the key areas of: organizational change, consultation and facilitation; gender and multicultural sensitivity and ethics and values.⁴²

Hatry, Newcomer and Wholey further emphasize the need for a diversity of skills, knowledge and attributes: *“Evaluators need a variety of skills to be effective. They should be good analysts. They should be gifted at listening. Evaluators should also possess marketing skills. They must communicate the value of evaluation to policy-makers and managers who may not*

⁴¹ Mertens, Donna M. *Training Evaluators: Unique Skills and Knowledge*, New Directions in Program Evaluation, no. 62, Summer, 1994

⁴² Torres, Rosalie, Hallie S. Preskill and Mary E. Piontek. *Evaluation Strategies for Communicating and Reporting: Enhancing Learning in Organizations*, Sage, Thousand Oaks, 1996.

appreciate the benefits to be derived from systematic evaluation efforts.”⁴³ Torres, Preskill and Piontek emphasize the need to develop the softer skills in order to communicate and report findings effectively. They point out: “Indeed, the entry point for any learning to occur is communication. For the evaluator’s part, this communication is about evaluation approaches, activities and findings. It occurs throughout all phases of an evaluation, from early planning stages to follow-up.”⁴⁴

The competency standard established by the Treasury Board of Canada Secretariat states: “The person or persons carrying out evaluation, or evaluation-related work, must possess or collectively possess the knowledge and competence necessary to fulfill the requirements of the particular evaluation work.”⁴⁵ The guidance provided states: “Evaluators should possess or ensure the provision of content knowledge appropriate for the evaluation and continuously strive to improve their methodological and practice skills. Evaluators should possess the knowledge, skills and experience in:

- *The application of sound research design able to answer the chosen questions;*
- *The collection and analysis of reliable quantitative and qualitative data; and*
- *The development of valid, credible and unbiased conclusions and recommendations”⁴⁶*

This standard reinforces the responsibility for evaluators to first determine the benefits or outcomes that are anticipated by the client, and develop approaches, methodologies and outputs appropriate to achieve those benefits and outcomes. That will then determine the specific knowledge and skills required for the specific evaluation.

M.F. Smith, in responding to the articles on the future of evaluation in the fall, 2001 American Journal of Evaluation, points out the range of opinion regarding what skills are needed: “Many authors identify needed evaluation skills. These include:

- *Strategies for coping with the information revolution (Love); that is, assisting government with electronic delivery of information and services; learning to use new technologies for real-time data collection and analysis; and moving beyond simply collecting and storing data to performing analyses and making reports accessible and useful for intelligent and timely decisions;*
- *Strategies for engaging, coping with and capitalizing on the political side of evaluation (Stake)*
- *Skills for promoting organizational learning; for example collaboration and facilitation, interpersonal communication, team development, group process, consulting, organizational behaviour and change(Torres & Preskill)*
- *Interpersonal and group dynamic skills for working in collaborative relationships, partnering with stakeholders, and serving as coach, facilitator and critical friend*

⁴³ Hatry, Harry P., Kathryn E. Newcomer, Joseph S. Wholey. *Conclusion: Improving Evaluation Activities and Results, Handbook of Practical Program Evaluation*, Jossey-Bass, 1994, p. 591

⁴⁴ Torres, Preskill and Piontek. p. 64

⁴⁵ Treasury Board of Canada Secretariat. *Evaluation Policy*, February, 2001. p.8

⁴⁶ Ibid.

- *Cultural sensitivity, mediating, negotiating and conflict resolution (Datta);*
- *A few evaluators will serve as technical experts (Fetterman); and*
- *Skills for providing training for organization members in such areas as strategic planning and development of goals (Wholey), though Worthen predicts that evaluators will fail to embrace such areas and then face the consequence of competition from other professions that will satisfy these needs.*⁴⁷

Implications for Professional Development

Based on this review, it seems that both users and providers of evaluation need to have sufficient basic knowledge to enable them to determine what knowledge, skills and attributes are required for a specific evaluation. The literature also emphasizes the evolving and diverse nature of evaluation. Some, such as Enoch Sawin may view this as a problem: *“There are serious problems and issues in program evaluation in terms of both theory and practice. This seems to be attributable largely to the wide diversity of approaches. Redefining the evaluation in a specific way that will be generally acceptable seems impossible. Unless the diversity is reduced, we need a new name for the field, or more likely a generally agreed-on set of names. Team approaches and some specialization by evaluators should help to cope with the diversification that increasingly characterizes the field.”*⁴⁸ The majority of the literature presents the diversity of evaluation as a challenge, but also a strength. It speaks to the need for ongoing professional development, both for evaluators and for those who use evaluators. There are clearly both soft skills required such as communication, mediation, listening and hard skills such as statistics, survey design to name but a few. As pointed out by Burt Perrin: *“You should acknowledge that there are gaps in your knowledge and skill base. In particular, you may need to enhance your people skills and learn the ‘art’ of practical utilization-focused evaluation.”*⁴⁹

All of this also speaks to what makes evaluation unique: a field that is diverse and flexible, while at the same time is built on long-standing and respectable fields of study including sociology, economics and mathematics.

Discussion questions:

- (1) Does the knowledge required depend on the specific evaluation?
- (2) If we agree that the knowledge required depends on the specific evaluation, what are the implications for the development of evaluators?
- (3) Even a comprehensive list such as King’s does not get into the knowledge related to specific methods such surveys, focus groups, cost-benefit analysis, etc. Should it? Is it more important to talk about attributes and competencies than about specific knowledge?

⁴⁷ Smith, M.F. *Evaluation: Preview of the Future*, American Journal of Evaluation, V. 22 no. 2, Fall, 2001, p. 284

⁴⁸ Sawin, Enoch I. *Toward a Clarification of Program Evaluation: A Proposal with Implications for the Possible Certification of Evaluators*, The American Journal of Evaluation, Vol. 21, No. 2, Spring-Summer, 2000, p. 234

⁴⁹ Perrin, Burt. *Commentary: Making Yourself – and Evaluation – Useful*, American Journal of Evaluation, Vol. 22, No.2, 2001, p. 252