

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

EVALUATION BENEFITS, OUTPUTS, AND KNOWLEDGE ELEMENTS

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Canadian Evaluation Society Project in Support of Advocacy and Professional Development

EXECUTIVE SUMMARY

Introduction

The purpose of this project was to support the Canadian Evaluation Society's advocacy efforts as well as the development of a Core Body of Knowledge (CBK) for program evaluation by identifying a) the benefits that can be attributed to program evaluation, b) the outputs¹ necessary to achieve those benefits, and c) the knowledge and skills needed to produce the outputs.

Methods

Our methods included a literature review, two Internet consultations with the evaluation community, two discussion sessions with delegates at the CES 2002 National Conference, and on-line discussions among the members of an international expert reference panel.

One of the most exciting aspects of this project was getting evaluators engaged in discussing the nature of evaluation. The links that were forged between evaluators, and the thinking that was stimulated, were valuable in and of themselves. Through this engagement process, a number of important considerations were raised that relate to the definition of the field of program evaluation and its promotion. It is worth considering how CES can encourage continued discussion of these issues nationally, as well as on a global scale.

Suggestions for CES

- Post the report on the CES website.
- Provide a mechanism for commentary and input, such as an interactive website.
- Publish significant parts of the report in the Canadian Journal of Program Evaluation.
- Use the project as a means of engaging the international evaluation community in future collaborative work. Some associations are currently involved in complementary projects that could serve as a basis for collaboration (for example, the Australasian Evaluation Society's effort to identify evaluator competencies, and the Qualitative Research Consultants Association's set of draft professional competencies).
- Present the results at the conferences of CES chapters and other national evaluation associations.

¹ The term "evaluation output" is not commonly used in the literature, and may be new to many evaluators and evaluation users. For the purposes of this project, evaluation outputs have been defined to include the evidence, conclusions, and recommendations that are produced by an evaluation, as well as manifestations of stakeholder involvement in the evaluation process.

- Encourage dialogue about specific questions of interest, both between and within the various CES chapters.
- Collaborate with other evaluation associations when following up on specific questions of interest.
- Take a consultative approach when following up on specific questions of interest.

Considerations in Defining Evaluation

This project confirmed our belief that program evaluation is a diverse and evolving field. This is one of its strengths, as it allows for greater flexibility and adaptation. At the same time, some evaluators have suggested that there is an obligation to define evaluation, even if doing so means that certain activities are excluded by the definition. However, there is no widespread consensus about where the line that defines evaluation should be drawn, and how inclusive it should be. This makes it difficult to determine what benefits, outputs, and knowledge elements should be attributed to evaluation.

While there is no universally accepted definition of program evaluation, our consultation process did identify some basic characteristics of evaluation that appear to be widely accepted:

- Evaluation applies research design principles to answer practical questions about programs.
- Data is collected and processed systematically to provide evidence about what is happening in a program (processes and outcomes), why it is happening, and how the program can be improved. This evidence can be used to make judgements about the program's merit or worth.
- Evaluation is cross-disciplinary and draws methods from many different fields of study.

Benefits that May be Derived from Evaluation

We have identified twelve broadly stated benefits that may be derived from evaluation. These benefits are grouped into five categories:

- Accountability,
- Decision Making,
- Knowledge and Skills,
- Social Change, and
- Cohesion and Collaboration.

A summary of the benefits is shown on page vii. In this summary, you will see that many of the benefits have been stated in terms of the program being evaluated. This does not diminish the potential for larger-scale societal benefits that may result from the widespread use of evaluation. Over the long term, we believe that the local benefits of evaluation will contribute to more effective social programs, financial savings, and an improved human condition (better health, higher quality of life, cleaner environment, etc.).

CES hopes to use the identified benefits for advocacy purposes. The reference panel members raised the following issues for consideration in advocating for program evaluation:

- What some people perceive as a benefit of evaluation, others may perceive as unimportant, or even as a threat.
- What is a benefit in one situation may not be a benefit in another.
- Evaluation can have both benefits and negative impacts or costs.
- It is important to ensure that any claims we make about evaluation are substantiated so we don't "over-sell" the benefits of evaluation.
- Some evaluators are very uncomfortable with the idea of advocating for evaluation.

Suggestions for CES

- When determining next steps for advocacy and professional development, consider the concerns that have been identified relating to the promotion of evaluation and the limiting of the field.
- This report is based primarily on the input of evaluators. Other stakeholders may have different opinions. It would therefore be valuable to invite evaluation stakeholders to comment on the identified benefits and their relationship to evaluation outputs. For advocacy purposes, it would be valuable to determine what differences in perception exist between stakeholders who are experienced/knowledgeable about evaluation and those who are new to the concept of evaluation.
- Using the benefit descriptions and the descriptions of sample evaluations (Appendix G), develop advocacy materials tailored to specific audiences. The materials can be reviewed by evaluation stakeholders with two simultaneous goals: advocacy and refinement of the list.
- Update *The Value in Evaluation: A Statement for Managers* booklet that CES published in 1989, and post the updated version on the website.
- Develop a checklist or other assessment instrument that individual evaluators can use prior to an evaluation to determine what benefits their project stakeholders hope to derive from an evaluation.
- Develop a measurement tool to assess the benefits stakeholders actually derived from evaluation. Encourage evaluators to use this tool for meta-evaluative purposes, in conjunction with the above-mentioned checklist. CES may also want to collect Canada-wide data using such an instrument.

Evaluation Outputs

Evaluation outputs include the evidence, conclusions, and recommendations that are produced by an evaluation, as well as manifestations of stakeholder involvement in the evaluation process. They are an important link between the knowledge elements (inputs) and the benefits (outcomes) of evaluation. Specifically:

1. For the purposes of advocacy, outputs should help us determine if the benefits we have attributed to evaluation do in fact result from evaluation activities.
2. For the purposes of the Core Body of Knowledge, outputs help us determine which knowledge and skills people need to make certain evaluation benefits possible.

We have identified 27 evaluation outputs, grouped in the following seven categories:

- Needs Assessment Outputs,
- Evaluability Assessment Outputs,
- Process Evaluation Outputs,
- Outcome Evaluation Outputs,
- Efficiency Assessment Outputs,
- Outputs of Stakeholder Involvement, and
- Outputs Spanning all Types of Evaluation.

A summary of the outputs is shown on the page viii.

One school of thought says that how an evaluation is done can impact evaluation utilization and provide other benefits that are independent of the results. This is commonly known as *process use* of evaluation.² Stakeholder involvement is an important contributor to process use, and is tangible enough to be reflected in outputs. However, other processes may be more difficult to see and measure, and may have been inadvertently excluded by the model.

Evaluation Knowledge Elements

Knowledge elements are the knowledge, skills, and effective practices that are required to conduct evaluation activities. We identified 151 specific knowledge elements. Some examples include application of ethical guidelines, naturalistic inquiry, data collection using questionnaires, and active listening. Relevant texts, articles, or other resources were identified for each knowledge element. The specific knowledge elements were grouped into 23 more general knowledge elements, which are summarized on page ix.

Readers should keep the following important points in mind when reviewing the list of knowledge elements:

- Many knowledge and skill requirements vary from evaluation to evaluation. It may be helpful to view the list of knowledge elements as a toolkit from which evaluators can select the tools that are most appropriate for the specific evaluation, taking into account the context of the evaluation and the desired benefits.

² For example, see Patton, M.Q. (1997). *Utilization-focused evaluation: The new century text* (3rd Ed.). Thousand Oaks, CA: Sage.

- This is **not** a list of what every evaluator should know. Evaluation has a wide range of methods and approaches. It is not possible, or even desirable, for any one person to have an in-depth knowledge of everything. Evaluators need to be:
 - a) aware of the different methods and approaches
 - b) able to realistically assess their own capabilities, and
 - c) able to assemble teams of people with the knowledge and skills needed for a specific evaluation.
- Because of the applied nature of evaluation, soft skills such as effective listening, questioning, and negotiation may be particularly important across the evaluation process.
- The list of knowledge elements and relevant resources will need to evolve along with the field.

The lists of outputs, knowledge elements, and resources will be a valuable guide for designing curriculum for evaluation programs and courses; designing professional development workshops to be offered by CES and other organizations; providing evaluators with ideas about alternative methods and approaches; and developing a self-assessment guide for use by evaluators.

Suggestions for CES

- Publish checklists of evaluation outputs, knowledge elements, and resources that can be used by individual evaluators for the purpose of self-assessment, continued competence, and evaluation planning.
- Post the lists on the CES website and allow evaluators to submit comments, suggest new items and/or suggest that obsolete or outdated items be removed.
- Use the list to develop workshops for CES members.
- Ensure the list reflects the diversity of the field by seeking verification from evaluators in different positions (academic, consulting, internal) and sectors, and with different approaches (particularly those who have less mainstream approaches to evaluation).
- Assess members' need for training in interpersonal, communication, and project management skills.

Relationships Between Knowledge Elements, Outputs, and Benefits

We had initially hoped to be able to describe how each output contributes to each benefit, and which knowledge elements are needed to produce which outputs. While the consultations provided interesting information about benefits, outputs, and knowledge elements, we were unable to draw conclusions about the relationships between them.

In retrospect, our initial hopes were likely unrealistic. The review of the literature, the consultations, and the discussions of our reference panel all underscored the incredible diversity and complexity of evaluation practice. Reference panel members, in particular, cautioned us

against getting too linear and specific, and questioned the initial assumptions that this would be possible — or even appropriate.

In our preliminary explorations of these relationships, we have found that in many cases, the relationship depended not only on the background of the evaluator, but also on the specifics of the evaluation situation. In other words, the relationships between knowledge elements, outputs, and benefits do not appear to be direct and linear. The model on which this project was based may therefore not be appropriate for future work in this area. A more complex, realistic model would help researchers identify the various routes by which an evaluation can produce benefits, and the various factors that help or hinder along the way. In our review of the literature, we did not come across any other explicit models of how program evaluation works, so the development of such a model could be a major contribution to the field in and of itself.

The process of thinking through the relationships between benefits, outputs, and knowledge elements may still be a useful activity within the context of a specific evaluation. It can help evaluators focus their thinking by guiding them through the following questions:

- What benefit is the client trying to gain? What other benefits are possible?
- What outputs does the client require? What other outputs are possible?
- What knowledge and skills are required to provide the benefits and outputs?
- Do we have the required knowledge and skills, or can we get them?

Suggestions for CES

- When training evaluators, provide exposure to a variety of approaches and build awareness of the strengths and weaknesses of each. Also teach evaluators how to deal with difficult choices and trade-offs.
- Develop a tool that evaluators can use to explore the benefits, outputs, and knowledge elements required for a specific evaluation.
- Seek funding for future exploration of the relationships between benefits, outputs, and knowledge elements.
- Begin the research by developing a more complex, realistic model of how program evaluation produces benefits.
- Ensure that evaluators with diverse backgrounds and approaches are involved in the process of exploring the relationships.

Conclusion

Evaluation is a developing field that will continue to evolve. This is one of the strengths of the field, placing evaluators in a position where they must constantly review and improve their practices. This document identifies some important issues for evaluators, and perhaps evaluation clients, to think about. Implementing the further steps suggested here will carry on the dynamic process started by this initiative.

CANADIAN EVALUATION SOCIETY PROJECT IN SUPPORT OF ADVOCACY AND PROFESSIONAL DEVELOPMENT

POTENTIAL BENEFITS AT A GLANCE

Accountability

Evaluation can support accountability for program performance and spending.

- Providing information for stakeholders
- Meeting the requirements of funders

Decision Making

Evaluation can help one make better decisions about program direction.

- Setting goals and priorities
- Reviewing goals and priorities

Evaluation can help one make better decisions about allocation of resources.

- Determining the value of programs
- Allocating resources to programs

Evaluation can help one improve programs.

- Improving program design
- Improving program implementation
- Improving program cost-effectiveness
- Supporting effective management practices
- Making more effective use of evaluation

Knowledge and Skills

Evaluation can increase understanding of the program being evaluated

Evaluation can build knowledge about existing/potential needs and about programming that addresses those needs.

- Increasing knowledge of needs and problems
- Increasing knowledge of effective practices and programs
- Increasing knowledge of programming

Evaluation can develop capacity for effective program design, assessment, and improvement.

- Learning to think more critically about programs
- Improving attitudes toward evaluation
- Developing capacity to understand, use, and/or conduct evaluation

Social Change

Evaluation can be used to promote, defend, or oppose specific methods, approaches, or programs.

Evaluation can be used to shape public opinion.

Evaluation can be used to support pluralism and democracy.

- Exploring diverse perspectives
- Supporting a more democratic process for program decision-making

Cohesion and Collaboration

Evaluation can increase consistency and communication between departments or organizations.

Evaluation can build energy and enthusiasm within the program team.

- Building pride and confidence
- Building cohesion and enthusiasm

CANADIAN EVALUATION SOCIETY PROJECT IN SUPPORT OF ADVOCACY AND PROFESSIONAL DEVELOPMENT

OUTPUTS AT A GLANCE

Needs Assessment Outputs

- Description of unmet needs

Evaluability Assessment Outputs

- Description of program design and logic
- Articulation of standards for performance or criteria for success
- Description of the context of the program
- Determination of readiness for/appropriateness of evaluation

Process Evaluation Outputs

- Description of program implementation
- Comparison of actual events with the program plan or performance standards
- Explanations of why implementation has deviated from the plan

Outcome/Impact Evaluation Outputs

- Description of program outcomes
- Identification of unexpected/unwanted outcomes
- Attributions linking outcomes to specific interventions
- Identification of factors that affect the effectiveness of an intervention
- Determination of merit or worth

Efficiency Assessment Outputs

- Description of program costs
- Estimation of the value of program outcomes
- Comparison of value for money

Outputs of Stakeholder Involvement

- Involvement of stakeholders in some or all evaluation activities
- Integration of the evaluation with the customs the stakeholders' or the program's culture
- Consultation with stakeholders to solicit their views of the program
- Sharing of results with stakeholders
- Positive relationships between the evaluator and the program stakeholders
- New partnerships
- On-the-project training in evaluation for program managers and other stakeholders

Outputs Spanning all Types of Evaluation

- Performance indicators and indicator systems
- Evaluation tools
- New questions about the program
- Syntheses of previous research
- Suggestions of good practices
- Recommendations

CANADIAN EVALUATION SOCIETY PROJECT IN SUPPORT OF ADVOCACY AND PROFESSIONAL DEVELOPMENT

KNOWLEDGE ELEMENTS AT A GLANCE

Ethics

- Ethical conduct
- Competence and quality assurance

Evaluation Planning and Design

- Understanding the program
- Assessing readiness for the evaluation
- Focusing the evaluation
- Systems theory, organizational development, and change
- Specific types of evaluation
- History of evaluation, evaluation theory, and evaluation models
- Research design
- Constructing meaning
- Selecting appropriate data collection and analysis methods
- Effective practices in applied research

Data Collection

- Sampling
- Measurement issues
- Data collection methods

Data Analysis and Interpretation

- Qualitative analysis
- Quantitative analysis
- Determining merit or worth
- Critical thinking skills

Communication and Interpersonal Skills

- Interpersonal skills
- Reporting skills
- Other communication skills

Project Management

- Managing evaluation projects

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- The CES members and other interested individuals who took the time to complete one or both consultations. Quite simply, this project could not have been completed without them. An extra special thanks goes to those correspondents who generously provided written descriptions of evaluations that they were involved in.
- The members of our international reference panel, who overcame language barriers and a variety of technological difficulties to discuss program evaluation over the Internet. Through their discussions, the panel members raised important issues that shaped and strengthened the project.
- The members of the steering committee, especially the co-chairs, whose friendly guidance and support energized us throughout the project. Their vision made this project happen.
- The Canadian Evaluation Society's National Council, who commissioned the project, and who reviewed drafts of the report. Their thoughtful comments and questions challenged and strengthened this report.
- The Canadian Evaluation Society Conference 2002 delegates who attended the discussion sessions in Halifax, and who fearlessly waded into the debate about "what makes evaluation unique." Their enthusiasm and ideas shaped the project and made the sessions a memorable experience for everyone involved.
- The members of the CES-Ontario Chapter who attended the chapter's breakfast session about this project, and provided many helpful suggestions for improvement to the model on which the project is based.
- Benoît Gauthier of Circum Network Inc., who provided the on-line forum that we used for the reference panel discussions. Benoît was available at all times to accommodate our needs and ensure that the system was working for us.
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- Nathalie Ocelus, who translated all of the consultations and reports into French in a timely and professional manner.
- And finally, the many individual evaluators around the world who expressed interest in this project, provided feedback about our draft reports, and encouraged us along the way.

Rochelle Zorzi, Burt Perrin, and Martha McGuire.

GLOSSARY OF TERMS

Benefit of Evaluation	An outcome of the evaluation that is advantageous for stakeholders in some way. Benefits are not automatic; stakeholders typically need to do something (for example, use the evaluation outputs) to make the benefits happen.
Evaluation Output	An immediate result of the evaluation process. Typical outputs would include evidence, conclusions, and recommendations. Outputs can also include manifestations of stakeholder involvement in the evaluation process.
Evaluator	A person who conducts evaluation, regardless of whether or not that is their primary role. For example, program managers who conduct evaluation would be considered evaluators for the purposes of this report.
Knowledge Elements	The knowledge, skills, and effective practices that are required to conduct evaluation activities.
Process Use of Evaluation	Changes in thinking, behaviour, procedures or culture that occur among those involved in the evaluation as a result of learning that occurs during the evaluation process (Patton, 1997; p 90).
Program	For the purposes of this report, “program” represents programs, policies, and initiatives.
Program Evaluation	Likewise, “program evaluation” is intended to be inclusive of program, policy, and initiative evaluation.
Stakeholder	Individuals or groups who may benefit from evaluation. Stakeholders may be internal or external to the program, and may include politicians, program funders, decision makers (e.g., policy makers, program directors, etc.), program managers, service delivery staff, recipients of a program, evaluators, the research community, special interest groups, disadvantaged/underrepresented groups within a community, shareholders, citizens, society, or humanity/the global community.

Canadian Evaluation Society Project in Support of Advocacy and Professional Development

INTRODUCTION

Background

A number of years ago, the Canadian Evaluation Society (CES) Council participated in a strategic planning process. Two broad areas were confirmed as priorities:

- professional development, and
- advocacy on behalf of the evaluation function.

Having an identified Core Body of Knowledge (CBK) was viewed as one means (but not the sole means) of supporting these two priorities. The CBK comprises “those theories, skills, and effective practices that people, working largely without supervision, must possess in order to plan, carry out, and report on valid and reliable evaluations of the programs³ of governments, other public sector agencies and organizations, not-for-profit organizations, and business.⁴” The CBK is to be updated periodically to include proven new techniques and approaches.

The CBK will serve as:

- a guide for CES members in their self-assessment of their capacity to do an evaluation;
- a guide for the Society and its members in the identification of Canadian post-secondary courses, and possibly texts and other publications, that cover each of the knowledge elements contained in the CBK;
- the basis for the Society’s design of its own professional development courses where these are needed to supplement those offered by other institutions; and
- a major element in the definition of the concept of evaluation and, thus, a potentially important element in the CES advocacy program.

Purpose of the Current Project

This project was intended to support the Society’s advocacy efforts as well as the development of the CBK by identifying a) the benefits that can be attributed to program evaluation, b) the

³ For the purposes of this paper, the term *program* represents programs, policies, and initiatives. Likewise, the term *program evaluation* is intended to be inclusive of program, policy, and initiative evaluation.

⁴ Canadian Evaluation Society (2001). *Request for proposals: A project in support of the advocacy and professional development work of the Canadian Evaluation Society*. Unpublished document, available from the Canadian Evaluation Society, Ottawa, ON.

outputs necessary to achieve those benefits, and c) the knowledge and skills needed to produce the outputs.

For advocacy purposes, the project aimed to demonstrate that the benefits attributed to evaluation do in fact result from evaluative activities and outputs. For professional development purposes, it aimed to explain why each core knowledge element is essential for evaluation by demonstrating its link with well-defined evaluation benefits.

The project had three phases. The purposes of each phase are shown in the table below.

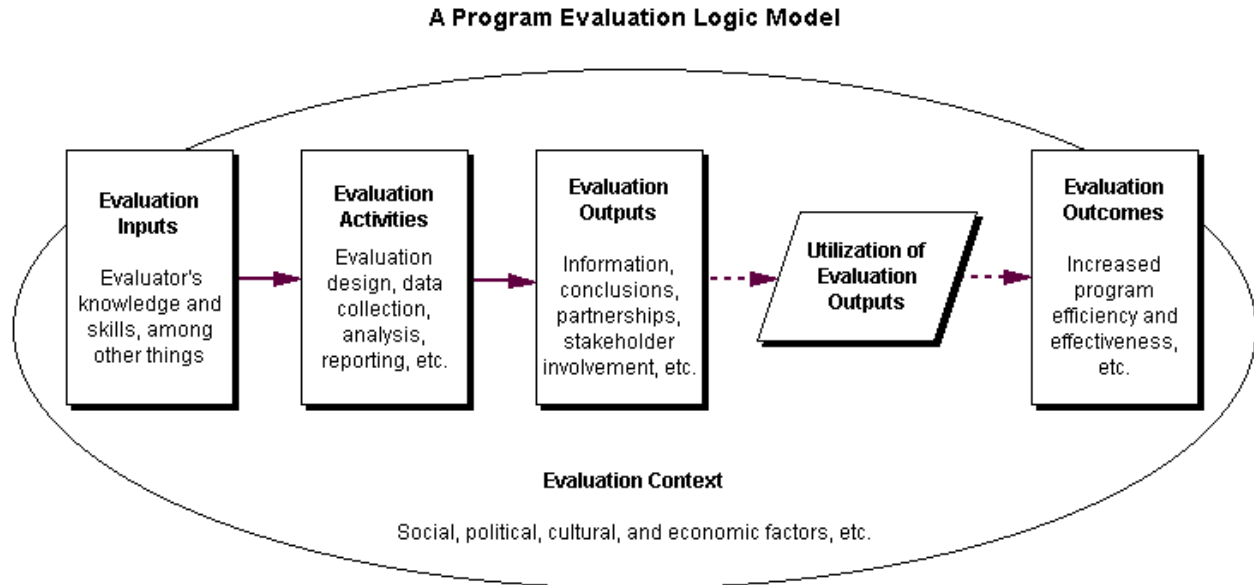
Phase	Purpose
Phase 1	To articulate and describe the benefits that stakeholders can derive from program evaluation
Phase 2	To explore evaluation outputs in relation to the benefits
Phase 3	To investigate the knowledge and skills needed to produce the outputs in a way that makes the benefits possible

The specific research questions were as follows:

1. *What exactly are the benefits that evaluation can offer to governments, other public sector agencies and organizations, not-for-profit organizations, and business?*
2. *What exactly are the generic types of output that evaluations can produce that are related to each benefit?*
3. *How exactly does each type of output contribute to each benefit?*
4. *In what ways are the outputs unique to evaluation?*
5. *What are the knowledge elements that are needed to produce the various types of outputs?*
6. *For each knowledge element, what sections of which commonly available text or publication contains a good description of it?*

The Underlying Model

The underlying model for this project assumes that, like the programs we evaluate, program evaluation has inputs, activities, outputs, and outcomes. The model is deliberately simplified to provide a manageable framework for the project⁵. The model has evolved over the course of the project, but maintains the three original concepts of inputs (knowledge elements), outputs, and outcomes (benefits). It is shown below.



Evaluation is conducted within a specific **evaluation context**. Social, political, cultural, economic, and other factors influence all aspects of the evaluation.

Evaluation inputs include funding, time, and other resources. For this project, we are concerned specifically with the *knowledge elements* (knowledge and skills) of the person or group of people conducting the evaluation.

Evaluation activities are what happen in the course of the evaluation, and they are manifested in evaluation outputs.

Evaluation outputs are the immediate results of the evaluation process. Typical outputs would include evidence, conclusions, and recommendations. Outputs can also include manifestations of stakeholder involvement in the evaluation process. The latter warrants specific consideration,

⁵ The model is not intended as a tool to help individual evaluators in their work. For those purposes, a more realistic, multi-causal model would be appropriate.

because it is thought to affect evaluation utilization, and to result in benefits independently of the results of the evaluation⁶.

Evaluation outcomes are realized when stakeholders use the outputs of an evaluation. The dotted lines in the diagram recognize that the links between outputs, utilization, and outcomes are contingent on stakeholder behaviour.

Typical outcomes include increased program efficiency or effectiveness. Other outcomes might include increased understanding of a problem, or empowerment of a marginalized group. Although evaluation sometimes produces unintended negative outcomes, the focus of this project is on *benefits*, or positive outcomes. Evaluators⁷ with appropriate skills and knowledge should be in a better position to avoid unintended negative outcomes.

⁶ For example, see Patton (1997).

⁷ Throughout this report, when we refer to “evaluators,” we are talking about people who conduct evaluation, regardless of whether or not that is their primary role. For example, program managers who conduct evaluation would be considered evaluators.

METHODS

The process of conducting a study is often as important as the results. We elected to use a broad consultative process with CES members and other evaluators across the world in the hopes that it would:

- ensure that the results represent the diversity of the field,
- bring evaluators together in constructive dialogue about the nature of evaluation,
- increase the credibility of the results, and
- encourage individual evaluators to think more about how to maximize the benefits offered by their evaluations.

Our methods included a literature review, two Internet consultations with the evaluation community, two discussion sessions with delegates at the CES 2002 National Conference, and on-line discussions among the members of an international expert reference panel. These methods are summarized in the table on the following page, and described in greater detail in Appendix A.

Analysis of the Data

The analysis involved summarizing and synthesizing data from diverse sources and perspectives. Brief *Analysis Notes* are included in a footnote at the beginning of each section.

Limitations of the Methods

The information on which this report is based comes mainly from evaluators. Being close to the topic, these individuals bring a level of expertise that is necessary as we begin to lay the foundation for the Core Body of Knowledge. At the same time, their views about evaluation-related topics are shaped by their own paradigms, training, and practice. How they collectively see program evaluation may represent only one side of the story. Other stakeholders, such as program staff, participants, citizens, or directors, might view it differently.

In short, the results of this project present a picture of evaluation as seen through the eyes of people who do evaluation. While it does not tell the whole story, it does provide a starting point for determining how evaluation can be helpful to various stakeholders, and what outputs and knowledge elements are required to make evaluation beneficial. The results of this project, once reframed for different audiences, can be used as a basis for testing our conclusions and exploring other perspectives.

Methods

Methods used in the project			
Method	Purposes	Description	Results
Literature Review	<ul style="list-style-type: none"> Identify key issues and serve as a basis for further discussion 	<ul style="list-style-type: none"> Scanned selected texts Briefly summarized what we found in relation to benefits, outputs, and knowledge elements 	Appendix C
Consultation #1	<ul style="list-style-type: none"> Solicit ideas about the benefits of evaluation 	<ul style="list-style-type: none"> Interactive on-line consultation form Potential respondents recruited through CES member broadcast and international evaluation listservs Respondents could post benefits, view benefits posted by others, and comment on benefits posted by others. 	Appendix D
Consultation #2	<ul style="list-style-type: none"> Solicit ideas about evaluation benefits, outputs, processes, and knowledge elements 	<ul style="list-style-type: none"> Interactive on-line consultation form Potential respondents recruited as above Respondents: <ul style="list-style-type: none"> focused on a single evaluation listed and prioritized the benefits of the evaluation identified the outputs and processes needed to produce each of the three most important benefits identified the knowledge elements required to carry out the processes and produce the outputs 	Appendix E
Conference discussion sessions	<ul style="list-style-type: none"> Explore the factors that make evaluation unique from other activities 	<ul style="list-style-type: none"> Two sessions at the CES 2002 National Conference in Halifax Three discussion questions: <ol style="list-style-type: none"> What is unique about evaluation? What do we mean by the 'outputs' of evaluation? What are the knowledge and skills that are needed to do evaluation? 	Appendix F
International expert reference panel	<ul style="list-style-type: none"> Help complete, interpret, and organize the results from the literature review and consultations Raise considerations about the project 	<ul style="list-style-type: none"> 23 Canadian members and 13 members from outside Canada (see Appendix B) On-line discussion forum Benefits discussion: 2 weeks in April Outputs/knowledge discussion: 3 weeks in May 	

Reflections

We tried some innovative approaches with this study. The Internet was a wonderful tool for linking people and ideas across vast distances. At the same time, it had a few limitations:

- a) Some people were more comfortable with the Internet-based consultations than others, and the medium may have deterred some people from participating.
- b) It was difficult for the reference panel to develop a sense of community over the Internet in the short span of time we had for this project. This may have inhibited reference panel communications to some degree. Nevertheless, there were a number of high calibre discussions, along with many specific suggestions that have contributed to this project.

We were very satisfied with the results of the first consultation, and feel that they reflected a broad cross-section of perspectives and experiences. Being able to view people's responses to others' suggestions was invaluable.

With the second consultation, we may have tried to cover too much ground at once. Given resource and time restrictions, the most feasible approach was a more closed-ended consultation that turned out to be quite lengthy. In retrospect, an open-ended consultation process might have been more suitable, given that we were still at an exploratory stage with outputs and knowledge elements.

As anticipated, the consultative methods used in the project have been valuable in and of themselves, forging links between evaluators and stimulating more in-depth thought about the nature of evaluation.

The project generated considerable interest, both in Canada and internationally. Sessions related to the project at the CES 2002 National Conference in Halifax attracted large audiences, and we had to schedule a second discussion session to accommodate the interest. In addition, evaluators from around the world (including Australia, the United States, South America, and parts of Europe) wrote to express their interest in the project and their desire to participate where possible. The high level of interest suggests that this is an important and compelling topic for evaluators.

Organization of this Report

This report presents the results of this project in four sections:

- Articulation and description of the benefits that may derive from evaluation
- Articulation of evaluation outputs
- Articulation of evaluation knowledge elements, with relevant resources
- Discussion of relationships between benefits, outputs, and knowledge elements.

We conclude with a review and discussion of what we have learned, and provide suggestions for actions that CES can take to build on the efforts of this project.

ISSUES FOR CONSIDERATION

Through the literature review, reference panel, and conference sessions, we identified a number of issues that should be considered when interpreting and using the results of this project.⁸

Difficulties in Defining Evaluation

What constitutes a benefit (or output, or knowledge element) of evaluation depends in part on how we define evaluation. A number of definitions have been proposed by different authors, but there is no widespread consensus about which definition most faithfully represents the field. Reference panel members raised this as a point of discussion, asking, “What distinguishes evaluation from other activities or professions?”

After hearing the reference panel members’ suggestions, we took the question to the discussion sessions at the Canadian Evaluation Society 2002 National Conference in Halifax. The responses from the two groups suggest that evaluation may distinguish itself from other knowledge-based activities by 1) its purpose, 2) its approach and methods, and 3) its outputs.

Purpose

- Evaluation addresses practical questions and feeds into decision making.
- Evaluation makes judgements about a program’s merit or worth.
Controversial: Some evaluators argued that the purpose of evaluation is solely to provide the information needed to make such judgements, not to actually make those judgements.
- Evaluation looks for explanations; it tries to determine *why* things work in different contexts and for different people. It attempts to get at the substance of a program rather than just skimming the surface of processes, or relying on cursory measures.

Approach and methods

- Evaluation applies research design principles appropriately in controlled and uncontrolled settings.
- Evaluation data is collected and processed systematically.
- In addition to using existing program data, evaluation collects new information to respond to specific questions about a program.

⁸ **Analysis Notes:** CES members and reference panel members raised a number of issues throughout the project. Our review of the literature also uncovered some issues deserving of consideration. We summarized the issues, making note of differences of opinion. We brought some of the issues forward during the discussion sessions at the Canadian Evaluation Society 2002 Conference in Halifax, and incorporated the ideas from those sessions. Where additional information (e.g., feedback from the steering committee) could help clarify or resolve the issues, we incorporated it as appropriate.

- Evaluation tends to be comprehensive, paying attention to many aspects of the program, to get a full understanding of what's going on.
- Evaluation is cross-disciplinary and draws methods from many different fields of study.

Outputs

- The evidence provided by evaluation is:
 - credible
 - reliable
 - valid
 - objective/unbiased
- Evaluation can provide evidence about:
 - achievement of program objectives
 - attribution of changes to the program (impact)
 - the value of a program
 - what's working and what's not working
 - what needs to be done to improve
 - why a program is being conducted
 - how a program is being conducted

Panel members observed that most of the factors listed above are provided by at least one other professional group (audit, research, accounting, organizational development, etc.). While other fields may share certain characteristics, perhaps it is the combination of characteristics that distinguishes evaluation from other activities.

A Simple Model vs. the Complexities of Program Evaluation

The model does not reflect the complexities of evaluation

The model on which this project is based (page 3) is deliberately simplified to provide a manageable framework for the project. It suggests a linear relationship between knowledge, activities, outputs, and benefits that does not take into account the many complexities of a program evaluation. Some reference panel members were wary of making a direct link between evaluation outputs and benefits (as was suggested in the initial version of the model), or between knowledge elements and outputs. They felt it would be misleading to attempt to be overly reductionist in suggesting how evaluation might work.

Evaluators cannot guarantee benefits.

Some members of the reference panel had a high degree of discomfort with the concept of evaluation benefits. They observed that evaluation does not automatically provide benefits. The benefits we have identified will only be realized under certain conditions, which may vary by benefit type. Many were therefore uncomfortable with the generation of a list of evaluation benefits.

Similarly, in the conference discussions, participants recognized that, while evaluators have control over outputs, they cannot control benefits (although they can *influence* them). They questioned whether evaluators should be held accountable for benefits when they are partly determined by factors beyond their control.

In recognition of these concerns, we have chosen to speak about the benefits that *may be derived* from evaluation. While this implies that evaluation can offer benefits, it also implies that stakeholders have to do something to get these benefits; that they are not automatic and may not occur in all cases. We have also updated the model to include *utilization of evaluation outputs*, which is an intermediate step between outputs and benefits.

Difficulties in Defining “Outputs”

The meaning of the term output is unclear.

The term “evaluation output” is not commonly used in the literature. Some participants in the conference discussions raised the concern that the term could cause confusion because it has different meanings in different contexts. They suggested that we use the same terminology as is used in similar fields such as audit and knowledge management. In those fields, the terms of choice are “products” and “services.” “Product” is a broad term that can include tangibles (e.g., reports) and intangibles (e.g., different types of information). Although participants favoured this term, its breadth may conflict with the need to be precise. Other possible terms include results, information, findings, immediate outcomes, or deliverables.

There was a diversity of opinion about this issue among the reference panel members. Some members of the reference panel preferred the word output over other terms such as products or results.

The questions raised about this term were valuable in clarifying what we mean by evaluation outputs. The steering committee for the project developed the following definition:

“For the purpose of the CES Advocacy-CBK project, the “outputs” of evaluation are what the evaluator, during or at the end of an evaluation process, provides to the client and possibly other stakeholders. They are the immediate results of the evaluation process.

“Outputs generally comprise: (1) information, conclusions and perhaps recommendations that are useful for making decisions about a program or policy (for example, information on the effectiveness with which it achieves its goals), and/or (2) arrangements for the participation by stakeholders in the evaluation process. In both cases, outputs, together with factors beyond the evaluator's control, lead to the benefits of evaluation.

“In the CES Advocacy-CBK project, outputs serve two key purposes. First, for advocacy, they are the demonstrable link between evaluation benefits and the evaluation function. Second, for professional development, they are the criteria for the content of the CBK: if

a certain knowledge element or skill is important for the production of an evaluation output, it should be included in the CBK; if it is not important for this purpose, then it should not be.

“We appreciate that some evaluators may prefer other words, like "product" or "service", but we have decided to remain with "output". It has a long history in evaluation in Canada, and many, perhaps most, people appear to be comfortable with it. In any case, we believe that the concept, regardless of the name that is applied to it, is essential to this project.”

The concept of evaluation outputs is difficult to isolate.

Going beyond terminology, the very concept of an evaluation output seems to be difficult to isolate. There seems to be substantial interconnectedness between benefits, outputs, activities, and knowledge. We found that people often wrote about evaluation outputs as if they were the benefits of evaluation. Furthermore, when describing evaluation benefits, they often wrote about knowledge, activities, outputs, and benefits in the same sentence.

The concept of an evaluation output may be new to many people who conduct evaluations. Nonetheless, it has proved to be a useful concept for organizing our thinking and discussion. It has caused us to reflect on how we take our knowledge and translate it into something from which others can gain some benefits.

We may not be able to capture all important evaluation processes through outputs.

One school of thought says that how an evaluation is done can have more impact than its conclusions or recommendations. *Process use* of evaluation is thought to increase evaluation utilization, and to provide other benefits that are independent of the results.⁹ Such benefits might include increased thought about an issue, culture change in the organization, or changes in values. Some evaluators feel that these benefits are not as important as those resulting from use of evaluation conclusions or recommendations, but others argue that they are equally important, or even more important.

Stakeholder involvement is an important contributor to process use, and is tangible enough to be reflected in outputs. However, proponents of process use have suggested that other processes may be more difficult to see and measure. We should take care that no important processes are inadvertently excluded by the model.

Considerations in Promoting Evaluation

Reference panel members raised a number of considerations about the promotion or advocacy of evaluation.

⁹ For example, see Patton (1997).

Benefit is in the eye of the beholder.

Not all of the potential benefits described in this document will be useful for advocacy with all stakeholder groups. What some people perceive as a benefit, others may perceive as unimportant, or even as a threat. Context may also play a role in this; what is a benefit in one situation may not be a benefit in another.

We identified the following audiences who may benefit from evaluation:

- Politicians
- Program funders
- Decision makers (e.g., policy makers, program directors, etc.)
- Program managers
- Service delivery staff
- Recipients of a program
- Evaluators
- The research community
- Special interest groups
- Disadvantaged/underrepresented groups within a community
- Shareholders
- Citizens
- Society
- Humanity/the global community

For advocacy purposes, it will be important to identify which benefits are relevant to which audiences. Although specific beneficiaries will differ from situation to situation, we believe that certain audiences are more likely to be interested in some benefits than others. For example, program funders are more likely to be interested in benefits related to allocation of resources than are service delivery staff. Where possible, the descriptions of the benefits have specified which stakeholders are most likely to be interested in the benefit. The advocacy committee may wish to conduct further research to confirm which benefits are of greatest interest to which audiences.

Should we acknowledge unintended negative impacts of evaluation?

Evaluation can have both benefits and negative impacts, risks, or costs. When advocating for evaluation, some panel members felt there was an obligation to address both of these aspects of evaluation, rather than focusing exclusively on benefits.

Should we be cautious in promoting evaluation?

There was considerable disquiet among some of the reference panel members with focusing too much on the advocacy of evaluation. Partly because of the negative impacts or costs, some panel members suggested that we need to be cautious in promoting evaluation. They felt that it might be better to refer to the “role(s)” of evaluation rather than the benefits. (e.g., what role does

evaluation have to play in improving social programs? What role does it have to play in accountability?)

Other panellists and CES members have disagreed, stating that it is important to promote the benefits of evaluation, as long as our claims are substantiated and we take care not to over-sell the benefits of evaluation, as was done in the 1960s. Further, it was argued that we have an obligation to publicize the benefits of evaluation to ensure that this important tool for accountability and improvement is used well.

At least some of the disquiet seems to relate to the fear that advocacy efforts would be on behalf of the vested interest of professional evaluators (i.e., drumming up business for ourselves, “blowing our own horns”) rather than on behalf of the value that evaluation can provide. Some panellists felt that advocacy as a marketing effort was inappropriate. Others, however, felt that this form of advocacy was justified. They suggested that, to stay competitive with other knowledge-based professions, evaluation needs to find its market niche, define it precisely, and then promote it.

Concerns about Limiting the Field

There is a trade-off between defining the field and accepting its diversity.

The literature review confirmed our beliefs that program evaluation is a diverse and evolving field. This is one of its strengths, as it allows for greater flexibility and adaptation. At the same time, some evaluators have suggested that there is an obligation to define evaluation, even if doing so means that certain activities are excluded by the definition. The enduring question is, of course, where the line that defines evaluation should be drawn, and how inclusive it should be.

There are concerns about evaluator certification.

Some reference panel members expressed concerns that this initiative is a first step toward the certification of evaluators. They noted that many evaluations are conducted by people who would not consider themselves “evaluators” because evaluation is only one part of their role, and were concerned that these individuals would be prevented from carrying out the evaluation function if evaluators became certified.

CES Council’s decision to approve the development of a Core Body of Knowledge in 1999 was based on a document that stated:

“The development of the CBK does not imply the CES will ever adopt some form of certification. That is an additional step that can be decided quite independently on its merits. On the other hand, the need for effective professional development and advocacy does imply the need for a CBK.”

Thus, while certification would ultimately require an articulated core (or basic) set of knowledge elements (among other prerequisites), that is not one of the purposes of the current project.

BENEFITS THAT MAY BE DERIVED FROM EVALUATION

Through the review of the literature, the two consultations with the evaluation community, and the discussions of the reference panel, we have identified twelve broadly stated benefits that may be derived from evaluation. These benefits are grouped into five categories: accountability, decision making, knowledge and skills, social change, and cohesion and collaboration. The benefits are described in this section. A summary is shown on the following page.¹⁰

Many of the benefits in this section have been stated in terms of the program being evaluated. This does not diminish the potential for larger-scale societal benefits that may result from the widespread use of evaluation. Over the long term, we believe that the local benefits of evaluation will contribute to more effective social programs, financial savings, and an improved human condition (better health, higher quality of life, cleaner environment, etc.).

Accountability

Evaluation can support accountability for program performance and spending.

Citizens, shareholders and funders have a right to information about the programs they support. Evaluation can support accountability through its transparent, collective and public nature.

Providing information for stakeholders. Evaluation provides stakeholders with information about program performance, thereby opening the program to public scrutiny and judgement.

Evaluation can help stakeholders:

- verify that planned programs are implemented as intended;
- assess the efficiency of a program, or its components;
- determine the extent to which a program is having the intended effects, as measured against objectives, benchmarks, standards, or targets;
- identify any unintended effects of the program; and
- judge whether the program is worth the resources that are devoted to it.

¹⁰ **Analysis Notes:** A large number of potential benefits were identified through the literature review, consultation data, and panel discussions. After the first consultation, we listed the benefits from all sources in a single document, then eliminated duplicates and combined similar benefits. Categorizing the benefits proved to be a challenge. We began with categories that had been defined in the literature, and revised them as necessary to accommodate the diversity of benefits. We revised the categories through several iterations, with input from the reference panel at each stage. New benefits were identified through the second consultation. The categories were revised again to accommodate these additions.

CANADIAN EVALUATION SOCIETY PROJECT IN SUPPORT OF ADVOCACY AND PROFESSIONAL DEVELOPMENT

POTENTIAL BENEFITS AT A GLANCE

Accountability

Evaluation can support accountability for program performance and spending.

- Providing information for stakeholders
- Meeting the requirements of funders

Decision Making

Evaluation can help one make better decisions about program direction.

- Setting goals and priorities
- Reviewing goals and priorities

Evaluation can help one make better decisions about allocation of resources.

- Determining the value of programs
- Allocating resources to programs

Evaluation can help one improve programs.

- Improving program design
- Improving program implementation
- Improving program cost-effectiveness
- Supporting effective management practices
- Making more effective use of evaluation

Knowledge and Skills

Evaluation can increase understanding of the program being evaluated

Evaluation can build knowledge about existing/potential needs and about programming that addresses those needs.

- Increasing knowledge of needs and problems
- Increasing knowledge of effective practices and programs
- Increasing knowledge of programming

Evaluation can develop capacity for effective program design, assessment, and improvement.

- Learning to think more critically about programs
- Improving attitudes toward evaluation
- Developing capacity to understand, use, and/or conduct evaluation

Social Change

Evaluation can be used to promote, defend, or oppose specific methods, approaches, or programs.

Evaluation can be used to shape public opinion.

Evaluation can be used to support pluralism and democracy.

- Exploring diverse perspectives
- Supporting a more democratic process for program decision-making

Cohesion and Collaboration

Evaluation can increase consistency and communication between departments or organizations.

Evaluation can build energy and enthusiasm within the program team.

- Building pride and confidence
- Building cohesion and enthusiasm

Meeting the requirements of funders. When an organization or organizational unit carries out evaluation, this can meet formal requirements of a funder that evaluation be done. Carrying out and demonstrating use of evaluation can demonstrate to a funder an organization's true commitment to accountability and to learning and to making improvements where warranted.

Decision Making

Evaluation can help one make better decisions about program direction.

There are many issues, social needs and problems that compete for attention in a world of limited resources. If priorities are selected arbitrarily, staff may find that they are addressing needs that do not exist, that do not fit with the organization's mission, or that just are not important. Organizations can be more effective when their programs focus on important needs that are relevant to their stakeholders.

Setting goals and priorities. Evaluation can help directors, policy makers, managers and funders set priorities, goals and objectives that:

- reflect the values and ideologies of different stakeholder groups;
- reflect the organization's role in society;
- focus on real (not imagined) needs;
- focus on needs that are most amenable to change; and/or
- focus on more important needs (i.e., those that are prevalent, serious, and/or pressing).

Reviewing goals and priorities. Evaluation can help determine whether existing goals and priorities are still valid and/or relevant, enabling the organization to adapt to changing needs, organizational changes, and values shifts.

Evaluation can help one make better decisions about allocation of resources.

Without some form of evaluation, organizations risk devoting considerable time, money and effort to programs that are inefficient or even ineffective in meeting specified goals. Evaluation can help directors, policy makers and funders determine the merit or worth of different programs. It allows them to compare the costs and effectiveness of different programs to determine which ones they will support, and to what extent.

Determining the value of programs. Evaluation can help:

- generate multiple criteria for judging the program's value. Program sponsors may have different opinions than program staff or participants. Value judgements based on multiple perspectives are more relevant than those based on a single perspective.
- assess the effects (expected and unexpected) of a program relative to these criteria; and
- determine if those effects can be attributed to the program, or if they may be due to other factors outside the program.

Allocating resources to programs. Evaluation can support:

- termination of programs that are not effective, are not efficient, or are no longer needed;
- expansion of programs that have proven effective;
- reduced funding to programs when the additional funds are not needed;
- increased funding for programs when inadequate resources are limiting their effectiveness;
- use of effective prevention to avert potential future costs;
- selection of programs that produce a given outcome for the least cost;
- selection of programs that produce a better outcome for the same cost;

Evaluation can help one improve programs.

Policy makers, program managers and program staff can use evaluation to make improvements to their programs. Evaluation can help improve program design, day-to-day implementation, cost-effectiveness, management, and evaluation. Sometimes evaluation provides the impetus to make necessary changes, as can happen when an evaluation confirms what managers or staff already suspected.

Improving program design. Evaluation can help managers and staff make corrections to the program design that increase its effectiveness and efficiency. It helps program managers and staff know what changes to make, and can be useful in communicating the need for these changes. Using evaluation, managers and staff can:

- determine if the program, as designed, is likely to meet its objectives;
- set more realistic objectives;
- identify and address incorrect assumptions and weaknesses in the design;
- determine what components are effective and what are ineffective;
- reduce overlap between similar programs;
- drop ineffective activities and add more effective ones; and
- identify and avoid potential unwanted effects.

Improving program implementation. Evaluation can determine whether or not the program is being implemented as intended. When implementation is not going as intended, evaluation can help managers and staff understand why. In some cases, it may be appropriate for program implementation to deviate from the original plan – for example, if the original plan is flawed, or if program staff are being responsive to new opportunities or changes in circumstance. In other cases, evaluation can help managers and staff take steps to improve implementation.

Benefits that May be Derived from Evaluation

Evaluation can help managers and staff:

- identify and address problems that have arisen, such as glitches in the delivery process, service gaps, or specific issues such as abuse of power, racism, incompetence, etc.;
- implement proven good practices;
- avoid unwanted effects; and
- correct staff assumptions that impact service delivery or efficiency.

Improving program cost-effectiveness. Evaluation can help managers and staff select program methods that produce a given outcome for less cost, or produce a better outcome for the same cost.

Supporting effective management practices. Evaluation is part of the program cycle. It can provide managers with tools and systems they can use to increase their effectiveness. Evaluation helps managers:

- explain the program to others: how it works, what its goals and standards are, what responsibilities others have, and what role they can play in achieving the program goals;
- create and/or improve systematic monitoring systems such as management information systems and performance measurement systems (identifying the most important indicators, selecting valid indicators, encouraging more timely and accurate reporting, etc.);
- improve process and efficiency flows;
- use program data more effectively for management decisions; and
- manage the change process more effectively.

Making more effective use of evaluation. The beginning phases of evaluation can identify whether or not it is appropriate to evaluate a program, and can identify the most appropriate time to conduct an evaluation. These beginning phases can also help managers and staff determine what they need to measure and how to measure it.

Data systems and whole evaluations can also be evaluated (meta-evaluation) to assess and improve their validity, reliability and cost-effectiveness.

Knowledge and Skills

Evaluation can increase understanding of the program being evaluated.

One of the most immediate benefits that stakeholders can derive from evaluation is a clearer, more objective understanding of the program, including:

- what the program is expected to accomplish;
- the context of the program (political, ideological, organizational);
- the role the program plays in society;

Benefits that May be Derived from Evaluation

- the program's logic and assumptions;
- the roles of individuals or groups involved in the program;
- who the program is serving;
- the program's day-to-day activities;
- the program's strengths and weaknesses; and
- the results of the program.

Increased clarity about the program can ensure that all players are pulling in the same direction. A thorough and objective understanding of the program also serves as the foundation for improvement, accountability, and the allocation of resources.

Evaluation can raise questions and increase awareness of issues that are in need of more attention. For example, evaluation might identify that some stakeholder groups are doing better than others, or perhaps that one program location is serving twice (or half) as many as others with seemingly no difference in other aspects. Even if an evaluation cannot answer these questions, it is important to bring these questions and issues out into the open where they can be dealt with.

Evaluation can build knowledge about existing/potential needs, and about programming that addresses those needs.

Evaluation can build incremental knowledge, awareness, and understanding of social, economic, health, or environmental problems, as well as effective practices and programming that can ultimately contribute to the development of more relevant, effective, and efficient programs.

Increasing knowledge of needs and problems. Evaluation can increase awareness of the types of social, economic, health, or environmental needs that exist, as well as their prevalence and severity. It can also help stakeholders understand the origins and context of the needs, and can help predict future needs. A thorough understanding of needs enables the development of more relevant and effective programs, and helps establish program priorities.

Increasing knowledge of effective practices, programs. Evaluation can increase awareness of specific programs or practices that are known to be effective in addressing a particular need, enabling those programs or practices to be considered for use in other settings with similar conditions and needs. Evaluators can facilitate this cross-fertilization by sharing effective practices and lessons learned from other programs that they have evaluated.

With the incremental accumulation of knowledge about effective practices, evaluation can provide insights into what typically works and what typically does not work when addressing particular needs under specific conditions. Stakeholders can also develop a better understanding of why something is working or not, again resulting in better and more appropriate programming.

Increasing knowledge of programming. Evaluation can help us understand where and why programs arise. It can explore factors that affect organizational learning and innovation.

Evaluation can build capacity for effective program design, assessment, and improvement.

Evaluation can help managers, staff and other stakeholders think more critically about their programs, place increased importance on evaluation, and develop skills to continue evaluation activities. Because they impact stakeholders' thinking, these benefits extend beyond the program being evaluated to other programs.

Controversial: Some evaluators consider this to be one of the most enduring benefits of evaluation. Others consider it a side benefit, arguing that it is only useful to the extent that evaluation provides other benefits as well.

Learning to think more critically about programs. Evaluation helps foster a more thoughtful approach to planning that can extend beyond the program being evaluated. This is closely related to the concept of continuous quality improvement, where managers and staff are constantly asking themselves how things are going and what can be done differently or better. Specifically, evaluation can help managers and staff learn to:

- develop clear objectives;
- critically analyse program design;
- collect data systematically;
- incorporate formal and informal processes for reflection, discussion, and review;
- visualize implementation and consider how it will be monitored;
- ask difficult questions about the program;
- focus on improvement;
- strategically allocate resources to maximize impact;
- visualize possible results and consider how they will be assessed;
- be more critical about claims of effectiveness and causal links; and
- rely on evidence in their decision-making.

Improving attitudes toward evaluation. Evaluation can foster an organizational culture that values accountability and evaluation, and focuses on quality and continuous improvement. It can help staff become committed to addressing the strengths and weaknesses of the program. Staff and other stakeholders can come to view evaluation as a useful tool for improvement.

Developing capacity to understand, use, and/or conduct evaluation. Stakeholders who participate in the evaluation process can learn how to understand evaluation and to use it knowledgeably and appropriately. In some cases, stakeholders may develop skills to continue evaluation activities.

Social Change

Evaluation can be used to promote, defend, or oppose specific methods, approaches, or programs.

Proponents of a program can use evaluation findings to:

- promote the program goals;
- secure funding for the program;
- gather public support for the program;
- gather political support for the program; or
- lobby for organizational or legislative changes that are favourable to the program.

Opponents can likewise use evaluation findings to gather opposition to the program, argue against funding, and block organizational or legislative changes that are favourable to the program.

Both proponents and opponents can use evaluation to provide credibility or support for politically difficult decisions.

Concern: There is a possibility that evaluation can be misused for personal or political gain. For example, evaluation could be used as a privileged resource for those with high status in a program, without giving voice to other important stakeholders.

Evaluation can be used to shape public opinion.

Individuals can use evaluation to argue in favour or against certain views. For example, evaluation information is sometimes used to advocate for the rights of marginalized groups.

Controversial: Some evaluators argue that advocacy is essential to fair evaluation, particularly when it compensates for an existing power imbalance. Others are opposed to this use of evaluation in principle. Again, there is a concern that evaluation can be misused for personal or political gain.

Evaluation can be used to support pluralism and democracy.

Exploring diverse perspectives. Evaluation can provide a forum for listening to and sharing the perspectives of all stakeholders, including front-line staff, program participants, and marginalized groups, whose views are not always heard. In doing so, it can legitimate pluralism and foster a greater appreciation of inclusiveness and diversity.

Supporting a more democratic process for program decision-making. Evaluation can increase the involvement of service delivery staff and participants in future design and delivery decisions. Thus, it can empower those who traditionally have had little influence on programs.

Evaluation can reform organizations through the free flow of information, and foster a greater appreciation of democracy.

Cohesion and Collaboration

Evaluation can increase consistency and communication between departments or organizations.

Evaluation can provide a common framework for understanding, delivering, monitoring and evaluating a program among different departments or organizations. It can facilitate the sharing of knowledge across systems. Evaluation can also help develop a supportive network of individuals participating in similar but different processes.

Evaluation can build energy and enthusiasm within the program team.

Building pride and confidence. Evaluation can help provide a feeling of pride and satisfaction among managers and staff. Staff may be gratified that they have systematically explored questions about the value of the program rather than just relying on assumptions. They may also feel good about identifying ways to better serve their clientele and meet their objectives. Also, in many program areas, such as where staff are working constantly with people who have severe problems, there can be a very real risk of burnout. Evaluation can provide a way for staff to step back and to realize that they *have* made a difference.

Building cohesion and enthusiasm. Evaluation can provide an opportunity for all staff to view themselves as part of a team that is dedicated to achieving shared goals. It can increase morale, buy-in, and commitment to the program.

EVALUATION OUTPUTS

It is useful at this point to revisit the reasons we studied evaluation outputs. The model shown on page 3 indicates that outputs are an important link between the knowledge elements (inputs) and the benefits (outcomes) of evaluation. Specifically:

1. For the purposes of advocacy, outputs should help us determine if the benefits we have attributed to evaluation do in fact result from evaluation activities.
2. For the purposes of the Core Body of Knowledge, outputs help us determine which knowledge and skills people need to make certain evaluation benefits possible.

Outputs, then, are concepts that allow us to consciously reflect on how we take our knowledge and translate it into something from which others can gain some benefits. Of course, this process is rarely as simple or straightforward as the model makes it seem. It can happen in many direct or indirect ways, often interacting with other factors, some of which are beyond the control of those conducting the evaluation. Exploring outputs is nonetheless useful to give us a better appreciation of how evaluation knowledge and activities can ultimately lead to benefits.

Evaluation activities can manifest themselves in many and varied outputs. Through the review of the literature, the two consultations with the evaluation community, and the discussions of the reference panel, we have identified 27 evaluation outputs.¹¹ The outputs are articulated in this section, grouped by evaluation type. A summary is shown on the following page.

Needs Assessment Outputs

- Description of unmet needs, for example:
 - Specific needs of existing clients
 - The type, magnitude, and distribution of a social problem
 - Trends in social problems
 - Clients' strengths and assets
 - Existing programs that serve identified needs
 - Gaps in service

¹¹ **Analysis Notes:** A number of evaluation outputs were included in the submissions for the first consultation. We listed these and combined similar ones, then used some of the more common ones as a starter list for the second consultation, deliberately keeping the list brief. However, few new outputs were identified through the second consultation. Those that were suggested were incorporated into the list.

Rossi, Freeman & Lipsey (1999) provide one of the few comprehensive taxonomies of outputs, which appears to include those identified elsewhere and also through our consultations. We consulted their text to identify examples of the outputs in our list, as well as to add to the list. Because evaluation outputs are manifestations of activities, we found that most of the outputs could be grouped easily into categories reflecting the types of evaluation described in the text.

CANADIAN EVALUATION SOCIETY PROJECT IN SUPPORT OF ADVOCACY AND PROFESSIONAL DEVELOPMENT

OUTPUTS AT A GLANCE

Needs Assessment Outputs

- Description of unmet needs

Evaluability Assessment Outputs

- Description of program design and logic
- Articulation of standards for performance or criteria for success
- Description of the context of the program
- Determination of readiness for/appropriateness of evaluation

Process Evaluation Outputs

- Description of program implementation
- Comparison of actual events with the program plan or performance standards
- Explanations of why implementation has deviated from the plan

Outcome/Impact Evaluation Outputs

- Description of program outcomes
- Identification of unexpected/unwanted outcomes
- Attributions linking outcomes to specific interventions
- Identification of factors that affect the effectiveness of an intervention
- Determination of merit or worth

Efficiency Assessment Outputs

- Description of program costs
- Estimation of the value of program outcomes
- Comparison of value for money

Outputs of Stakeholder Involvement

- Involvement of stakeholders in some or all evaluation activities
- Integration of the evaluation with the customs of the stakeholders' or the program's culture
- Consultation with stakeholders to solicit their views of the program
- Sharing of results with stakeholders
- Positive relationships between the evaluator and the program stakeholders
- New partnerships
- On-the-project training in evaluation for program managers and other stakeholders

Outputs Spanning all Types of Evaluation

- Performance indicators and indicator systems
- Evaluation tools
- New questions about the program
- Syntheses of previous research
- Suggestions of good practices
- Recommendations

Evaluability Assessment Outputs

- Description of program design and logic, for example:
 - Its goals and objectives
 - The target group
 - Identification of stakeholders
 - Anticipated resources
 - Intended activities
 - Expected outcomes
 - Linkages between activities and expected outcomes

- Articulation of criteria for success, for example:
 - Identification of the values of different stakeholder groups
 - Specific standards for performance

- Description of the context of the program, for example:
 - Organizational context
 - Communication channels
 - The funding environment
 - Other related programs

- Determination of readiness for/appropriateness of evaluation, for example:
 - Identification of the stage at which the program is
 - Identification of steps that should be taken prior to evaluation
 - Identification of the most appropriate types of evaluation for the program

Process Evaluation Outputs

- Description of program implementation, for example:
 - Who the actual participants are
 - What resources (human, monetary, etc.) are available and expended
 - What activities are occurring
 - How the activities are carried out (quality, timeliness, etc.)

- Comparison of actual events with the program plan or performance standards

- Explanations of why implementation has deviated from the plan

Outcome/Impact Evaluation Outputs

- Description of program outcomes, for example:
 - Change in condition (e.g., health)
 - Change in status (e.g., employment status)
 - Change in behaviour (e.g., frequency of alcohol use)
 - Change in functioning (e.g., level of mobility)
 - Change in attitude (e.g., attitudes about eating vegetables)
 - Change in feeling (e.g., feelings of belonging)
 - Change in perception (e.g., perceptions of young people)
- Identification of unexpected or unwanted program outcomes, for example:
 - A program has the opposite effect than was intended
 - A program has positive side effects that were not anticipated or planned
 - A program has negative side effects that may or may not have been anticipated
- Attributions linking outcomes to specific interventions, for example:
 - Changes in outcomes over time
 - Comparing outcomes with comparison groups
 - Identification of confounding factors that might obscure or enhance apparent effects
 - Identification of effective practices/activities
 - Identification of ineffective practices/activities
- Identification of factors that affect the effectiveness of an intervention, for example:
 - Population demographics
 - General economic conditions
 - Staff enthusiasm
 - Leadership
 - Organizational context
 - Political/social context
 - Available resources
- Determination of merit or worth, for example:
 - Comparison of actual outcomes with performance standards or criteria for success
 - Comparison with other programs that have similar goals

Efficiency Assessment Outputs

- Description of program expenditures and other costs, for example:
 - Direct, monetary costs
 - Indirect costs such as time, effort, lost opportunities
- Estimation of the value of program outcomes, for example:
 - Monetary value of specific outcomes
 - Relative value (in non-monetary terms) of specific outcomes

- Comparison of value for money, for example:
 - Payoff per dollar of expenditure
 - Cost of achieving a given outcome

Outputs of Stakeholder Involvement

The literature on evaluation utilization suggests that *how* evaluation is done (i.e. the process) can be at least as important to its ultimate impact as what exactly it says or concludes.¹² For example, process use of evaluation is thought to generate interest in continuous quality improvement, increase commitment to the program, and increase knowledge and awareness that staff members maintain and use.

Outputs relating to stakeholder involvement in the evaluation, at various levels, include:

- Involvement of stakeholders in some or all evaluation activities, for example:
 - discussions about program
 - designing the evaluation
 - developing instruments
 - collecting data
 - interpreting data
 - action planning
 - communicating results
- Integration of the evaluation with the customs of the stakeholders' or the program's culture
- Consultation with stakeholders to solicit their views of the program
- Sharing of results with stakeholders
- Positive relationships between the evaluator and the program stakeholders, for example:
 - A level of trust
 - Respect for one another's skills/responsibilities
- New partnerships
- On-the-project training in evaluation for program managers and other stakeholders

¹² See, for example:

Patton, M.Q. (1997). *Utilization-focused evaluation: The new century text* (2nd Ed.). Thousand Oaks, CA: Sage.

Outputs Spanning All Types of Evaluation

- Performance indicators and indicator systems
- Evaluation tools, for example:
 - Evaluation questions
 - A description of the evaluation methods
 - Data collection frameworks and tools
 - Analytical frameworks
- New questions about the program, for example:
 - Why one program site seems to produce better outcomes than others
 - Why some clients seem to be doing better than others
- Syntheses of previous research, for example:
 - Findings from previous evaluations of the program
 - Findings from the research literature
- Suggestions of good practices, for example:
 - Alternate service delivery models
 - Methods used by similar programs to overcome similar problems
- Recommendations, for example:
 - Ways to improve program design
 - Ways to improve program implementation
 - Recommendations about program expansion, continuation, or termination
 - Recommendations about resource allocation

EVALUATION KNOWLEDGE ELEMENTS

Knowledge elements are the knowledge, skills, and effective practices that are required to conduct evaluation activities. Before articulating the knowledge elements, we would like to emphasize four points:

- 1) *Knowledge and skill requirements vary from evaluation to evaluation.* While some knowledge and skills might be important for almost any evaluation, others are only applicable in certain situations. For example, we believe that ethical conduct, being able to focus the evaluation, and interpersonal and communication skills are likely to be useful in every evaluation, whereas survey methods, questionnaire development, and quantitative analysis would be useful in some evaluations but not in others.

It may be helpful to view the list of knowledge elements as a toolkit from which evaluators can select the tools that are most appropriate for the specific evaluation, taking into account the context of the evaluation and the desired benefits.

- 2) *This is **not** a list of what every evaluator should know.* Evaluation has a wide range of methods and approaches. It is not possible, or even desirable, for any one person to have an in-depth knowledge of everything. Evaluators need to be:
 - a. aware of the different methods and approaches,
 - b. able to realistically assess their own capabilities, and
 - c. able to assemble teams of people with the knowledge and skills needed for a specific evaluation.

It may in fact be possible to define a set of core skills and knowledge that all evaluators *should* know. We were unable to do so based on the results of this project, but this list may provide a starting point for further exploration.

- 3) *“Soft” skills may be particularly important.* Skills such as effective listening, questioning, and negotiation were emphasized in the consultations, and also by participants of the conference discussion sessions. Because of the applied nature of evaluation, these skills are important across all stages of the evaluation process. In the words of one conference session participant, *“You can have the strongest academic credentials, but if you don’t have the skills on the people side, they’re no good.”* It will be important to consider these soft skills in professional development planning.
- 4) *This list will change.* This list of knowledge elements and resources is intended to be dynamic, not definitive or exhaustive. There are certainly other good resources in existence now, and others will become available in the future. New approaches and methods will also be developed. The list will need to evolve along with the field.

Evaluation Knowledge Elements

This section articulates the 23 general knowledge elements that were identified through the course of the project. For each general knowledge element, we have identified more specific knowledge, skills, or practices, which are shown in the tables in this section. We have also suggested relevant resources that have good discussions of each item.¹³ The general knowledge elements are summarized on page 33.

In some instances, respondents commented on the necessity of the knowledge elements. Disparate views among respondents may indicate areas of controversy, or may simply indicate that different evaluations have different knowledge requirements.

Ethics

Ethical conduct

K	S	P	Items	Resource(s)
✓			Knowledge and application of ethical guidelines	<i>CES Guidelines for Ethical Conduct</i> AEA (1994) AES (1997) AfrEA (2000) Sanders (1994) Newman & Brown (1996) CIDA (2000)
		✓	Respect the human dignity and worth of the people involved in the program and in the evaluation	
		✓	Behave with sensitivity to the cultural and social environment of the program and its stakeholders	
		✓	Ensure the honesty and integrity of the evaluation	
		✓	Act in the best interest of the program stakeholders and the general public	
		✓	Disclose biases, conflicts of interest, any limitations in approaches or skills, etc.	
✓			Freedom of information and protection of privacy	Provincial legislation

Legend

K = Knowledge

S = Skill

P = Practice

¹³ **Analysis Notes:** A number of evaluation knowledge elements were mentioned in the submissions for the first consultation. A good many others were listed in King et al.'s (2001) taxonomy of essential evaluator competencies. We used some of the more common ones as a starter list for the second consultation, deliberately keeping the list brief. While some new knowledge elements were suggested in the second consultation, we still did not feel that the list was comprehensive. We therefore reviewed numerous evaluation texts and articles to identify additional knowledge elements and associated resources.

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

KNOWLEDGE ELEMENTS AT A GLANCE

Ethics

- Ethical conduct
- Competence and quality assurance

Evaluation Planning and Design

- Understanding the program
- Assessing readiness for the evaluation
- Focusing the evaluation
- Systems theory, organizational development, and change
- Specific types of evaluation
- History of evaluation, evaluation theory, and evaluation models
- Research design
- Constructing meaning
- Selecting appropriate data collection and analysis methods
- Effective practices in applied research

Data Collection

- Sampling
- Measurement issues
- Data collection methods

Data Analysis and Interpretation

- Qualitative analysis
- Quantitative analysis
- Determining merit or worth
- Critical thinking skills

Communication and Interpersonal Skills

- Interpersonal skills
- Reporting skills
- Other communication skills

Project Management

- Managing evaluation projects

Evaluation Knowledge Elements

Competence and quality assurance

K	S	P	Item	Resource(s)
✓			Awareness of the steps in conducting an evaluation	<i>CES Essential Skills Series (#2)</i> Any introductory evaluation text
✓			Awareness of risks to the integrity of the evaluation process	Rose (2001)
		✓	Self-assessment of competency to perform the evaluation (knowing own limits)	King (2001) QRCA (2002)
		✓	Ongoing improvement of skills, knowledge, networks	<i>CES Guidelines for Ethical Conduct</i>
✓			Application of standards for evaluation	<i>CES Guidelines for Ethical Conduct</i> Sanders (1994) Newman & Brown (1996)
✓			Meta-evaluation	Cook & Gruder (1978) Scriven (1969) Stufflebeam (1981)

Evaluation Planning and Design

Understanding the program

K	S	P	Item	Resource(s)
		✓	<ul style="list-style-type: none"> Become familiar with the program 	Owen, with Rogers (1999) TBS (1998) Most introductory evaluation texts
	✓		<ul style="list-style-type: none"> Analyze the social, political, and cultural context of the program (legislation, similar programs, culture-specific understandings, relationships, communication patterns, agendas, etc.) 	TBS (1998) Owen, with Rogers (1999) CIDA (2000) Patton (1997)
		✓	<ul style="list-style-type: none"> Develop a program description 	<i>CES Essential Skills Series (#2)</i>
	✓		<ul style="list-style-type: none"> Develop a logic model 	Rossi, Freeman, & Lipsey (1999) Smith (1989) Rutman (1980) Wholey (1977) Wholey, Hatry, & Newcomer (1994) Wong-Rieger & David (1995) W.K. Kellogg Foundation (2001).

Evaluation Knowledge Elements

Respondents indicated that it was important to understand various aspects of the program, including the context and the need being served. Without this knowledge, the evaluators may evaluate the wrong thing or misinterpret the results.

Assessing readiness for the evaluation

K	S	P	Item	Resource(s)
	✓		<ul style="list-style-type: none"> Determine if it is appropriate to evaluate the program 	Wholey (1977) Wholey (1994)

Focusing the evaluation

K	S	P	Item	Resource(s)
		✓	<ul style="list-style-type: none"> Obtain the cooperation of stakeholder groups 	Owen, with Rogers (1999) Patton (1997) CIDA (2002)
		✓	<ul style="list-style-type: none"> Be clear who is the client 	Owen, with Rogers (1999) Kellogg Foundation (1998) Cresswell (2002) Porteous et al. (1997) Any introductory evaluation text
		✓	<ul style="list-style-type: none"> Identify stakeholders 	
	✓		<ul style="list-style-type: none"> Identify the goals and values of the stakeholders 	
	✓		<ul style="list-style-type: none"> Identify program objectives 	
			<ul style="list-style-type: none"> Identify information needs 	
	✓		<ul style="list-style-type: none"> Specify evaluation questions 	

Respondents felt that knowing how to focus the evaluation was key, and that no evaluation should be conducted without this first step.

Systems theory, organizational development, and change

K	S	P	Item	Resource(s)
✓			<ul style="list-style-type: none"> Knowledge of organizational development and change 	Senge (1990)
✓			<ul style="list-style-type: none"> Knowledge management 	Harvard Business Review (1998)
✓			<ul style="list-style-type: none"> Knowledge of evaluation's role in organizational development and change 	Weiss (1999; 1977) Chelimsky & Shadish (1997) Cousins & Earl (1995)
✓			<ul style="list-style-type: none"> Knowledge of evaluation uses (e.g., formative, summative) 	Scriven (1991) Patton (1997)
✓			<ul style="list-style-type: none"> Understanding of how decisions are made in a political context 	Weiss (1999; 1977) Chelimsky & Shadish (1997)
✓			<ul style="list-style-type: none"> Systems approaches, systems thinking 	Flood (1999) Williams (Work in progress)

Evaluation Knowledge Elements

✓			<ul style="list-style-type: none"> • Chaos and complexity theories 	Axelrod (2000) Stacey, Griffin, & Shaw (2000)
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Having an understanding of organizational systems and change allows the evaluators to help managers introduce and manage change, and to design recommendations that are likely to have maximum impact.

Specific types of evaluation

K	S	P	Item	Resource(s)
✓			<ul style="list-style-type: none"> • Needs assessment 	Rossi, Freeman, & Lipsey (1999) <i>CES Essential Skills Series (#2)</i>
✓			<ul style="list-style-type: none"> • Evaluability assessment 	Rossi, Freeman, & Lipsey (1999) Smith (1989) Rutman (1980) Wholey (1977) Wholey, Hatry, & Newcomer (1994) Wong-Rieger & David (1995) Hudson et al. (1992)
✓			<ul style="list-style-type: none"> • Process evaluation/implementation evaluation 	Rossi, Freeman, & Lipsey (1999) <i>CES Essential Skills Series (#3)</i> Hudson et al. (1992)
✓			<ul style="list-style-type: none"> • Outcome evaluation/impact assessment 	Mohr (1995) Hudson et al. (1992) Rossi, Freeman, & Lipsey (1999) Posavac & Carey (1997) <i>CES Essential Skills Series (#4)</i>
✓			<ul style="list-style-type: none"> • Efficiency evaluation/Cost analysis 	Rossi, Freeman, & Lipsey (1999)

Respondents indicated that the evaluators should be familiar with, or even have a thorough knowledge of, many types of evaluation.

History of evaluation, evaluation theory, and evaluation models

Some respondents felt that people who conduct an evaluation should be familiar with basic evaluation models. However, others suggested that knowledge of models is irrelevant for most evaluations, since they are eclectic.

Evaluation Knowledge Elements

K	S	P	Item	Resource(s)
✓			<ul style="list-style-type: none"> • Various theories of evaluation 	Shadish, Cook, & Leviton (1995)
✓			<ul style="list-style-type: none"> • History of evaluation 	Chelimsky & Shadish (1997) Shadish, Cook, & Leviton (1995) House (1993) Segsworth (2001)
✓			<ul style="list-style-type: none"> • Utilization-focused 	Patton (1997)
✓			<ul style="list-style-type: none"> • Empowerment 	Fetterman, et al. (1996)
✓			<ul style="list-style-type: none"> • Participatory 	Cousins & Earl (1995) CIDA (2002)
✓			<ul style="list-style-type: none"> • Goal-free 	Scriven (1991)
✓			<ul style="list-style-type: none"> • Realistic Evaluation 	Pawson & Tilley (1997)
✓			<ul style="list-style-type: none"> • Other models 	Stufflebeam (2001)

Research design

K	S	P	Item	Resource(s)
✓			<ul style="list-style-type: none"> • Experimental, quasi-experimental, non-experimental 	Campbell & Stanley (1966) Cook & Campbell (1979) Posavac & Carey (1997)
✓			<ul style="list-style-type: none"> • Longitudinal 	Pedhazur et al. (1991)
✓			<ul style="list-style-type: none"> • Case study 	Yin (1989)
✓			<ul style="list-style-type: none"> • Ethnography 	Fetterman (1989)
✓			<ul style="list-style-type: none"> • Naturalistic inquiry 	Denzin (1971) Guba & Lincoln. (1981)
✓			<ul style="list-style-type: none"> • Phenomenology and epistemology 	Campbell (1988)
✓			<ul style="list-style-type: none"> • Program review 	
✓			<ul style="list-style-type: none"> • Survey research 	Santo Pietro (1983) Dillman (2000) Fink (2002)
✓			<ul style="list-style-type: none"> • Mixed method 	Cook & Campbell (1979) Datta (1997) Cresswell (2002) Mertens (1997)
✓			<ul style="list-style-type: none"> • Ruling out alternative interpretations 	Campbell & Stanley (1966) Cook & Campbell (1979)

Some respondents indicated that it is helpful to understand many types of evaluation design. However, others suggested that knowledge of one or more types of research design is not usually possible in the real world.

Evaluation Knowledge Elements

Constructing meaning

K	S	P	Item	Resource(s)
✓			<ul style="list-style-type: none"> Evaluation paradigms (e.g., positivism, constructivism, collaborative interpretation, hermeneutics) 	Cronbach and associates (1980) Guba & Lincoln (1989)
✓			<ul style="list-style-type: none"> Human construction of meaning 	Gilovich (1991) Guba & Lincoln (1989)

Some respondents indicated that having a conceptual framework is helpful. Others thought that the people conducting the evaluation should understand how participants and staff construct reality in the program being evaluated. Still others felt that knowledge of paradigms was not important in simple evaluations, because academic rigour is not required.

Selecting appropriate data collection and analysis methods

K	S	P	Item	Resource(s)
	✓		<ul style="list-style-type: none"> Selecting appropriate data collection and analysis methods 	Owen, with Rogers (1999) Campbell (1988) Chelimsky & Shadish (1997) Patton (1997) Cook & Reichardt (1979)

Some respondents felt that this skill was important to allow the evaluators to select among a variety of methods and sources for quality, reliability, etc. They also felt that it was important to tailor methods to different respondent groups and evaluation activities. Other respondents felt that this skill was not essential.

Effective practices in applied research

Respondents indicated that this knowledge element was critical to conducting a good evaluation.

Evaluation Knowledge Elements

K	S	P	Item	Resource(s)
		✓	<ul style="list-style-type: none"> • Triangulation, multiple methods, multiple perspectives, multiple lines of evidence 	Campbell and Stanley (1966) Cook and Campbell (1979)
		✓	<ul style="list-style-type: none"> • Involvement of stakeholders 	Cousins & Earl (1995) Fetterman et al. (1996) Patton (1997) CIDA (2002)
		✓	<ul style="list-style-type: none"> • Incorporate consultation as appropriate 	Cousins & Earl (1995) Patton (1997)
		✓	<ul style="list-style-type: none"> • Able to design the evaluation to minimize intrusiveness 	Patton (1997) Webb et. al. (1966)
		✓	<ul style="list-style-type: none"> • Able to adapt the evaluation to situational needs/constraints 	Patton (1997)
		✓	<ul style="list-style-type: none"> • Able to adapt/change study as needed 	Patton (1997)
		✓	<ul style="list-style-type: none"> • Attention to cross-cultural, gender, or age issues 	CIDA (2002)

Data Collection

Sampling

K	S	P	Item	Resource(s)
✓			<ul style="list-style-type: none"> • Probability sampling 	Dillman (2000) Fink (2002)
✓			<ul style="list-style-type: none"> • Purposeful sampling 	Patton (2001a) Marshall & Rossman (1999)
	✓		<ul style="list-style-type: none"> • Knowledge of when to use/not to use different types of sampling 	Patton (2001a) Marshall & Rossman (1999) Fink (2002)

Respondents noted that, in some cases, the population is too small for sampling. However, even in these cases, the people conducting the evaluation may still find useful to have knowledge of sampling issues so that they can address stakeholder questions about sampling.

Evaluation Knowledge Elements

Measurement issues

K	S	P	Item	Resource(s)
✓			<ul style="list-style-type: none"> • Reliability 	Campbell and Stanley (1966) Pedhazur et al. (1991) Patton (2001a)
✓			<ul style="list-style-type: none"> • Validity 	Campbell and Stanley (1966) Pedhazur et al. (1991) Patton (2001a)
✓			<ul style="list-style-type: none"> • Psychometric theory, including factor analysis 	Pedhazur et al. (1991) Nunnally & Bernstein (1994)

Some respondents felt that knowledge of measurement issues was not relevant for all evaluations. However, others indicated that such knowledge was key to accurate assessment of program effectiveness. They felt that the absence of this would result in impressionistic evaluation with poor data reliability. They further noted that the applied nature of evaluation makes this particularly important since it is even more vulnerable to the many threats to reliability and validity (e.g., sampling bias, measurement bias, research design bias).

Data collection methods

Respondents noted that a range of data collection methods may be required for a given project, and that the relative importance of each method would depend on the specifics of the evaluation. However, they felt that knowledge of at least some data collection methods was essential, because evaluation is about research, which requires data collection.

Evaluation Knowledge Elements

K	S	P	Item	Resource(s)
✓			<ul style="list-style-type: none"> Literature review 	Cooper (1998)
✓			<ul style="list-style-type: none"> Program records, documents 	Guba & Lincoln. (1981)
✓			<ul style="list-style-type: none"> Performance measurement systems, program information systems, indicator systems, monitoring systems 	Mayne (1999) Montague (1997) Perrin (1998) Hatry (1999)
✓			<ul style="list-style-type: none"> Questionnaires 	Dillman (2000) Marshall & Rossman (1999) Fink (2002)
✓			<ul style="list-style-type: none"> Interviews 	Marshall & Rossman (1999) Denzin & Lincoln (1994) Fink (2002) Patton (2001a) Guba & Lincoln. (1981)
✓			<ul style="list-style-type: none"> Focus groups 	Krueger & Casey (2000) Morgan & Krueger (1997)
✓			<ul style="list-style-type: none"> Observation 	Marshall & Rossman (1999) Santo Pietro (1983) Patton (2001a) Webb et al. (1966) Guba & Lincoln. (1981)
✓			<ul style="list-style-type: none"> Participant observation 	Marshall & Rossman (1999) Santo Pietro (1983) Patton (2001a)
✓			<ul style="list-style-type: none"> Group concept development, brainstorming, etc. 	Santo Pietro (1983)
✓			<ul style="list-style-type: none"> Town hall meetings and other group processes 	Santo Pietro (1983)
✓			<ul style="list-style-type: none"> Expert opinion (e.g., delphi) 	Dick (2000)
✓			<ul style="list-style-type: none"> Experiential methods (games, classroom activities) 	Santo Pietro (1983) Hart (1994)
✓			<ul style="list-style-type: none"> Projective techniques and psychological tests 	Marshall & Rossman (1999)
✓			<ul style="list-style-type: none"> Narrative inquiry, logs, journals, oral histories 	Santo Pietro (1983) Schwandt (2001)
✓			<ul style="list-style-type: none"> Using physical evidence 	Marshall & Rossman (1999) Santo Pietro (1983)
✓			<ul style="list-style-type: none"> Unobtrusive evidence 	Webb et al. (1966) Marshall & Rossman (1999) Guba & Lincoln. (1981)

For overviews/discussions of many of these, see: Love (1991b), the CES Evaluation Sourcebooks, or most general texts (e.g. Owen with Rogers, Worthen, Mertens, Rossi & Freeman).

Data Analysis and Interpretation

Qualitative analysis

K	S	P	Item	Resource(s)
✓			<ul style="list-style-type: none"> Narrative review 	
✓			<ul style="list-style-type: none"> Content analysis, quantifying qualitative data 	Marshall & Rossman (1999) Miles & Huberman (1995) Patton (2001a)
✓			<ul style="list-style-type: none"> Identifying and verifying emergent themes 	Marshall & Rossman (1999) Miles & Huberman (1995) Patton (2001a)
✓			<ul style="list-style-type: none"> Grounded theory 	Glaser (1992)
✓			<ul style="list-style-type: none"> Flow diagrams 	

Respondents indicated that a certain level of knowledge is important to ensure the appropriate type of data is collected.

Quantitative analysis

K	S	P	Item	Resource(s)
	✓		<ul style="list-style-type: none"> Database construction and manipulation 	
		✓	<ul style="list-style-type: none"> Handling missing data 	
✓			<ul style="list-style-type: none"> Descriptive statistics (frequencies, means, etc.) 	Knapp (1996) Jaeger (1990) Any social science statistics text
✓			<ul style="list-style-type: none"> Multiple regression and analysis of variance 	Knapp (1996) Jaeger (1990) Pedhazur (1997) Any social science statistics text
✓			<ul style="list-style-type: none"> Meta-analysis 	Glass (1977)
✓			<ul style="list-style-type: none"> Trend analysis 	
✓			<ul style="list-style-type: none"> Structural equation modeling 	Kenny (1979)
✓			<ul style="list-style-type: none"> Cost-effectiveness analysis, case costing, financial analyses, etc. 	Posavac & Carey (1997) Kee (1994)
✓			<ul style="list-style-type: none"> Development of regular analysis and reporting systems (to go with MIS, performance measures) 	Nutter (1992)

See also the CES *Evaluation Method Sourcebooks*.

Evaluation Knowledge Elements

Respondents indicated that a certain level of knowledge is important to ensure the appropriate methods are used at the appropriate times. Some respondents indicated that there are some instances where knowledge of quantitative analysis methods are not required.

Determining merit or worth

K	S	P	Item	Resource(s)
✓			• Grading	
✓			• Ranking	
✓			• Setting criteria (e.g., based on specific program experience and perceptions)	
✓			• Making judgments	

Respondents indicated that this knowledge element is helpful for determining an agreed-upon standard for assessing effectiveness. They suggested that caution was warranted when dealing with and acknowledging various value systems and social groups involved in the program.

Critical thinking skills

K	S	P	Item	Resource(s)
	✓		• Analysis	
	✓		• Synthesis	
	✓		• Problem solving	Block (2000)
	✓		• Conceptual thinking	Block (2000)
		✓	• Openness to unintended impacts and effects	Sanders (1994)
		✓	• Neutrality	Sanders (1994)
		✓	• Courage to question the system	Kushner (2000)
		✓	• Inquisitiveness, curiosity	
		✓	• Thinking outside the box	Senge (1990)
	✓		• Drawing conclusions	CIDA (2002) Porteous et al. (1997)
	✓		• Making recommendations	CIDA (2002) Porteous et al. (1997) Patton (1997) Sonnichsen (1994)

Some of these are touched upon in Perrin (2000).

Respondents suggested that critical thinking skills were important for looking at the big picture, which may go beyond immediate issues. Some respondents felt these skills were useful ways for external evaluators to add value to the study.

Communication and Interpersonal Skills

Interpersonal skills

K	S	P	Item	Resource(s)
	✓		• Facilitation	Kaner et al. (1996)
	✓		• Negotiation	Fisher, Ury, & Patton (1991) Barrington (1992)
	✓		• Diplomacy	Carnegie (1981)
	✓		• Group processing	Kaner et al. (1996)
	✓		• Collaboration, team player	
	✓		• Motivating others	Carnegie (1981)
	✓		• Conflict resolution; Dealing with antagonistic people	Brounstein (2001)
	✓		• Political astuteness, perceptiveness	Barrington (1992)
	✓		• Ability to work within a multicultural environment	Jennings (1992)
✓			• Adult education principles and techniques	Knowles, Holton, & Swanson (2000)

Respondents indicated that interpersonal skills are essential on a day-to-day basis; because evaluation occurs in an applied setting, evaluators have to work with others. Negotiation skills were deemed particularly important to for getting access for the evaluation, obtaining resources, getting appropriate participation, and building support for the final report

Reporting skills

K	S	P	Item	Resource(s)
	✓		• Presentations	Torres, Preskill & Piontek (1996) Carnegie (1977)
	✓		• Report writing	Torres, Preskill & Piontek (1996) CIDA (2002) Cresswell (2002)
	✓		• Preparation of cabinet documents and presentations	See requirements for each jurisdiction
	✓		• Graphical displays	Henry (1992)
	✓		• Media communications	Torres, Preskill & Piontek (1996)
	✓		• Presenting negative/lukewarm evaluation results constructively	Torres, Preskill & Piontek (1996)
		✓	• Regular and timely communications	Barrington (1992)
	✓		• Development of a communication strategy	Torres, Preskill & Piontek (1996)

Evaluation Knowledge Elements

Respondents indicated that reporting skills were essential for decision-making, and for ensuring that the evaluator has thought it through. They noted that there is not much point to conducting an evaluation if the results are not presented to program stakeholders effectively.

Other communication skills

K	S	P	Item	Resource(s)
	✓		• Questioning	Perrin (2001)
	✓		• Active listening	Brounstein (2001)
	✓		• Sensitivity	Hunsaker & Alessandra (1980)
	✓		• Probing, obtaining clarification	Lewis (1999) Block (2000)

Respondents indicated that these communication skills were essential on a day-to-day basis for involving stakeholders, data collection, and disseminating results.

Project Management

Managing evaluation projects

K	S	P	Item	Resource(s)
		✓	<ul style="list-style-type: none"> • Be clear who is the client 	Sanders (1994)
	✓		<ul style="list-style-type: none"> • Fiscal responsibility, budgeting 	Sanders (1994) Marshall & Rossman (1999) Lewis (1999)
	✓		<ul style="list-style-type: none"> • Scheduling, time management 	Lewis (1999)
✓			<ul style="list-style-type: none"> • Risk management 	Lewis (1999)
	✓		<ul style="list-style-type: none"> • Assembling an evaluation team 	Bell (1994) Sanders (1994)
		✓	<ul style="list-style-type: none"> • Making use of outside expertise (e.g., advisory committees, specialists/experts, subcontractors) 	
	✓		<ul style="list-style-type: none"> • Managing a team; supervising 	Bell (1994) Hunsaker & Alessandra (1980)
	✓		<ul style="list-style-type: none"> • Proposal writing, competitive proposal process (for contracts and/or grants) 	
	✓		<ul style="list-style-type: none"> • Accessing needed resources, including personnel, information, instruments, funding 	
	✓		<ul style="list-style-type: none"> • Organizing resources, maximizing use of available resources, doing evaluation on a shoestring 	Favaro & Ferris (1991)
	✓		<ul style="list-style-type: none"> • Writing formal agreements 	Sanders (1994)
	✓		<ul style="list-style-type: none"> • Computer skills 	
		✓	<ul style="list-style-type: none"> • Good documentation practices 	Sanders (1994)
		✓	<ul style="list-style-type: none"> • Systematically reviewing data, analyses, and reports for accuracy/quality 	Sanders (1994)

RELATIONSHIPS BETWEEN KNOWLEDGE ELEMENTS, OUTPUTS, AND BENEFITS

We had initially hoped to be able to describe how each output contributes to each benefit, and which knowledge elements are needed to produce which outputs. While the consultations provided interesting information about benefits, outputs, and knowledge elements, we were unable to draw conclusions about the relationships between them.

In retrospect, our initial hopes were likely unrealistic. The review of the literature, the consultations, and the discussions of our reference panel all underscored the incredible diversity and complexity of evaluation practice. Reference panel members, in particular, cautioned us against getting too linear and specific, and questioned the initial assumptions that this would be possible. Evaluation interacts with many other factors within a complex environment. In reality, outputs are only able to produce benefits if they are applied in the right way to the right situation. No single output is going to be appropriate for all situations or all purposes. Likewise, the knowledge required to conduct an evaluation will depend on the purpose of the evaluation, the approach of the evaluators, and the specific circumstances in which the evaluation takes place.

In sum, we believe that there are no simple answers to the research questions:

- *How exactly does each type of output contribute to each benefit?*
- *What are the knowledge elements that are needed to produce the various types of outputs?*

It is nonetheless important to think about these questions, and we compliment CES (as have others) for daring to tackle this ambitious project. Although simple answers may be beyond our grasp, the quest for understanding will contribute to the development of the field.

To stimulate further thinking and determine if this avenue is worthy of further study, we have conducted some preliminary explorations of the relationships between benefits and outputs, and between outputs and knowledge elements. While our explorations are at this point subjective, they have resulted in additional insights. The results of this activity are annexed to this report.

In our explorations, we found that it was quite difficult to define the relationships in the abstract. There were often many possible routes to the same benefit, depending on the evaluator's background and the specifics of the program being evaluated. It may be helpful to think of evaluation outputs and knowledge elements as a toolkit. Evaluators must select the tools that are most appropriate for the specific evaluation, taking into account the context of the evaluation and the desired benefits.

That said, there may be areas of agreement and commonality where evaluators agree on the elements required to make a given benefit possible. In this report, we have attempted to provide a comprehensive, although not perfect, list of benefits, outputs, and knowledge elements, upon which future explorations can build.

DISCUSSION

This project undertook to answer a set of challenging questions about the essence of program evaluation. Not surprisingly, we found no simple answers. There were some questions we were unable to answer within the resource and methodological constraints of this project, and to some extent we are uncertain that they even can be answered. However, the process of thinking them through is enormously valuable, even if no definitive answers exist. The Canadian Evaluation Society should be applauded for taking the initiative to explore this topic.

This section reviews what has been accomplished over the course of this project, and suggests steps that CES can take to use and build on the results.

Evaluator engagement in the process

One of the most exciting aspects of this project was getting evaluators engaged in discussing the nature of evaluation. The links that were forged between evaluators, and the thinking that was stimulated, were valuable in and of themselves. Through this engagement process, a number of important considerations were raised that relate to the definition of the field of program evaluation and its promotion. It is worth considering how CES can encourage continued discussion of these issues nationally, as well as on a global scale.

Some of the best Canadian thinking about the implications of this project has been done by La Société québécoise d'évaluation de programme (SQÉP), the Québec chapter of CES, who have devoted substantial time to the consideration of these issues. We suggest that the CES council work with SQÉP to encourage dialogue about these issues both between and within the various CES chapters.

To date, most aspects of the project have been made public through the project website, member broadcasts, listserv postings, and word of mouth. Descriptions of the methods and interim results have been posted on the Internet, and have attracted attention in Canada and around the world. CES should be commended for having the courage to take such an open process to a work in progress. It will be important to maintain transparency and credibility by making the final report available to interested parties.

Suggestions for CES:

- Post the report on the CES website.
- Publish significant parts of the report in the Canadian Journal of Program Evaluation.
- Provide a mechanism for commentary and input, such as an interactive website.
- Use the project as a means of engaging the international evaluation community in future collaborative work. Some associations are currently involved in complementary projects that could serve as a basis for collaboration (for example, the Australasian Evaluation Society's effort to identify evaluator competencies, and the Qualitative Research Consultants Association's set of draft professional competencies).

- Present the results at the conferences of CES chapters and other national evaluation associations.
- Encourage dialogue about specific questions of interest, both between and within the various CES chapters.
- Collaborate with other evaluation associations when following up on specific questions of interest.
- Take a consultative approach when following up on specific questions of interest.

Benefits that may be derived from evaluation

The study identified a broad range of benefits that may be derived from evaluation. The benefits were identified through the first consultation and confirmed and improved through the reference panel discussions and the second consultation. The descriptions of sample evaluations in Appendix G provide real world examples of how evaluation has resulted in benefits. The benefit descriptions and the examples can be used for advocacy and professional development.

Suggestions for CES:

- When determining next steps for advocacy and professional development, consider the concerns that have been identified relating to the promotion of evaluation and the limiting of the field.
- Invite evaluation stakeholders to comment on the identified benefits and their relationship to evaluation outputs, because they may have different opinions than evaluators. For advocacy purposes, it would be valuable to determine what differences in perception exist between stakeholders who are experienced/knowledgeable about evaluation and those who are new to the concept of evaluation.
- Using the benefit descriptions and the descriptions of sample evaluations (Appendix G), develop advocacy materials tailored to specific audiences. The materials can be reviewed by evaluation stakeholders with two simultaneous goals: advocacy and refinement of the list.
- Update *The Value in Evaluation: A Statement for Managers* booklet that CES published in 1989, and post the updated version on the website.
- Develop a checklist or other assessment instrument that individual evaluators can use prior to an evaluation to determine what benefits their project stakeholders hope to derive from an evaluation.
- Develop a measurement tool to assess the benefits stakeholders actually derived from evaluation. Encourage evaluators to use this tool for meta-evaluative purposes, in conjunction with the above-mentioned checklist. CES may also want to collect Canada-wide data using such an instrument.

Evaluation outputs, knowledge elements, and resources

The study identified a number of evaluation outputs and knowledge elements. Some were identified through the consultations and others through a brief review of the literature. The lists of outputs, knowledge elements, and resources will be a valuable guide for:

- Designing curriculum for evaluation programs and courses;
- Designing professional development workshops to be offered by CES and other organizations;
- Providing evaluators with ideas about alternative methods and approaches; and
- Developing a self-assessment guide for use by evaluators.

Once working lists of outputs, knowledge elements, and resources have been refined, they will need to be kept up-to-date. One efficient way of keeping them up to date is to post the lists on the CES website and allow members to suggest new outputs, knowledge elements, and/or resources, and to suggest that outdated knowledge elements and resources be removed.

It is interesting that, in talking about knowledge elements, evaluators emphasized the importance of “soft skills” such as interpersonal, communication, and project management over skills that are more specific to program evaluation, such as data collection and analysis. This may reflect a particular need for professional development in the softer skills.

Suggestions for CES:

- Publish checklists of evaluation outputs, knowledge elements, and resources that can be used by individual evaluators for the purpose of self-assessment, continued competence, and evaluation planning.
- Post the lists on the CES website and allow evaluators to submit comments, suggest new items and/or suggest that obsolete or outdated items be removed.
- Use the list to develop workshops for CES members.
- Ensure the list reflects the diversity of the field by seeking verification from evaluators in different positions (academic, consulting, internal) and sectors, and with different approaches (particularly those who have less mainstream approaches to evaluation).
- Assess members’ need for training in interpersonal, communication, and project management skills.

Relationships between evaluation knowledge elements, outputs, and benefits

We were not able to describe how evaluation outputs contribute to each benefit, or what knowledge elements are needed to produce each output. Members of the reference panel were unsure that it would even be possible to identify definitive relationships in all cases.

In our preliminary explorations of these relationships, we have found that in many cases, the relationship depended not only on the background of the evaluator, but also on the specifics of the evaluation situation. In other words, the relationships between knowledge elements, outputs, and benefits do not appear to be direct and linear. The model on which this project was based may therefore not be appropriate for future work in this area. A more complex, realistic model would help researchers identify the various routes by which an evaluation can produce benefits, and the various factors that help or hinder along the way. In our review of the literature, we did

not come across any other explicit models of how program evaluation works, so the development of such a model could be a major contribution to the field in and of itself.

If the relationships can be better defined, CES may be in a better position to define a Core Body of Knowledge for program evaluation. This would have implications for CES-sponsored workshops and training, and for post-secondary education of evaluators. It would also make it easier for evaluators to determine the knowledge and skills required for a given evaluation, and to assess their capacity to conduct it.

In the meantime, the process of thinking through the relationships between benefits, outputs, and knowledge elements may be a useful activity within the context of a specific evaluation. It can help evaluators focus their thinking by guiding them through the following questions:

- What benefit is the client trying to gain? What other benefits are possible?
- What outputs does the client require? What other outputs are possible?
- What knowledge and skills are required to provide the benefits and outputs?
- Do we have the required knowledge and skills, or can we get them?

Suggestions for CES:

- When training evaluators, provide exposure to a variety of approaches and build awareness of the strengths and weaknesses of each. Also train evaluators in how to deal with difficult choices and trade-offs.
- Develop a tool that evaluators can use to explore the benefits, outputs, and knowledge elements required for a specific evaluation.
- Seek funding for future exploration of the relationships between benefits, outputs, and knowledge elements.
- Begin the research by developing a more complex, realistic model of how program evaluation produces benefits.
- Ensure that evaluators with diverse backgrounds and approaches are involved in the process of exploring the relationships.

Conclusion

Evaluation is a developing field that will continue to evolve. This is one of the strengths of the field, placing evaluators in a position where they must constantly review and improve their practices. This document identifies some important issues for evaluators, and perhaps evaluation clients, to think about. Implementing the further steps suggested in this section will carry on the dynamic process started by this initiative.

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Canadian Evaluation Society Project in Support of Advocacy and Professional Development

ANNEX: EXPLORING RELATIONSHIPS BETWEEN BENEFITS, OUTPUTS, AND KNOWLEDGE ELEMENTS

Under the guidance of the steering committee, the project team conducted some preliminary explorations of the relationships between benefits and outputs, and between outputs and knowledge elements. The purpose of this effort was to stimulate further thinking and to determine if this avenue is worthy of further exploration.

To explore the relationships, we selected three of the benefits, and used an outputs x knowledge elements matrix to determine a) which outputs were required to make the benefit possible, and b) which knowledge elements were required to produce the necessary outputs.¹⁴ Each project team member undertook this activity separately, and then we reviewed each other's work. One of the steering committee members also participated in this activity. The resulting matrices, plus one text-based exploration, are shown at the end of this annex. A blank matrix is also included, and can be used as a worksheet for those who would like to try to replicate our efforts.

Each of the explorations presented in this section represent the views of a single evaluator. As such, they are quite subjective, and thus should not be viewed as a definitive determination of what knowledge elements are required to make a given evaluation benefit possible.

¹⁴ The instructions for this activity were as follows:

1. Select a benefit for exploration.
2. Type/print the name of the benefit in the appropriate place.
3. Refer to the descriptions of the benefit, and the outputs, in the report.
4. Determine how important each output is in making the benefit possible. Rate the output 2 if it is "highly likely to be essential for a given evaluation," and 1 if it is "somewhat likely to be essential for a given evaluation." Leave the box blank if the output is not likely to be essential for making the benefit possible. Burt found he needed to add a category of "?" to indicate that it would depend on how the output was used.
5. Next, focus *only* on those outputs to which you have given a "2" rating.
6. For each of these outputs, determine how necessary each knowledge element would be in producing the output. Refer to the report for more detailed descriptions of the knowledge elements. Rate the knowledge element 2 if it is "highly likely to be essential for a given evaluation," and 1 if it is "somewhat likely to be essential for a given evaluation."
7. As you complete the matrix, keep in mind that we are trying to determine what knowledge and skills are required to carry out the evaluation - it does not matter who has the skill. For example, one member of an evaluation team may have expertise in data collection methods, another may have expertise in a specific type of evaluation, and they may contract out the data analysis to a third party; nonetheless, all of these elements might be necessary for producing the output, and should be reflected as such in the matrix.

Reflections

The purpose of this exercise, as previously mentioned, was to stimulate further thinking and to determine if this avenue is worthy of further exploration. The project team and steering committee reflected on the process of completing this, and made the following observations.

We felt as though our ratings were arbitrary.

In completing the matrices, we felt that each rating we made was arbitrary. When some of us repeated the exercise twice for the same benefit, we came up with somewhat different results. We also produced different results when trying to replicate each others' matrices. In the words of one project team member, completing the exercise felt "much the same as rolling dice."

Much of the time, we felt that our rating should be "it depends." We noted that:

- There can be multiple routes (including outputs) to a given benefit, requiring a range of potential skills.
- Much depends on the specifics of the program being evaluated.
- One's background, beliefs, and approach to evaluation have a significant impact on which outputs and knowledge elements one deems essential.

Implications for professional development.

Given that "it depends," perhaps people conducting evaluations really need a good basis in understanding the rationale of a variety of alternative approaches, in order to know which to apply when. In other words, being too specialized, or overly focused on a specific approach or methodology, can be a problem. When training people to conduct evaluations, CES should therefore ensure exposure to a variety of approaches, and build an awareness of their strengths and limitations. Evaluators would also benefit from training in how to deal with difficult choices and trade-offs.

We are still struggling to achieve a balance between specificity and manageability.

The benefits, outputs, and knowledge elements were interpreted differently by different people, in spite of the descriptions in the report. This is likely because they were stated in general terms. More precision in delineating the benefits, outputs, and knowledge elements would make it easier to determine the relationship between a given benefit and a given output, or between a given output and a given knowledge elements. For an example of this, see the last example in this annex, which shows a text-based exploration.

However, making the terms more precise would also result in a larger number of benefits, outputs, and knowledge elements. The sheer number of items would make the delineation of relationships a huge task. Finding a balance between specificity and manageability remains a challenge.

There are some knowledge elements that are important, even if they do not contribute to outputs. Some knowledge elements seemed to be crucial to an evaluation, but did not contribute directly to the outputs (for example, ethical behaviour or project management). We added a row at the bottom of the matrix where these knowledge elements could be recognized.

This exercise may be a useful planning tool within the context of a specific evaluation.

We believe that this exercise has some promise as a means of conducting a preliminary assessment of what is required for a particular evaluation. Indeed, at this stage, this is how we would recommend that it be used. Going through this exercise could help evaluators focus their thinking by guiding them through the following questions:

- What benefit is the client trying to gain?
- What other benefits are possible? (value-added)
- What outputs does the client require?
- What other outputs are possible? (value-added)
- What knowledge and skills are required to provide the benefits and outputs?
- Do we have the required knowledge and skills, or can we get it?

CES may be able to adapt the matrix as a tool for evaluators. Applied to specific evaluation case studies, the tool could also be useful in training new evaluators. This use of the matrix is consistent with what one of the reference panel members had suggested during the last phase of the reference panel discussions:

“All of the above purposes would seem to incline one to a more comprehensive list with encouragement to select from within the list according to purpose rather than a more limited, and dare I say, ‘precious’ list.”

Analysis of Relationships Between Outputs and Knowledge Elements¹⁵

Output under consideration: Recommendations on increasing cost effectiveness, i.e., reducing the cost of producing any given amount of any given type and quality of desirable outcome while reducing or holding constant the amount of any (unintended) undesirable outcome.

Benefit under consideration: More of the good outcomes AND/OR less of the undesirable outcomes produced by the program AND/OR dollar savings (which of course permit the purchase of more of other types of good outcomes).

Required Knowledge Elements:

- Ability to organize and facilitate QI improvement project teams (interpersonal skills, reporting skills, other communication skills, managing evaluation projects)
- Flow diagrams (critical thinking skills, understanding the program, systems theory etc.)
- Cause and effect diagrams (critical thinking skills, understanding the program, systems theory etc.)
- Pareto Analysis (critical thinking skills, understanding the program, systems theory etc.)
- Histograms (critical thinking skills, understanding the program, systems theory etc.)
- Scatter diagrams (critical thinking skills, understanding the program, systems theory etc.)
- Control charts (critical thinking skills, understanding the program, systems theory etc.)
- Brainstorming (critical thinking skills, understanding the program, systems theory, interpersonal communication, other communication)
- Data collection (research design, selecting appropriate data collection and analysis methods, effective practices in applied research, sampling, data collection methods, quantitative analysis, qualitative analysis)

¹⁵ Prepared by Bud Long

Annex: Exploring Relationships

Outputs x Knowledge Elements Matrix

Benefit: Evaluation can support accountability for program performance and spending

Prepared by Martha McGuire		Knowledge Elements (page 1 of 2)											
		Ethics		Evaluation Planning and Design									
		Ethical conduct	Competence and quality assurance	Understanding the program	Assessing readiness for the evaluation	Focusing the evaluation	Systems theory, organizational development, and change	Specific types of evaluation	History of evaluation, evaluation theory, and evaluation models	Research design	Constructing meaning	Selecting appropriate data collection and analysis methods	Effective practices in applied research
Output x benefit relationship	Outputs												
	Needs Assessment												
	Description of unmet needs												
	Evaluability Assessment												
	Description of program design and logic												
	Articulation of standards for performance or criteria for success												
	Description of the context of the program												
	Determination of readiness for/appropriateness of evaluation												
	Process Evaluation												
2	Description of program implementation	2	2	2	1	1	2				2	2	2
2	Comparison of actual events with the program plan or performance standards	2	2	2	1		2				2	1	2
2	Explanations of why implementation has deviated from the plan	2	2	2	1	2	2				2	2	2
	Outcome/Impact Evaluation												
2	Description of program outcomes	2	2	2		2	2				2	2	2
2	Identification of unexpected/unwanted outcomes	2	2	2		2	2				2	2	2
2	Attributions linking outcomes to specific interventions	2	2	2		2	2				2	2	2
2	Identification of factors that affect the effectiveness of an intervention	2	2	1		2	2				2	2	2
2	Determination of merit or worth	2	2	2		2	2				2	2	2
	Efficiency Assessment												
2	Description of program costs	2	2	1		2					2	2	2
2	Estimation of the value of program outcomes	2	2	2		2					2	2	2
2	Comparison of value for money	2	2	1		2					2	2	2
	Stakeholder Involvement												
2	Involvement of stakeholders in some or all evaluation activities	2	2	1			1				2	1	
2	Integration of the evaluation with the customs of the stakeholders' or the program's culture	2	2	2			1				2	1	
2	Consultation with stakeholders to solicit their views of the program	2	2	1			1				2	1	
2	Sharing of results with stakeholders	2	2	2			1				2	1	
2	Positive relationships between the evaluator and the program stakeholders	2	2	2			1				2	1	
2	New partnerships	2	2	1			2						
2	On-the-project training in evaluation for program managers and other stakeholders	2	2	1			1					1	
	General												
2	Evaluation tools	2	2	2		1			2		2	2	2
2	Identification of new questions about the program	2	2	2		1	2						
2	Suggestions of good practices	2	2	2		1	2						
	Recommendations												
	Knowledge elements not associated with specific outputs that would be important for carrying out the evaluation in a way that makes the benefit possible												

2 = Highly likely to be essential for a given evaluation
 1 = Somewhat likely to be essential for a given evaluation
 ? = It depends on the situation and who makes the decision

Outputs x Knowledge Elements Matrix

Benefit: Evaluation can support accountability for program performance and spending

		Knowledge elements (page 2 of 2)										
		Data Collection			Data Analysis and Interpretation				Communication and Interpersonal Skills			Proj Mng
Output x benefit relationship	Outputs	Sampling	Measurement issues	Data collection methods	Qualitative analysis	Quantitative analysis	Determining merit or worth	Critical thinking skills	Interpersonal skills	Reporting skills	Other communication skills	Managing evaluation projects
		Needs Assessment										
	Description of unmet needs											
	Evaluability Assessment											
	Description of program design and logic											
	Articulation of standards for performance or criteria for success											
	Description of the context of the program											
	Determination of readiness for/appropriateness of evaluation											
	Process Evaluation											
2	Description of program implementation		1	2	2	1	2	2	2	2	2	
2	Comparison of actual events with the program plan or performance standards		1	2	2	1	2	2	2	2	2	
2	Explanations of why implementation has deviated from the plan				2	1	2	2	2	2	2	
	Outcome/Impact Evaluation											
2	Description of program outcomes	2	2	2	1	2	2	2	2	2	2	
2	Identification of unexpected/unwanted outcomes	2	2	2	1	2	2	2	2	2	2	
2	Attributions linking outcomes to specific interventions			2	1	2	2	2	2	2	2	
2	Identification of factors that affect the effectiveness of an intervention			2	1	2	2	2	2	2	2	
2	Determination of merit or worth	2	2	2	1	2	2	2	2	2	2	
	Efficiency Assessment											
2	Description of program costs	1	2	2	1	2	2	2	1	2		
2	Estimation of the value of program outcomes	1	2	2	1	2	2	2	1	2		
2	Comparison of value for money	1	2	2	1	2	2	2	1	2		
	Stakeholder Involvement											
2	Involvement of stakeholders in some or all evaluation activities			2	2			2	2		2	
2	Integration of the evaluation with the customs of the stakeholders' or the program's culture			2				2	2		2	
2	Consultation with stakeholders to solicit their views of the program						2	2	2		2	
2	Sharing of results with stakeholders							2	2	2	2	
2	Positive relationships between the evaluator and the program stakeholders	2	2	2				2	2		2	
2	New partnerships							2	2		2	
2	On-the-project training in evaluation for program managers and other stakeholders							2	2		2	
	General											
2	Evaluation tools	2	2	2	2	2		2				
2	Identification of new questions about the program				2		2	2		2	2	
2	Suggestions of good practices				2			2	2	2	2	
	Recommendations											
	Knowledge elements not associated with specific outputs that would be important for carrying out the evaluation in a way that makes the benefit possible											2

2 = Highly likely to be essential for a given evaluation
 1 = Somewhat likely to be essential for a given evaluation
 ? = It depends on the situation and who makes the decision

Outputs x Knowledge Elements Matrix

Benefit: Evaluation can help one improve programs
 (Improving program implementation)

Prepared by Rochelle Zorzi		Knowledge Elements (page 1 of 2)														
		Ethics		Evaluation Planning and Design												
		Ethical conduct	Competence and quality assurance	Understanding the program	Assessing readiness for the evaluation	Focusing the evaluation	Systems theory, organizational development, and change	Specific types of evaluation	History of evaluation, evaluation theory, and evaluation models	Research design	Constructing meaning	Selecting appropriate data collection and analysis methods	Effective practices in applied research			
Output x benefit relationship	Outputs															
	Needs Assessment															
	Description of unmet needs															
	Evaluability Assessment															
2	Description of program design and logic			2		1	1	2					2		1	
2	Articulation of standards for performance or criteria for success			2		2	1	2				2	2		1	
2	Description of the context of the program			2		1	1	2					2		1	
1	Determination of readiness for/appropriateness of evaluation															
	Process Evaluation															
2	Description of program implementation			2		1	1	2					2		1	
2	Comparison of actual events with the program plan or performance standards			2		1		2				2	2		1	
2	Explanations of why implementation has deviated from the plan			2		1	1	2					2		1	
	Outcome/Impact Evaluation															
	Description of program outcomes															
	Identification of unexpected/unwanted outcomes															
	Attributions linking outcomes to specific interventions															
	Identification of factors that affect the effectiveness of an intervention															
	Determination of merit or worth															
	Efficiency Assessment															
	Description of program costs															
	Estimation of the value of program outcomes															
	Comparison of value for money															
	Stakeholder Involvement															
1	Involvement of stakeholders in some or all evaluation activities															
1	Integration of the evaluation with the customs of the stakeholders' or the program's culture															
2	Consultation with stakeholders to solicit their views of the program							1								1
2	Sharing of results with stakeholders			1				2								1
1	Positive relationships between the evaluator and the program stakeholders															
1	New partnerships															
	On-the-project training in evaluation for program managers and other stakeholders															
	General															
2	Evaluation tools															
1	Identification of new questions about the program															
1	Suggestions of good practices															
2	Recommendations	2	2	2				2				2				
	Knowledge elements not associated with specific outputs that would be important for carrying out the evaluation in a way that makes the benefit possible				2					1	1					2

2 = Highly likely to be essential for a given evaluation
 1 = Somewhat likely to be essential for a given evaluation
 ? = It depends on the situation and who makes the decision

Outputs x Knowledge Elements Matrix

Benefit: Evaluation can help one improve programs
 (Improving program implementation)

Prepared by Rochelle Zorzi

		Knowledge elements (page 2 of 2)										
		Data Collection			Data Analysis and Interpretation				Communication and Interpersonal Skills			Proj Mng
Output x benefit relationship	Outputs	Sampling	Measurement issues	Data collection methods	Qualitative analysis	Quantitative analysis	Determining merit or worth	Critical thinking skills	Interpersonal skills	Reporting skills	Other communication skills	Managing evaluation projects
		Needs Assessment										
	Description of unmet needs											
	Evaluability Assessment											
2	Description of program design and logic	1	2	2	2*		2				2	
2	Articulation of standards for performance or criteria for success	1	2	2	2*	2	2	2			2	
2	Description of the context of the program	1	2	2	2*		2				2	
1	Determination of readiness for/appropriateness of evaluation											
	Process Evaluation											
2	Description of program implementation	1	2	2	2*		2				2	
2	Comparison of actual events with the program plan or performance standards		2		2*	2	2				2	
2	Explanations of why implementation has deviated from the plan	1	2	2	2*		2				2	
	Outcome/Impact Evaluation											
	Description of program outcomes											
	Identification of unexpected/unwanted outcomes											
	Attributions linking outcomes to specific interventions											
	Identification of factors that affect the effectiveness of an intervention											
	Determination of merit or worth											
	Efficiency Assessment											
	Description of program costs											
	Estimation of the value of program outcomes											
	Comparison of value for money											
	Stakeholder Involvement											
1	Involvement of stakeholders in some or all evaluation activities											
1	Integration of the evaluation with the customs of the stakeholders' or the program's culture											
2	Consultation with stakeholders to solicit their views of the program							2			2	
2	Sharing of results with stakeholders							2	2		2	
1	Positive relationships between the evaluator and the program stakeholders											
1	New partnerships											
	On-the-project training in evaluation for program managers and other stakeholders											
	General											
2	Evaluation tools			2								
1	Identification of new questions about the program											
1	Suggestions of good practices											
2	Recommendations		2		2*	2	2	2	2	2		
	Knowledge elements not associated with specific outputs that would be important for carrying out the evaluation in a way that makes the benefit possible											2

2 = Highly likely to be essential for a given evaluation
 1 = Somewhat likely to be essential for a given evaluation
 ? = It depends on the situation and who makes the decision

*One of these two knowledge elements would be essential

Annex: Exploring Relationships

Outputs x Knowledge Elements Matrix

Benefit: Evaluation can be used to support pluralism and democracy

Prepared by Burt Perrin		Knowledge Elements (page 1 of 2)															
		Ethics		Evaluation Planning and Design													
		Ethical conduct	Competence and quality assurance	Understanding the program	Assessing readiness for the evaluation	Focusing the evaluation	Systems theory, organizational development, and change	Specific types of evaluation	History of evaluation, evaluation theory, and evaluation models	Research design	Constructing meaning	Selecting appropriate data collection and analysis methods	Effective practices in applied research				
Output x benefit relationship	Outputs																
	Needs Assessment																
2	Description of unmet needs	2		2		2											
	Evaluability Assessment																
	Description of program design and logic																
	Articulation of standards for performance or criteria for success																
1	Description of the context of the program																
	Determination of readiness for/appropriateness of evaluation																
	Process Evaluation																
2	Description of program implementation	2		2													
	Comparison of actual events with the program plan or performance standards																
?	Explanations of why implementation has deviated from the plan	2		2	1		2			2							
	Outcome/Impact Evaluation																
?	Description of program outcomes	2		2	2	1	2			1							
2	Identification of unexpected/unwanted outcomes	2		2	2	2	2	2									
	Attributions linking outcomes to specific interventions																
1	Identification of factors that affect the effectiveness of an intervention																
	Determination of merit or worth																
	Efficiency Assessment																
	Description of program costs																
	Estimation of the value of program outcomes																
	Comparison of value for money																
	Stakeholder Involvement																
2	Involvement of stakeholders in some or all evaluation activities	2		2	2	2	1	2	1	2	2	2					
2	Integration of the evaluation with the customs of the stakeholders' or the program's culture	2		2		2	2	2	1	2	2	2					
2	Consultation with stakeholders to solicit their views of the program	2			2	2	2	2	1	2	2	2					
2	Sharing of results with stakeholders	2					2		1		2	2					
2	Positive relationships between the evaluator and the program stakeholders	2		2		2	1	1		2	2	2					
2	New partnerships	2					2					2					
1	On-the-project training in evaluation for program managers and other stakeholders																
	General																
	Evaluation tools																
2	Identification of new questions about the program	2		2		2	2	2				2					
	Suggestions of good practices																
	Recommendations																
	Knowledge elements not associated with specific outputs that would be important for carrying out the evaluation in a way that makes the benefit possible																

2 = Highly likely to be essential for a given evaluation
 1 = Somewhat likely to be essential for a given evaluation
 ? = It depends on the situation and who makes the decision

Outputs x Knowledge Elements Matrix

Benefit: Evaluation can be used to support pluralism and democracy

		Knowledge elements (page 2 of 2)										
		Data Collection			Data Analysis and Interpretation				Communication and Interpersonal Skills			Proj Mng
Output x benefit relationship	Outputs	Sampling	Measurement issues	Data collection methods	Qualitative analysis	Quantitative analysis	Determining merit or worth	Critical thinking skills	Interpersonal skills	Reporting skills	Other communication skills	Managing evaluation projects
		Needs Assessment										
2	Description of unmet needs							2	2	2	2	2
	Evaluability Assessment											
	Description of program design and logic											
	Articulation of standards for performance or criteria for success											
1	Description of the context of the program											
	Determination of readiness for/appropriateness of evaluation											
	Process Evaluation											
2	Description of program implementation							1	2	2	2	2
	Comparison of actual events with the program plan or performance standards											
?	Explanations of why implementation has deviated from the plan							2	2	2	2	2
	Outcome/Impact Evaluation											
?	Description of program outcomes											
2	Identification of unexpected/unwanted outcomes							2	2	2	2	2
	Attributions linking outcomes to specific interventions											
1	Identification of factors that affect the effectiveness of an intervention											
	Determination of merit or worth											
	Efficiency Assessment											
	Description of program costs											
	Estimation of the value of program outcomes											
	Comparison of value for money											
	Stakeholder Involvement											
2	Involvement of stakeholders in some or all evaluation activities						2	2	2	2	2	2
2	Integration of the evaluation with the customs of the stakeholders' or the program's culture						2	2	2	2	2	2
2	Consultation with stakeholders to solicit their views of the program						2	2	2	2	2	2
2	Sharing of results with stakeholders						2	2	2	2	2	2
2	Positive relationships between the evaluator and the program stakeholders						2	2	2	2	2	2
2	New partnerships								1	1	1	1
1	On-the-project training in evaluation for program managers and other stakeholders											
	General											
	Evaluation tools											
2	Identification of new questions about the program							2	2	2	2	2
	Suggestions of good practices											
	Recommendations											
	Knowledge elements not associated with specific outputs that would be important for carrying out the evaluation in a way that makes the benefit possible											

2 = Highly likely to be essential for a given evaluation
 1 = Somewhat likely to be essential for a given evaluation
 ? = It depends on the situation and who makes the decision

Outputs x Knowledge Elements Matrix

Benefit: _____

Output x benefit relationship		Knowledge Elements (page 1 of 2)											
		Ethics		Evaluation Planning and Design									
		Ethical conduct	Competence and quality assurance	Understanding the program	Assessing readiness for the evaluation	Focusing the evaluation	Systems theory, organizational development, and change	Specific types of evaluation	History of evaluation, evaluation theory, and evaluation models	Research design	Constructing meaning	Selecting appropriate data collection and analysis methods	Effective practices in applied research
Outputs													
	Needs Assessment												
	Description of unmet needs												
	Evaluability Assessment												
	Description of program design and logic												
	Articulation of standards for performance or criteria for success												
	Description of the context of the program												
	Determination of readiness for/appropriateness of evaluation												
	Process Evaluation												
	Description of program implementation												
	Comparison of actual events with the program plan or performance standards												
	Explanations of why implementation has deviated from the plan												
	Outcome/Impact Evaluation												
	Description of program outcomes												
	Identification of unexpected/unwanted outcomes												
	Attributions linking outcomes to specific interventions												
	Identification of factors that affect the effectiveness of an intervention												
	Determination of merit or worth												
	Efficiency Assessment												
	Description of program costs												
	Estimation of the value of program outcomes												
	Comparison of value for money												
	Stakeholder Involvement												
	Involvement of stakeholders in some or all evaluation activities												
	Integration of the evaluation with the customs of the stakeholders' or the program's culture												
	Consultation with stakeholders to solicit their views of the program												
	Sharing of results with stakeholders												
	Positive relationships between the evaluator and the program stakeholders												
	New partnerships												
	On-the-project training in evaluation for program managers and other stakeholders												
	General												
	Evaluation tools												
	Identification of new questions about the program												
	Suggestions of good practices												
	Recommendations												
	Knowledge elements not associated with specific outputs that would be important for carrying out the evaluation in a way that makes the benefit possible												

- 2 = Highly likely to be essential for a given evaluation
- 1 = Somewhat likely to be essential for a given evaluation
- ? = It depends on the situation and who makes the decision

Outputs x Knowledge Elements Matrix

Benefit: _____

		Knowledge elements (page 2 of 2)										
		Data Collection			Data Analysis and Interpretation				Communication and Interpersonal Skills			Proj Mng
Output x benefit relationship	Outputs	Sampling	Measurement issues	Data collection methods	Qualitative analysis	Quantitative analysis	Determining merit or worth	Critical thinking skills	Interpersonal skills	Reporting skills	Other communication skills	Managing evaluation projects
		Needs Assessment										
	Description of unmet needs											
	Evaluability Assessment											
	Description of program design and logic											
	Articulation of standards for performance or criteria for success											
	Description of the context of the program											
	Determination of readiness for/appropriateness of evaluation											
	Process Evaluation											
	Description of program implementation											
	Comparison of actual events with the program plan or performance standards											
	Explanations of why implementation has deviated from the plan											
	Outcome/Impact Evaluation											
	Description of program outcomes											
	Identification of unexpected/unwanted outcomes											
	Attributions linking outcomes to specific interventions											
	Identification of factors that affect the effectiveness of an intervention											
	Determination of merit or worth											
	Efficiency Assessment											
	Description of program costs											
	Estimation of the value of program outcomes											
	Comparison of value for money											
	Stakeholder Involvement											
	Involvement of stakeholders in some or all evaluation activities											
	Integration of the evaluation with the customs of the stakeholders' or the program's culture											
	Consultation with stakeholders to solicit their views of the program											
	Sharing of results with stakeholders											
	Positive relationships between the evaluator and the program stakeholders											
	New partnerships											
	On-the-project training in evaluation for program managers and other stakeholders											
	General											
	Evaluation tools											
	Identification of new questions about the program											
	Suggestions of good practices											
	Recommendations											
	Knowledge elements not associated with specific outputs that would be important for carrying out the evaluation in a way that makes the benefit possible											

2 = Highly likely to be essential for a given evaluation
 1 = Somewhat likely to be essential for a given evaluation
 ? = It depends on the situation and who makes the decision