Using Action Research to Build Evaluation Capacity in Public Health Organizations

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**Background:** New practice standards in Ontario require the ongoing evaluation of public health programs. However, public health units have limited capacity to conduct and use evaluations.

**Purpose:** The purpose of this study was to assess an action research approach as a means to build evaluation capacity in public health units.

**Setting:** 36 Canadian public health units in Ontario.

**Intervention:** Action research for evaluation capacity building.

**Research Design:** Multiple-case study.

**Data Collection and Analysis:** Qualitative, semi-structured interviews were held with study participants after the design and implementation of evaluation capacity building strategies in their organizations. Analysis was conducted using the general inductive approach (Thomas, 2006).

**Findings:** Evaluation capacity building is well-supported by an action research approach.

**Keywords:** evaluation capacity building, evaluation of public health programs, action research.
Introduction

In Ontario, 36 community-based Public Health Units (hereafter "health units") deliver programs and services focusing on health promotion and the prevention of chronic diseases. These health units are grouped under the Public Health Ontario banner and are overseen by the Ontario Ministry of Health and Long-Term Care. Public health units are required to evaluate their programs and services under the Foundational Standard of the Ontario Public Health Standards (MHLTC, 2017). These provincial standards aim to foster greater transparency, accountability and efficiency of the public health system. However, a recent study showed that health units experience various challenges in performing high-quality evaluations and in using evaluation findings for evidence-based decision-making:

Many of the health units [in Ontario] mentioned that evaluation findings are used to verify client satisfaction rather than monitoring program outcomes. Evaluation tends to serve accountability purposes and is not used in broader organizational decision-making (Bourgeois, Simmons, Hotte, & Osseni, 2016, p. 175).

These challenges echo those experienced by non-profit organizations more broadly and highlight the importance for health units to strengthen their evaluation capacity, defined as the structures and organizational processes that support and promote evaluative thinking in operations and program delivery. Although a significant body of research on evaluation capacity in government organizations has been developed over the last fifteen years, less systematic evidence is available on the evaluation capacity of non-profit organizations, with the bulk of the research based on descriptive case studies and small samples (Carnochan et al., 2014; Despard, 2016; Henry & Mark, 2003). These studies reveal that in general, non-profit organizations have limited capacity that hinder their efforts to meet accountability demands and improve programs; further, the outcome measures and other evaluation requirements imposed by funders tend to complicate the efforts of non-profits and reduce their ability to respond effectively to questions related to program outputs and outcomes (Rey-Garcia et al., 2017). Given their organizational structure, Ontario public health units share many of these challenges; in effect, they are required to undertake evaluation activities on their own to meet the requirements of the Ministry, their main funder. Such challenges include, for example, a lack of administrative and performance data from which evaluations can draw (Mitchell & Berlan, 2016; Rey-Garcia et al., 2017), a lack of basic knowledge of evaluation and social research methods (Despard, 2016); insufficient time, people and financial resources to carry out evaluations (Buetti et al., 2018; Carman & Fredericks, 2010; Michell & Berlan, 2016); a lack of technical tools needed for evaluation (Andrews et al., 2005; Carnochan et al., 2015); a lack of interest from managers and board members (Mitchell & Berlan, 2016), and a lack of organizational policies and processes that integrate evaluation into the activities of the organization (Carman & Fredericks, 2010; Carnochan et al., 2015).

In 2014, Public Health Ontario funded a research project aiming to improve the quality of evaluations conducted within health units and foster increased use of evaluation results towards decision-making. The research project was structured in three consecutive phases each with distinct objectives:

**Phase I:** Select an Evaluation Capacity Assessment Instrument for Ontario public health units. This phase involved a scoping review of the literature and led to the selection of an existing tool to measure evaluation capacity in health units.

**Phase II:** Measure capacity to do and to use evaluation across the health units. This phase focused on measuring evaluation capacity across the province. To do so, the Organizational Evaluation Capacity Self-Assessment Instrument (Bourgeois, Toews, Whynot, & Lamarche, 2013) was adapted to the specific context of the Ontario public health sector and administered to 32 health units. Key informant interviews were also conducted to provide contextual information and to support interpretation. Overall, findings for this phase indicated a generalized low level of capacity across the province and yielded potential strategies for
building evaluation capacity in the specific context of Ontario public health (Bourgeois, Simmons, Hotte, & Osseni, 2016).

**Phase III: Identify effective strategies to build evaluation capacity in public health units.** This phase involved a subset of 10 health units interested in designing and implementing their own Evaluation Capacity Building (ECB) strategies, and to monitor its outcomes over several months. An action research design was used to develop customized ECB strategies for each participating health unit, based on its specific context and needs as well as the results of Phase II. The ECB strategies implemented by the participating health units focused specifically on: a) leadership, b) organizational environment, c) building individual evaluation knowledge, skills and attitudes, and d) comprehensive organizational frameworks. The scope of the strategies ranged from targeting fewer than 10 individuals up to the entire organization. Most health units used a mixed-method design to assess the impact of their chosen strategy. This methodological approach also enabled monitoring and assessment of each strategy as it was implemented, based on a common set of reporting templates. The design, implementation, and reporting components lasted eight months in total. A multiple case study was used to analyze the findings from the 10 participating organizations and derive higher level findings. Additional data used in the multiple case studies were collected through semi-structured interviews with 13 health unit representatives (Bourgeois, Simmons, & Buetti, 2018).

The purpose of this paper is to reflect on the action research design used in the third phase of the project. More precisely, this paper aims to: (1) assess the participants’ appreciation of the action research design used by the researchers; and (2) identify personal and organizational learning outcomes that may have resulted from participating in the research project. Reflecting on this research design is particularly important and timely since a newly funded research project aiming to improve the evaluation capacity of chronic disease prevention in public health units is currently taking place in Ontario, indicating continued interest in ECB within the Ontarian public health sector (Propel, 2018). This paper will also inform other ongoing ECB initiatives across the voluntary and nonprofit sector. The paper is organized into four sections: First, a general description of the action research design will be provided; next, the methods used to collect data on this approach will be presented, and will be followed by a description of the findings. Finally, a discussion of the findings and their impact on future ECB projects will conclude this brief paper.

**Description of the Research Design Used to Develop and Implement ECB Strategies**

**Putting Evaluation into Action: An Action-Research Approach**

Action research involves a partnership between researchers and organizational members interested in studying and transforming organizations (Greenwood, Whyte, & Harkavy, 1993; Greenwood, 1994). More specifically, it seeks to engage individuals and organizations in a problem-solving process while creating knowledge through systematic data collection and analysis (Janzen et al., 2017). This requires taking a specific action (i.e. designing, implementing, and evaluating an ECB strategy) to impart change (i.e. to improve the quality of evaluations and make greater use of evaluation results) within the organization. By allowing for continuous adaptations throughout its implementation, action research can overcome the limitations of more traditional methods and enable continuous adaptation to changing organizational contexts: “using an action-reflection cycle helps to keep the implementation of change on track, as far as feasible, by involving the very people who will be affected by the change” (Sankaran, 2010, p. 3). In one study (Janzen et al., 2017), action research, compared to traditional approaches, offered at least three benefits for building evaluation capacity in a community-based organization: first, the process of strengthening evaluation capacity...
was driven by and for the organization, which enabled local knowledge to emerge; second, staff members developed new skills and knowledge by becoming active co-researchers, and third, stakeholders’ involvement in the research process resulted in better understanding and value of evaluation results for their future decision-making. For all of these reasons, action research was deemed to be a suitable approach to bring together researchers and practitioners in the development and implementation of ECB strategies in health units.

A Three-Stage Design to Support Health Units in Developing and Implementing ECB Strategies

The collaborative action research activities undertaken by researchers and practitioners were organized into three distinct stages, as shown in Figure I.

<table>
<thead>
<tr>
<th>Activities and Outputs</th>
<th>Short-Term</th>
<th>Medium-Term</th>
<th>Long-Term</th>
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<tbody>
<tr>
<td>Planning Ttwo-Day training in Action Research and in ECB.</td>
<td>Health unit representatives participating in the training session acquire and develop knowledge and competencies in action research and in ECB.</td>
<td>Participating health units extend their new knowledge and competencies and plan additional ECB strategies.</td>
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<td>Five worksheets on designing, implementing, and evaluating the intended ECB strategy.</td>
<td>Participants receive practical guidance on evaluation by using the worksheets throughout the design process.</td>
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<tr>
<td>A standardized implementation plan template for the intended ECB strategy.</td>
<td>Participants design a rigorous ECB strategy by completing the standardized implementation plan.</td>
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<tr>
<td>Planning Technical support to participants.</td>
<td>Participants implement their selected ECB strategy and receive ongoing technical and methodological support throughout the process.</td>
<td>Participating health units implement additional ECB strategies as required.</td>
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<tr>
<td>A standardized progress reporting template.</td>
<td>Participants complete the standardized progress reporting template and submit it to the research team.</td>
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<tr>
<td>Implementation A standardized final reporting template.</td>
<td>Participants complete the final reporting template and submit it to the research team.</td>
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<tr>
<td>One-day Knowledge Exchange Forum.</td>
<td>Participants attend the Knowledge Exchange Forum and learn valuable lessons in designing and implementing effective ECB strategies by sharing their experience and results with other participants.</td>
<td>Research knowledge on ECB strategies in public health informs future actions by health units and other stakeholders.</td>
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<tr>
<td>Final report and paper on combined results of study across health units.</td>
<td>Health units learn about other promising ECB strategies by reviewing the final report and other papers published by the research team.</td>
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Figure 1. Logic model of the action research project to build evaluation capacity (ECB) in Ontario’s public health units.
Planning Stage. The first phase of the project focused on bringing together practitioners and researchers in order to develop the required knowledge and skills to design a responsive ECB strategy. Twenty project team members (participants) attended a two-day workshop early on in the project’s lifecycle, to learn best practices in the design and implementation of ECB strategies, as well as action research approaches. The workshop featured presentations by experts in evaluation and program planning on different aspects of ECB and action research. Presentations focused on best practices in designing and implementing an ECB strategy, selecting an appropriate ECB strategy, engaging potential key stakeholders in building evaluation capacity, developing research questions and appropriate data collection methods. Following the presentations, small group discussions were held in order to identify potential barriers that may occur during the research process and to find strategies to overcome them. Group discussions were facilitated by the research team using practical worksheets on designing, implementing, and evaluating the ECB strategy. After the workshop, participants were asked to complete a standardized implementation plan. The implementation plan template contained different sections including a description of the selected ECB strategy, the key stakeholders involved, the research questions, the selected indicators and data sources, and the project work plan. Each of the completed implementation plans were reviewed by the research team to provide participants with suggestions and feedback as needed.

Implementation Stage. The participants implemented their health unit’s respective ECB strategy during the second stage of the project. Participants had approximately eight months to complete their projects. They were asked to keep track of any changes made in their initial implementation plan for research purposes. Ongoing technical support was provided during this phase by the Project Coordinator and academic researchers and largely consisted of brief conversations to work through implementation issues as well as the provision of further resources, such as guidance on the use of statistics in evaluation. After three months, participants were asked to complete a standardized progress report. The research team reviewed each of the completed progress reports to address challenges faced by participants and to identify solutions in a collaborative manner.

Evaluation and Dissemination Stage. At the end of the research project, participants were asked to complete a standardized final report. The final report template contained several sections detailing activities completed and outcomes, resources used, and challenges experienced during implementation. Results of the ECB strategies were shared among participating health units during a one-day Knowledge Exchange Forum. Additional qualitative and quantitative data were gathered for research purposes using semi-structured interviews and some health units also measured their overall evaluation capacity using the same instrument as in the first phase of the project. Best practices and lessons learned in building evaluation capacity were disseminated across health units by various reports, academic conferences, and one research paper (Bourgeois, Simmons, & Buetti, 2018).

Methods

Participant Selection and Characteristics

An invitation to participate in the third phase of the project was sent to all 32 public health organizations who had participated in the second phase. Each project team was comprised of two representatives who had evaluation-related responsibilities in their respective health unit. In some cases, these were full-time evaluation practitioners, in others they were program managers or epidemiologists. In some cases, the members of each project team varied over time, as individuals changed job assignments within their health unit or went on leave.

Methodological Approach

The study’s methodology was guided and framed by an interpretivist paradigm, which recognizes the value and importance of
participants’ lived experience and seeks to transfer the knowledge gained to other similar contexts. Six months following the submission of the final reports by participating health units, follow-up interviews were conducted to: (1) assess the participants’ appreciation of the action research design used by the research team; and (2) identify personal and organizational learning outcomes that may have resulted from their participation in the research project. The interviews sought to gather the respondents’ views on how their respective ECB strategies had been implemented, how the projects unfolded, what they perceived to be the key limitations and unexpected outcomes of the ECB strategies, as well as what they felt were facilitating factors in the implementation of the ECB strategy and any lessons learned along the way. Further questions focused on any activities conducted since the implementation of the ECB strategy that might also support evaluation capacity within their organization. In addition to these general questions, specific questions were also developed for each participating health unit in order to clarify the information received through the implementation, progress and final reports. These questions largely focused on more technical issues (e.g., What was the response rate to the post-intervention survey conducted by the health unit?). The responses collected through these more specific questions were used as part of the ECB strategy multi-case analysis. The informants in the study (n=10) were managers and staff members directly involved in the action research project. Telephone interviews, which lasted on average 45 minutes, were conducted by a graduate research assistant using a semi-structured interview guide. The interviewer was not directly involved with the ten informants during the action research process and received training prior to the interviews from the lead researcher, in addition to written materials. The authors received ethical approval from Public Health Ontario’s Ethics Review Board and the lead researcher’s university ethics committee (at the time, the ethics approval was provided by l’École nationale d’administration publique) before commencing and verbal consent was sought from each participant prior to the interview, as per the ethical approvals received. Respondents who wished to review their interview transcript were provided with the opportunity to do so, but this was not requested by most participants. The recordings were destroyed following transcription and the transcripts themselves will be secured in a password protected file for five years. The interview transcripts were analyzed using the procedures developed by Braun and Clarke (2006) for thematic analysis. Initial codes were generated from the data and subsequently categorized into themes and were generally aligned with the interview questions. The key themes, which are presented in the section below, were reflected upon and discussed within the research team (interviewer and lead researcher). The lead researcher’s experience with and knowledge of both the project and ECB theory were leveraged throughout the data analysis and interpretation in order to position the findings of this study within a broader body of literature and knowledge. The findings for the action research component of the study were communicated to research team members but were not communicated specifically to the study’s participants, since this latter component was not part of the ECB intervention project specifically. Details on how phase 3 results were shared with participants are available in Bourgeois, Simmons, and Buetti (2018).

Results

The interview findings are divided into two sections: (1) the participants’ appreciation of the action research design used by the research team; and (2) individual and organizational outcomes resulting of OPHUs’ participation in the study.

Participants’ Appreciation of the Action Research Design

Planning Stage. Overall, the participants greatly appreciated the activities used during the Planning Stage. They found the two-day workshop well structured, interactive, and well balanced in terms of presentations of theory and opportunities to discuss practice. Participants also appreciated having dedicated time during the workshop to develop their
health unit’s ECB strategy. Some participants reported that this activity had a positive impact on the designing process:

Having some time devoted to the workshop to actually plan our project was great, whereas as if we would have just come back to our health unit and try to do the work, I think we would have found it challenging to devote as much time as the workshop.—Informant 3

The workshop also provided a great opportunity to exchange and learn from other health units on ECB strategies and practices:

We really enjoyed connecting with other public health colleagues that were there, learning about the projects they were planning to do. It was a great sharing opportunity—Informant 1

It was good to bring all the health units together. Having other health units engaged in the discussion of what their ECB strategies might be, it was very helpful to hear.—Informant 5

For most participants, the worksheets provided were helpful in structuring the implementation process into realistic, specific tasks and objectives:

Maybe not every aspect of every worksheet worked for us, but they surely helped us organize the information and not lose sight of anything important that we needed to plan.—Informant 4

However, some participants found the training agenda too tightly packed. This feedback was addressed mostly by participants facing challenges when designing the ECB strategy:

It was cramming a lot into one session, and in terms of applying that knowledge and developing an evaluation plan right there, on the spot… it was kind of hard to do. We were dealing with a complex issue… I don’t think we got to a specific enough research question, which led us to issues with measurements later on. I think we would have been better suited to really refine our research question in that initial stage.—Informant 3

**Implementation Stage.** The participants responsible for implementing the ECB strategy in their health units received some support from researchers as needed. In most cases, this took the form of technical support. According to some respondents, however, this labour-intensive phase could have been better supported by researchers, especially given the limited human and material resources available within each health unit to implement ECB strategies. In addition, the overall project had fairly strict timelines imposed by the funder. This meant that participants had little time to properly implement their ECB strategy and to monitor organizational change over time:

We had to adjust our research question and methods. I felt like we had little time left to collect the information we needed. […] I guess the project wasn’t as rigorous as it could have been, because we were dealing with a tight timeline.—Informant 5

Finally, certain participants mentioned that they would have liked to continue sharing lessons learned and discussing their experiences with other participants throughout the implementation phase, especially given that some of the ECB strategies were similar or shared common elements.

**Evaluation and Dissemination Stage.** A one-day knowledge exchange forum was held at the end of the project to bring together once more the study participants as well as colleagues from other health units who had not participated in this phase of the project. The purpose of the event was to share project results and lessons learned. Each of the ten participating health units presented their ECB strategy and results over the course of the day. Group discussions were held on dissemination of the study’s findings to a larger audience, as well as on the possibility of developing a repository of ECB resources that could be shared by public health units across the province. Although the interviews did not specifically focus on this final stage of the project, overall participants stated that the knowledge exchange forum enabled them to learn about the other ECB strategies and to share lessons learned with one another.
**Action Research: Individual and Organizational Outcomes**

The second research question focused on the individual and organizational outcomes of the project. Individual outcomes cited by participants included the development of new knowledge and skills in evaluation, as well as building on existing competencies. The actual process of developing and implementing an ECB strategy contributed in some cases to increased evaluation and program planning skills. The project, as expected, also enabled participants to develop their knowledge about evaluation capacity building and how to foster quality evaluation practices in their own organization:

Sometimes, we’re doing an evaluation without really... without really taking the time to slow down and being thoughtful about what we are doing. It was a good reminder of being more thoughtful of the impacts of an intervention by putting a good evaluation plan into place.— Informant 4

The participants also observed organizational outcomes; one of these included broader organizational buy-in and support for evaluation that the project required:

By being part of the research project, we were really able to reinforce the management buy-in for evaluation. They have prioritized this [evaluation].— Informant 7

Other outcomes cited by participants included creating a unique momentum for building evaluation capacity and keeping the health units accountable for the implementation of their strategy. In addition, the flexibility offered by the action research design enabled the participants to modify their approach over time, based on the feedback received from other organizational members:

We were able to collect the data and act on it as we were moving along the process. I do think it [action research] had in here the flexibility and the ability needed to adapt the strategy as we moved into the process.—Informant 6

**Discussion and Concluding Remarks**

The purpose of this paper was to reflect on the action research design used to support ten health units in designing and implementing effective ECB strategies. To do so, we conducted interviews with the participants responsible for these strategies. Results show that overall, the action research approach was effective in providing sufficient flexibility to each health unit, while supporting participants throughout the development and implementation process. Participants appreciated the opportunity to meet twice, once at the outset of the project, and once at the end. Beyond the ECB strategies themselves, the action research design fostered individual and organizational outcomes, such as increased knowledge and skills related to evaluation, and stronger organizational buy-in for evaluation. These outcomes support the use of action research as an ECB mechanism, and also support the findings of another study conducted in a community-based organization located in Ontario (Janzen et al., 2017). However, participants would have appreciated a longer implementation period as well as more proactive support from researchers over the course of this period. Therefore, although the planning workshop and the worksheets made available to participants were helpful, some participants may have benefitted from further support throughout the project, including during the implementation phase. A more proactive approach (as opposed to being available to participants on an ad hoc basis) may have been considered to be more supportive by participants and would be recommended in the future. In addition, an ongoing community of practice where participants can share their experiences as they implement their ECB strategies would further support participants and reduce the feeling of responsibility and isolation experienced by some.

Overall, the findings of the study support both direct and indirect forms of ECB by suggesting an approach that can be customized to the specific needs of the organization. Direct ECB refers to training in
evaluation, while indirect ECB refers to changes in organizational systems and structures to facilitate the production of quality evaluation and its use (Cousins, Goh, Clark and Lee, 2004). The two workshops held at the beginning and at the end of this phase of the project provided opportunities for direct ECB: the first workshop provided participants with training on action research and evaluation capacity, both of which can be integrated into an ongoing evaluation practice; the second workshop provided guidance and examples of ECB and lessons learned throughout the project and the lessons learned may be applicable to other public health units or non-profit organizations. In addition to the two workshops, the technical support provided by the research team also helped participants gain new knowledge and skills related to research and evaluation, which also aligns with indirect ECB. This study confirms previous findings that building evaluation capacity and thinking about evaluation more broadly require a greater understanding of evaluation principles, approaches and methods, as well as clear, manageable strategies that can be implemented and monitored locally (Preskill & Boyle, 2008; Taylor-Powell & Boyd, 2008; Volkov, 2008; Norton et al., 2016).

The findings of this study illustrate the potential usefulness of an action research approach in evaluation capacity building. However, the study does have certain limitations that must be considered when interpreting the findings: first, some participants had difficulty remembering their experience over the course of the project, since it happened over several months; second, the findings are based on the retrospective perceptions of participants rather than on more objective measures; finally, the interviews could have also addressed the third stage of the project in more detail. Our advice to evaluators engaged in ECB includes providing ongoing technical support throughout the implementation of the strategy, taking into account available organizational resources and time, and estimating longer periods of implementation that enables a more flexible approach that can be adapted to changing organizational contexts as necessary.

References


