

# Why a Focus on Integration and Complex Mixed Methods Evaluation Designs?: Introducing this Special Issue of the *Canadian Journal of Program Evaluation*

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The usefulness of complex mixed methods evaluation designs is well established (e.g., [Creswell & Plano Clark, 2018](#)), and evaluators and researchers of evaluation continue to benefit from illustrative examples that demonstrate methodological nuances and transparency in their descriptions. This special issue, replete with such illustrative examples, offers practical “how to” guidance to leverage authors’ experiences for others to learn from. By making explicit both the challenges faced and the lessons learned, the real-world descriptions contribute much-needed practical guidance for those involved in planning, conducting, and representing the requisite integration of qualitative and quantitative data within mixed methods evaluations ([Creswell & Plano Clark, 2018](#)). In so doing, we continue to advocate for the added value of the insights generated from integration in mixed methods evaluations ([Mertens & Tarsilla, 2015](#)), as well as to acknowledge the challenges faced when working under complex conditions ([Poth, 2018a](#))

*Complex* is a term used in the literature to describe conditions characterized by unpredictable outcomes and “high uncertainty and high social conflict . . . [;] so many factors and variables are interacting, many of them are not only unknown but *unknowable*” ([Patton, 2011](#), p. 90). Complex conditions in mixed methods evaluations are often characterized as having unknowable outcomes generated using yet-to-be-known integration strategies ([Poth, 2018b](#)). A range of illustrative examples were purposefully sought to be representative of a range of geographical locations, evaluator configurations, and evaluation purposes. A common thread is that the evaluators needed to navigate the complex contextual circumstances in which their evaluations took place and to provide evidence that their use of mixed methods generated insights that would have been inaccessible by either qualitative or quantitative research alone. We hope readers take away the fact that there is no recipe to be followed and that how evaluators managed their complex mixed methods designs is at the heart of this issue.

We hear the desire to use mixed methods in evaluations. We hear it in our roles as evaluators, as instructors of evaluation courses and workshops, and as

researchers of evaluation. Furthermore, mixed methods are stipulated as an appropriate methodological option in our Canadian evaluation technical practice competency 2.6 (CES, 2018). Yet access to opportunities remains limited for gaining expertise to develop, implement, and integrate mixed methods in our evaluation practice. Describing how evaluators integrate the qualitative and quantitative data, represent the integrated evidence, and describe the meta-inferences within their complex mixed methods designs is essential to enhance the quality of mixed methods evaluations in practice (e.g., Fàbregues & Molina-Azorín, 2017, 2021; Mertens, 2018). This special issue aims to do just that.

The desired quality of transparency in mixed methods evaluation designs is naturally enhanced by illustrative examples where evaluators and evaluation researchers share accounts of their lived experiences and, in doing so, liberate us from any (unrealistic) expectations of being omniscient in how our evaluation studies unfold (Poth, 2018a). Providing authentic interpretations of the effects of and responses to conditions of complexity has important implications for developing evaluators' mixed methods capacity to manage complex processes and outcomes. Enhancing our capacity for complex mixed methods evaluations is necessary to meet the demand for designs that can harness the infinite possibilities in which we engage in evaluations. We invite you to enhance your understanding of integration within complex mixed methods evaluation with the detailed accounts from around the world that are presented in this issue. We are pleased to introduce four articles detailing complex mixed methods designs, four practice notes presenting practical insights, three book reviews, and a closing commentary—pieces of interest to both researchers and practitioners.

The opening article by MacGregor and Cooper provides a balanced perspective of the opportunities and challenges they experienced with mixed methods integration in the context of conducting developmental evaluations with diverse education stakeholders in Ontario. Those who have been intrigued by the work of Patton (2011) in applying developmental evaluation under complex conditions and recently updated guidance by Gamble et al. (2021) will find MacGregor and Cooper's descriptions of complexity useful for negotiating the innumerable choices faced by evaluators and collaborators utilizing mixed methods approaches.

Gokiert and colleagues in western Canada advance the use of a community-based participatory convergent mixed methods design to identify three mixed insights about the evaluation capacity needs of the early childhood development field. This article will be of interest to those seeking an example of joint visual display to bring qualitative and quantitative data together visually to draw out new insights (Guetterman et al., 2015).

The third article by Musoke and colleagues details the role of mixed methods in evaluating the complexities inherent to the development and initial offering of a massive open online course (MOOC) that aimed to develop mixed methods capacity. The exploration of the levels of integration woven across the cycles of a multi-phase mixed methods approach will be of interest to those considering the use of mixed methods in real world evaluations of educational and social innovations (Bamberger & Mabry, 2020).

In the final article, Biru and colleagues describe integrating data across a largely retrospective mixed methods design aligned with the principles of evaluating complexity to evaluate a portfolio-level global health program. They identify the importance of systematic integration where diverse deliverables reflect the breadth of the program and involvement of many stakeholders. Those looking to integrate innovative data sources within a fully-integrated mixed methods approach (Creamer, 2018) will find this a must-read.

As well as articles, this issue includes four practice notes. Each of the practice notes offers insights into different aspects of the mixed methods evaluation process. Our first practice note by Ramanujan and colleagues details a sampling strategy from a mixed methods evaluation in rural India. Their work explores complexity by combining a randomized controlled trial of 400 villages with embedded case studies in four villages. By providing a rationale for their process and offering insights important for navigating the vast choices of selection criteria in complex, multi-site evaluations, these authors extend our understandings of the importance of sampling strategies in mixed methods evaluations. Within the eastern Ontario context in our second practice note, Searle and colleagues describe the successes and challenges encountered using mixed methods within a collaborative approach to evaluation in education (Shulha et al., 2016). They examine the complexity of responding to varied stakeholder groups, including leaders from multiple districts, community members, and youth, who are working together toward the improvement of mental health and well-being supports within school systems. In the third practice note, Mahato and colleagues illustrate how a mixed methods approach catalyzes capacity building for evaluation within complex higher education contexts in the United States and addresses how the chronically limited availability of resources plays a role in inhibiting evaluations. The authors suggest that the integration of mixed methods has the power to infuse evaluative thinking into higher education culture. Hou, in our final practice note, reports the use of a competency-based mixed methods assessment tool for service-learning courses occurring within the United States. The integration of qualitative and quantitative information in this assessment tool provides further evidence of changes in competency development that can be leveraged by learners and the field over time.

Closing out this issue, we are pleased to present three book reviews related to mixed methods texts, as well as a commentary. Each review is led by a graduate student—Worthington, Bachan, and Melendez—and provides a peek into a practical how-to resource from established experts. Reviewers have noted the attention to integration in each of these mixed methods texts.

Dr. Timothy Guetterman brings extensive expertise in evaluation and mixed methods research with particular emphasis on integration to a closing commentary for this issue, for which we are deeply appreciative. The commentary discussion provides a reflection on the contributions in this special issue with a recognition that evaluators are in a unique position to future develop integration. Guetterman closes by offering four challenges to evaluators interested in leveraging integration and developing techniques to advance mixed methods practice in evaluation.

We hope this special issue advances efforts in the field of evaluation as we embrace the messiness inherent in real-world, complex, mixed methods evaluation designs. We all know, and perhaps the COVID-19 global pandemic helped us to recognize, that even the most careful of evaluation plans can go awry because of unpredictable influences. We applaud the authors of the pieces in this issue, who, along with others in the field of evaluation, are bringing lessons learned about integrating mixed methods into mainstream conversations (Hutchinson, 2019). The importance of methodological sharing is highlighted by Patton in the foreword of a recent publication: “we can keep this learning to ourselves, or we can choose it to share it with others when we’re ready” (Hutchinson, 2019, p. xvii). We encourage evaluators to advance the further detailing of “messiness” in evaluation education as well as planning, implementing, and reporting as appropriate and necessary when pursuing complex problems. There exists a demonstrated need for recognizing and responding to “the inherent complex, dynamic, and undetermined nature of mixed methods research practice” in evaluation (Plano Clark & Ivankova, 2016, pp. 276–277). Our hope is that this special issue contributes to this ongoing dialogue.

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