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To cite this article: Ser Ming Mark Lee & Wei Cheng Liu (2024) Programme evaluation in action: theory to practice from an Asian educational context, Asia Pacific Journal of Education, 44:3, 569-581, DOI: [10.1080/02188791.2024.2355306](https://doi.org/10.1080/02188791.2024.2355306)

To link to this article: <https://doi.org/10.1080/02188791.2024.2355306>



Published online: 09 Oct 2024.



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Programme evaluation in action: theory to practice from an Asian educational context

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ABSTRACT

Programme evaluation has developed tremendously over the past 50 years, with a proliferation of evaluation research, an increase in the institutionalization of evaluation, and growth in the professionalization of evaluation. However, existing research and developments are still largely in North America, Europe, Australia, and New Zealand, with less from Asia. As theory building of policy and programme evaluation practices necessarily occur within specific political, economic, and cultural contexts, the applicability of Western-centric evaluation literature in Asian contexts warrants further examination. In this article, we explore the interconnections between evaluation theory, evaluation policy, and evaluation practice in the Ministry of Education Headquarters (MOE-HQ) in Singapore. We describe our theory of change of how evaluation theory influenced evaluation practice from the ground-up at the *micro* (individual) level, and from the top-down at the *meso* (organization) level. In the process, we also discuss how common challenges and tensions in evaluation (e.g., evaluation as an accountability vis-à-vis learning tool; appropriateness of randomized controlled trials vis-à-vis other approaches) acted out and were mitigated. We conclude with our learning points and implications for future research.

ARTICLE HISTORY

Received 2 August 2023
Accepted 8 May 2024

KEYWORDS

Programme evaluation;
educational evaluation;
evaluation theory; evaluation
policy; government;
organizational development

Introduction

There has been a proliferation of evaluation systems and practices in government and non-government sectors across Asian countries including Singapore. This presents an opportunity for evaluators and evaluation scholars in Asia to share their perspectives and contribute to the field of programme evaluation. This paper focuses on the interconnections between *evaluation theory*, *evaluation policy*, and *evaluation practice* based on the authors' experiences of how these three aspects interacted and were operationalized in the Ministry of Education Headquarters (MOE-HQ) in Singapore over a period of 20 years.

Singapore's education system

Singapore is a small island city-state of 718.3 sq.km located in Southeast Asia with a multi-ethnic population of 5.92 million consisting of 74% Chinese, 13.5% Malays, 9.0% Indians, and 3.4% of others (Singapore Department of Statistics, 2023). Singapore is well regarded for its high standards of governance and administration (Jones, 2016), relatively low levels of corruption (Quah, 2018) and high-performing education system. Pragmatism is a notable characteristic of its culture and political system and a key to its success. Since gaining independence in 1965, Singapore has overcome

significant challenges to become a prosperous and stable nation. In tandem, Singapore's education system has undergone several developmental transformations (e.g., Goh & Gopinathan, 2008; Kwek et al., 2023). Broadly, Singapore's education system has evolved from a "survival-driven education" during industrialization (1965–1978), to "efficiency-driven education" (1979–1996), to being "ability-based and aspiration-driven" (1997–2011), to "student-centric and values-driven" in the innovation-driven stage (2012–2019), and now into the "learning for life" future economy stage (2020 to present) (Ministry of Education, 2023b). The current focus is to "nurture the whole child and develop them into lifelong learners, with an enduring core of competencies to thrive in the 21st century" (Ministry of Education, 2023a). It now provides a compulsory six-year primary education followed by a diversity of secondary, post-secondary and tertiary institutions and educational pathways.

In Singapore, the Ministry of Education (MOE) oversees the strategic planning and implementation of national educational policies, curriculum, pedagogy, and assessment. Although largely centralized, MOE-funded schools do enjoy significant autonomy to tailor national policies and programmes to their local needs, with MOE-HQ providing oversight and guidance to ensure coherence and alignment with national goals (Ng et al., 2020). MOE is led by elected political heads and staffed with public officers across a range of divisions and groups in MOE-HQ. They serve a variety of key functions from shaping and effecting the national curriculum, driving application of technology to support teaching and learning, human resource policies, etc. (Ministry of Education, 2024). Many of the public officers are teachers with experience teaching in Singapore schools. Educational policies and programmes are often developed through deliberations involving various stakeholders and oftentimes involve the conduct of pilot studies. At any one time, there are multiple policies and programmes across a variety of areas, being designed, piloted, implemented, expanded, closed, etc. It is within this context that programme evaluation is increasingly being called upon to inform decision making.

Programme evaluation in MOE-HQ

Programme evaluation within MOE-HQ has undergone a significant evolution from the bottom-up. At the turn of the century, lacking a formal evaluation policy or structural framework, evaluation activities were still largely sporadic in nature. Predictably, there was often resistance to the introduction of programme evaluation, stemming from concerns such as fear of judgement and increase in workload. However, through persistent efforts by management and groups of officers to advocate for evaluation, a shift towards fostering a dynamic research and evaluation culture within MOE-HQ began to take shape and conduct of programme evaluation became more regular. It was only recently that programme evaluation has been increasingly institutionalized in MOE-HQ. This is in contrast with a top-down approach in other organizations where evaluation is not typically conducted but evaluation policies are imposed from the top-down (Stockmann, Meyer, & Taube, 2020). This bottom-up approach is a distinctive feature that underscores our journey and influences our theory of change which examines MOE-HQ's transformation from an individual (micro) to organizational (meso) perspective, rather than from the organizational to individual. This contextual foundation sets the stage for the subsequent discussion, providing insight into the distinctive path that MOE-HQ has taken in shaping its evaluation practices.

Currently, programme evaluation is conducted in MOE-HQ to (a) improve programme design, implementation, and resource allocation, and (b) to assess programme effectiveness. The evidence and information gathered through the evaluation is used to inform "course-correcting" decisions to programmes during implementation, the next phase or iteration of programmes (e.g., to continue, scale up, or discontinue prototype/pilot programmes), and resource prioritization and optimization. In addition, other than for evaluation purposes, evaluation tools such as theory of change and logic models are used to strengthen concept proposals and support business cases. Most evaluations in MOE-HQ are conducted internally by staff who are in-charge of the programmes – who we will refer to as "programme owners" henceforth – with

occasional involvement of external evaluators. These programme owners include officers who are specialists in their respective key functions, many of whom have fundamental research and evaluation capabilities.

There is also a dedicated and independent unit of evaluation specialists in MOE-HQ that was set up 15 years ago, of which we, the authors, are a part of. Initially, the unit was tasked with conducting evaluation studies as an “internal-external” evaluator, but our role has since evolved as the evaluation capabilities of the programme owners increased and evaluation culture in MOE became more pervasive and ingrained. We now lead efforts to strengthen evaluation in MOE through implementing evaluation policies and frameworks, conducting system-level evaluations, providing technical evaluation support for programme owners, and driving evaluation capacity building efforts. We are part of a larger division that is separate from the programme owners and do not have any vested interest in the programmes. Hence, we provide a more independent perspective on evaluation matters relating to the programmes. We have been involved in many aspects of the evolution of evaluation in MOE-HQ and have witnessed first-hand the key developments of programme evaluation in “action” from the bottom-up. It is from this perspective that we have written this paper.

Evaluation theory, evaluation policy, and evaluation practice

In this paper, we define *evaluation theory* as prescriptive models, approaches, steps, guidelines, etc. that specifies how an evaluation could and/or should be conducted (Alkin, 2023), and expand it to include evaluation capacity building theories. Christie and Alkin’s (2023) evaluation theory tree was a major influence on our thinking, so we will describe it in more detail here. The evaluation theory tree is a framework that depicts the evolution of the field of programme evaluation through the lens of evaluation theories and approaches and their respective theorists or proponents. Rooted in the foundations of social accountability, social inquiry and epistemology, the evaluation tree maps evaluation theories into one of its three branches—*Methods* branch, the *Valuing* branch, and the *Use* branch (Alkin, 2023).

The *Methods* branch contains evaluation theories that adopted a more methodological approach and perspective, such as randomized field experiments (Boruch & Turner, 2023) and Theory-driven evaluation approaches (H.-T. Chen, 1990). The evaluation theories on the *Valuing* branch focused on the vital role of the evaluator and the programme participants in making judgements on programme. This includes approaches such as Responsive Evaluation (Stake & Visse, 2023). Lastly, the *Use* branch theories prioritize the evaluation use which could take on many forms. This includes approaches such as Utilization-Focused Evaluation (Patton, 2011) and Empowerment Evaluation (Fetterman, 2023). Evaluators along each theory branch are likely to differ in their evaluation practice, with differences accentuated the further apart the theory they adopt is on the tree. We will revisit this notion of evaluation theory directly affecting evaluation practice in a later section as it pertains to how incorporating different evaluation theories changed our evaluation practices.

We define *evaluation policy* as any explicit policy, framework or rules that mandates or guides how evaluation is practiced (e.g., defined, planned, conducted, reported) in an organization (Al Hudib & Cousins, 2022a; Mark & Hart, 2022). Evaluation policy has received much attention in recent years, particularly in government and agency settings, and its impact on practice has been the subject of evaluation research (e.g., Christie & Fierro, 2012; Dillman & Christie, 2017; Goldman & Mbele, 2018; Holvoet & Renard, 2007). Evaluation policy is important in our context as MOE is a large organization and it is through evaluation policy that organizational structures and processes are established so that evaluation practice is systematized and routinized.

Evaluation practice is typically defined as how evaluation is conducted by individual evaluators and/or collectively by the organization. This encompasses everything from the setting of the purpose of evaluation, choosing evaluation approaches, methodology, to how findings and recommendations are reported. In this paper, we also include evaluation capacity building as an aspect of evaluation practice.

In recent years, there has been increasing interest in the interconnections between evaluation theory, policy, and practice (e.g., Christie & Lemire, 2019), particularly within organizational settings. Evaluation practitioners and scholars have explored various concepts such as evaluation systems, evaluation capacity building (ECB), and organizational capacity for evaluation to understand how these interconnections manifest. For example, the mediator model of evaluation policy for the relationship between evaluation theory and evaluation practice (Christie & Fierro, 2012, Dillman & Christie, 2017; Fujita-Conrads et al., 2023), and Al Hudib and Cousins' (2020) ecological framework for the relationship between evaluation policy and the organizational capacity to perform and utilize evaluation. Their ecological framework also elucidated the relationship between evaluation policy and organizational capacity for evaluation and underscores the importance of considering variables at the micro (stakeholders), meso (organization), and macro (context & evaluation policy document) levels.

A theory of change for evaluation in action in MOE-HQ

We propose a theory of change (ToC) (see Figure 1) that encapsulates how we experienced and drove programme evaluation at both the organization (Al Hudib, 2018) and at the individual level (Al Hudib & Cousins, 2022b). This distinction is important because there are different theories, considerations, and implications at the two levels based on our experience. For example, the development of MOE-HQ's evaluation policy was informed by specific theories, subject to political considerations, and its role vis-à-vis other existing organizational systems (e.g., budgeting and resourcing, strategic planning) had to be rationalized. In contrast, building the evaluation capabilities of staff to conduct evaluation clearly operated at the individual level where specific evaluation capacity building and adult learning theories informed these efforts. There were also instances where the same element could mean different things at the two levels. For example, how an organization conducts evaluation as an entity is different from how individual staff approach a particular evaluation project. Our ToC provides a useful frame of how evaluation theory, evaluation policy, and evaluation practice influenced and interacted with each other in our organizational context and includes explicit articulation of organizational development (OD) efforts and organizational effectiveness.

We identified the intended long-term impact of our evaluation efforts as organizational effectiveness, which is the ability to achieve its goals and objectives efficiently and successfully (Robbins & Coulter, 2021). We did this to highlight the role that the evaluation function plays within an organization together with other organizational functions (e.g., audit function, human resource) and antecedents (e.g., leadership, employee engagement) for organizational effectiveness.

Preceding organizational effectiveness is evaluation practice at both the individual (micro) and organization (meso) levels. Evaluation practice at the individual level refers to how programme

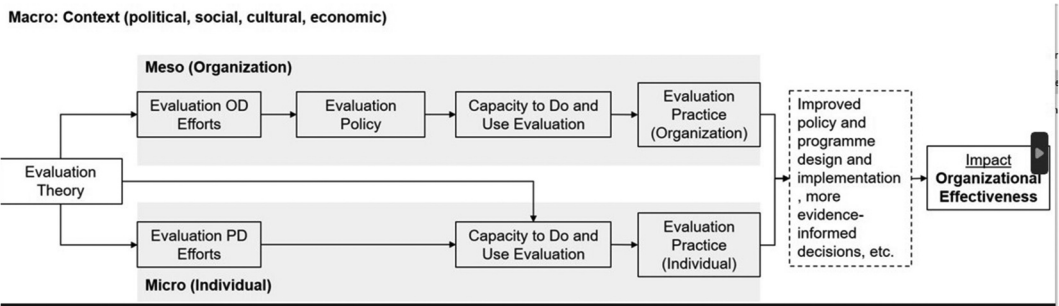


Figure 1. Theory of change of evaluation theory, policy, and practice.

evaluation is conducted by programme owners. This could include individual staff or evaluation teams' approaches to designing and conducting an evaluation, and the decisions made during and after the evaluation (e.g., regarding analytical approaches, reporting of evaluation findings). Evaluation practice at the organizational level, on the other hand, refers to the conduct and use of evaluation as an organization. For example, it could refer to the extent to which the organization's programmes are subject to evaluation, or whether the organization actively uses evaluation findings to inform resourcing and strategic planning decisions. Effective evaluation practices at both the organization and individual levels interact and contribute to overall organizational effectiveness through many possible pathways, such as quality of evaluation, improved programming and implementation of educational programmes and policies, and more evidence-informed decision making.

Evaluation practice is influenced by the capacity to *do* and *use* evaluation (Al Hudib & Cousins, 2022b) at both the individual and organization levels. At the individual level, this mainly refers to the relevant evaluation knowledge, skills, and attitudes (Preskill & Boyle, 2008) for programme owners to conduct and use evaluation, which is then preceded by evaluation professional development (PD) efforts to build evaluation capacity of programme owners. At the organization level, the capacity to do and use evaluation refers to the integration of the relevant evaluation policy into existing organizational structures and processes to facilitate evaluation practice.

Al Hudib and Cousins (2022b) listed "Characteristics of evaluation policy (content, type)" as a moderating variable that operates at the macro level or the broad "social and political context" in which the organization functions. In our context, we place our evaluation policy as an organization level variable that directly contributes to an organization's capacity to do and use evaluation and not part of the broader social and political context. We also highlight the direct influence of evaluation policy to evaluation practice (individual) (e.g., Fujita-Conrads et al., 2023). We then position our evaluation OD efforts as antecedents to incrementally develop, integrate, and implement evaluation policy.

We place evaluation theory at the start of the ToC as we view it to be the source of knowledge and inspiration for both evaluation PD and OD efforts. We also acknowledge the direct influence of evaluation theory on the capacity to do and use evaluation at the individual level, for example, through the broadening of knowledge and skills of the range of evaluation approaches. All this occurs within and is influenced by the political, social, cultural, and economic contexts at the macro level. Absent from the model are any bi-directional arrows and possible feedback loops. For example, we know that evaluation practices at the individual and organization levels could contextualize evaluation policies (H.-T. Chen, 1990), and are often abstracted or codified into evaluation theory. However, we opted to keep the first iteration of the ToC simple to facilitate our explication and understanding of the expanded components and links.

The rest of this paper describes our experience in MOE as a case example of application of the ToC. Following how evaluation evolved in MOE-HQ, we will first start at the individual (micro) level of the ToC and describe how evaluation theory expanded and improved how programme owners conduct evaluation of their programmes, and then talk about how our evaluation capacity building efforts evolved in tandem to support them. We then move on to the organization (meso) level to describe how MOE-HQ's evaluation policy was developed and its corresponding impact on evaluation practice at both the organization and individual levels. We conclude with our reflections and learning points, and implications for future research.

Individual level: how evaluation theory improved evaluation practice

In the early 2000s, evaluation practice in MOE-HQ would be more aptly called research studies, typically having research questions, hypotheses, study design, methods for data collection, and a full report at the end of the study. The studies were mostly summative in nature and focused on programme effectiveness. The common research design was either a Randomized

Controlled Trial (RCT) or a quasi-experimental design with a comparison group (pre-post). From the evaluation theory perspective, this reflects the influence of experimental theories on the *Methods* branch of the evaluation tree (Alkin, 2023). This was also aligned with the then-prevailing stance in the West, where RCTs were deemed as the gold standard for evidence of effectiveness for educational programmes, as exemplified by the National Research Council's (2002) call for an increase in RCTs in educational research, and the proliferation of "what works" clearinghouses like the What Works Clearinghouse by the Institute of Education Sciences (IES).

A key challenge we, as evaluation specialists then, encountered with this approach was the "black box" problem (e.g., H.-T. Chen, 1990; Rossi et al., 2004) where evaluation specialists who were not the domain experts often did not know how and why a programme produced or did not produce its intended outcomes. Programme owners needed information on other areas besides effectiveness, for example, on how they could further improve the design and implementation of their programmes, and how to successfully scale up effective programmes. This challenge was exacerbated in evaluations of complex policies and programmes that involved multiple components or interactions between different stakeholders.

Another challenge with this approach was that it was less responsive to unexpected changes, such as programme implementation changes. This stemmed from the common understanding then that once the evaluation study (e.g., questions, design, methods) was confirmed, it should not change mid-course to uphold the integrity of the study. On top of that, findings were usually shared by the evaluation team through written reports at the end of the evaluation. These practices limited the timeliness and utility of the evaluations, particularly in instances when decision points regarding the programme were brought forward, or when programme owners needed to make immediate changes to the programme during the evaluation.

Over time, through our exposure to evaluation theories further up the *Methods* branch and from the *Use* branch, we adjusted our approach to better resonate with our pragmatic inclination. These theories were instrumental in broadening our mindsets and repertoire of evaluation practices we adopted to address the challenges encountered. For example, Scriven's (1967; 1991) distinction between formative evaluation for learning and improvement purposes and summative evaluation of programme effectiveness for decision making purposes helped expand our understanding that evaluation was solely for accountability. Formative evaluation is a valuable tool in facilitating "midcourse corrections" (Weiss, 1998) to better achieve the programme or policy's intended outcomes beyond the summative nature of ex-post evaluations. The fact that educational outcomes, particularly student outcomes, were generally long term and compounded by various factors over the course of schooling years further underscored the value of formative evaluation. It is common practice now for our programme owners to conduct formative evaluations to improve programme design and implementation in addition to assessing programme effectiveness. We are also more discerning in the use of RCTs and quasi-experimental designs in our evaluation studies.

We also discovered approaches to mitigate the "black box" problem from theories of theory-driven evaluation (e.g., Brousselle & Champagne, 2011; H. T. Chen & Rossi, 1983; H.-T. Chen, 1990; Donaldson, 2007), and theory of change (ToCs) and logic models (Funnell & Rogers, 2011; Knowlton & Phillips, 2012). We introduced and continued to advocate for and promote the use of ToCs and logic models which help programme owners explicate and visualize the underlying rationale, mechanisms, and pathways of how programme activities lead to or contribute to intended outcomes. The deliberations during the development of these models also enhance understanding of programmes and contributes to improved programme design. The models are also used to aid communication of programmes to policy makers, and to strengthen the justification for funding and approval of programmes. Additionally, we also used logic models as a tool in evaluation planning to help in the identification of focus areas for evaluation and corresponding evaluation questions in a systematic way. Currently, there is an ongoing effort to expand the use of ToCs and logic models as a general practice for programme conceptualization and monitoring and evaluation planning.

Finally, Patton's (2011) Utilization-Focused Evaluation (UFE) was pivotal in shaping how evaluation is conceptualized and conducted. UFE's emphasis on "intended uses of intended users" (Patton, 2011) and its focus on maximizing evaluation use at all stages and aspects of the evaluation process provided the theoretical blueprint for evaluation teams to navigate practical challenges and to break free from prior methodological constraints and adherence. This approach also reinforced the importance of intentional stakeholder engagement and involvement, particularly at the beginning of the evaluation process, to identify intended users, in this case, policy makers and programme owners, and their intended uses of the evaluation. By prioritizing use, evaluations have been better equipped to address the challenges of responsiveness and timeliness.

This blend of multiple evaluation theories to meet our context and needs has contributed to the evolution of evaluation practice at both the organization and individual level. For example, we can justify the use of alternative evaluation approaches and methodological choices, beyond RCTs or quasi-experimental designs, that might be better suited for the educational programme or policy in question to other external funding agencies that may or may not be familiar with educational evaluation and codify this in our evaluation policies. At the individual level, programme owners are aware of the range of evaluation approaches and are comfortable with designing "fit-for-purpose" evaluation studies.

Individual and organizational: how evaluation theory informed evaluation capacity building efforts

Evaluation capacity building or ECB refers to the process of enhancing an organization's or a community's ability to conduct evaluation through developing the necessary knowledge and skills of individuals, and organizational resources and structures (e.g., Cousins & Leithwood, 2008; Patton, 2018; Preskill & Boyle, 2008).

Drawing inspiration from existing theories on ECB (e.g., Cousins et al., 2014; Patton, 2018; Preskill & Boyle, 2008) we approach ECB through two lenses: evaluation PD and evaluation OD efforts.

Evaluation PD efforts

Evaluation PD refers to systematic efforts to equip programme owners with the necessary knowledge, skills, and attitudes to *do* evaluation and *use* evaluation (Cousins et al., 2014; Preskill & Boyle, 2008). This should improve evaluation practice at the individual level and eventually contribute to the capacity of the organization to do and use evaluation. Our evaluation PD efforts aim to foster a "learning while doing" approach with a focus on process use (Patton, 2023). This is to equip programme owners with *just-enough* and *just-in-time* evaluation knowledge and skills for their immediate evaluation projects. This contrasts with identifying a set of evaluation competencies and developing them in all programme owners. Examples of our evaluation PD efforts include the evaluation unit adopting a collaborative and educative process where we "teach them how to fish" while supporting their evaluations – in contrast to us taking over the evaluation projects and doing it completely independently. We also have regular Evaluation Clinics to provide an informal platform for programme owners to bounce ideas and seek advice on challenges related to evaluation, provide a suite of self-help resources on an evaluation web portal, and drive a professional learning community on more technical aspects of evaluation.

Evaluation OD efforts

OD refers to a planned, systematic effort to improve an organization's overall effectiveness and increase its capacity to adapt and thrive in a changing environment (e.g., Cummings & Worley, 2019). It involves a holistic approach that focuses on enhancing various aspects of the organization, including its structure, processes, culture, and people. As such, it was useful to view efforts to

develop, modify or integrate evaluation mechanisms into organizational structures and processes from an OD angle. Evaluation OD hence refers to efforts to develop and implement evaluation policy (e.g., structures, processes, policies, guidelines) with the aim of establishing sustainable evaluation practices.

Our evaluation OD approach is one of the incremental integration i.e., we try to integrate new evaluation mechanisms into existing processes piece by piece, eschewing large-scale changes to the system. To guide our efforts, we reference Preskill and Boyle's (2008) model, which articulated key elements such as evaluation policies and procedures, evaluation frameworks and processes, integrated knowledge management evaluation system, continuous learning about evaluation. We considered how these components could complement existing structures and made modifications where necessary.

Organisation level: how evaluation theory influenced evaluation policy

This incremental integration approach was exemplified by how we are developing our evaluation policy. Developing an evaluation policy requires a deep appreciation of the organizational context, readiness, political climate, and prevailing evaluation practices and culture. Identifying which areas of the policy are most feasible to address first and determining the extent of workable change necessitate careful consideration of these factors. Additionally, selecting the best implementation approaches is essential. However, striking a balance between control and autonomy can prove challenging for evaluation policy. As Dillman and Christie (2017) cautions, an over codified policy may constrain evaluators' ability to respond appropriately to specific conditions.

At the outset, we addressed fundamental questions about the nature and scope of such a policy. For example, we debated whether evaluation methodological guidelines were necessary and, if so, how they could be enforced, as well as the risks of standardizing evaluation practice too much across the organization. To gain insights into these issues, we turned to theories on evaluation policies. Trochim's (2009) taxonomy provides a useful framework to appreciate the range of components in an evaluation policy and system, including the functions they serve. Additionally, Holvoet and Renard's (2007) key features of an effective evaluation system elucidate the inter-relationships between the components and the different forms that evaluation policies could take. These theories continue to help us examine and re-examine existing organizational structures and processes as we continue our journey to integrate evaluation mechanisms into our system.

For example, we first developed non-mandatory evaluation principles to help programme owners prioritize programmes for evaluation, decide whether to do it in-house or to outsource, determine the timing and purpose of evaluation based on programme lifecycle, and suggested steps to plan and conduct evaluation. This was an important first step in our journey towards developing an evaluation policy for the organization. A common framework helps promote greater consistency and rigour in evaluation practice, while also encouraging programme owners to be creative and adaptive in their approach. The guidelines were based on our collective experiences of evaluation practice and also reflect how evaluation practice can contextualize evaluation policy.

This incremental integration approach towards evaluation policy also draws inspiration from the "systems approach" (Dillman & Christie, 2017) and is aligned with Goldman and Mbele's (2018) observation that "having the policy in advance (as South Africa did) does not seem necessary although there needs to be some definition of how the system will work, how it will provide for impartiality, etc" (p. 8).

Reflections and learning points

In this section, we discuss three learning points gleaned from the contextualization and use of evaluation theories to inform evaluation practices in MOE-HQ: (1) pragmatism and the value of evaluation, (2) change management as a facilitator for evaluation PD and OD efforts, and evaluation

policy implementation, and (3) adopting an incremental integration approach to the institutionalization of evaluation, and conclude with implications for future research.

Pragmatism and the value of evaluation

Evaluation competes for limited organizational resources such as budget, skilled manpower and time (Alkin, 2017; Funnell & Rogers, 2011), and similarly within MOE-HQ, evaluation must contend for recognition and acceptance. For us, as evaluation specialists, we continuously need to demonstrate the practical value of programme evaluation to various stakeholders (who are not directly involved in actual evaluation practice). Our efforts to establish evaluation's legitimacy creates tensions between what we think evaluation should ideally be and how it must be adapted to work in MOE-HQ. We need to know and show how evaluation strengthens existing professional activities (e.g., monitoring, research) and processes (e.g., financial procedures, accountability systems) that programmes are already subject to. More importantly, we need to demonstrate how evaluation findings are useful and can be used to inform resourcing and strategic planning decisions. This focus on the value of evaluation drives us to identify specific evaluation ideas and tools that work in our context, regardless of which evaluation theories they are from. In doing so, we do not subscribe to any one ideology, evaluation theory or approach, and thus, conveniently side-step potential intractable issues surrounding conflicting values or ideology underlying the theories. For example, the alignment or conflict between underlying values (e.g., social justice, post-positivistic) of a particular evaluation theory or approach and the organization's values. The implications of such a pragmatic and eclectic approach are uncertain, but they raise interesting questions about whether it is appropriate to not adopt evaluation theories or approaches in their entirety and/or in combination.

Change management compliments evaluation PD and OD efforts, and evaluation policy implementation

The efforts required to successfully implement evaluation policy in an organization is not often described. This minimally involves convincing staff to adopt new mindsets, follow new rules, and to change their behaviours related to evaluation practice. We drew on change management theories, such as Lewin's (1951), Kotter's (1996) and systems theory (Senge, 2006), for valuable frameworks to plan for successful change strategies regarding evaluation policy. A large organization like MOE-HQ presents even greater challenges for changes to be adopted system wide. We learnt that successful change management requires strong support and messaging from leadership and management at all levels, coupled with evaluation-related support in terms of resources and consultancy for programme owners to adapt to the changes. We found that it was useful for us, in our evaluator role, to adopt an OD practitioner's lens to view and affect changes.

There have been efforts to look at the relationship between evaluation and OD in organizations. Notably, Preskill (1994) and Preskill and Torres (1998) studied how evaluators and evaluative inquiry contribute to organizational learning and change from a learning organizational perspective. Robinson and Cousins (2004) also studied the impact of internal participatory evaluation as an organizational intervention, while Rannisto and Saloranta (2019) discussed how evaluation could be a useful tool for leaders to use when leading and managing change efforts. We believe this intersection between ECB and OD fields holds much potential for application both at the individual and organization levels. For example, how change management facilitates the institutionalization of evaluation structures and systems in organizations and leads to effective evaluation practice.

Adopting an incremental integration approach to the institutionalization of evaluation

As mentioned, we struggled with whether a comprehensive evaluation policy should be developed and launched in one go, or whether the components of an evaluation policy could be developed separately and incrementally over time. We quickly learned that major organizational changes were challenging to justify and even more so to be implemented. We currently have a theory-informed ideal landing point or vision of how the institutionalization of evaluation in our organization could look like, and we have and continue to take incremental steps to integrate evaluation into the organization's processes. We believe this is the best approach for our context. Small wins and successes can be celebrated and built on each other over time. It also helps us navigate the usual tensions between freedom and control structures in an organization which have major implications on evaluation practices. In situations where an evaluation policy is being enforced from the top-down, one might consider staggering the implementation of the policy to make it more incremental. However, there might also be organizations where a different change management approach, for example, step-change, might have to be adopted in the implementation of the evaluation policy. Regardless, change management theories could be brought in to smoothen the implementation.

Implications for research

Our proposed ToC (see [Figure 1](#)) can be used to study the development and evolution of evaluation practice in organizations over time. For example, when an organization is first starting out in setting up its evaluation system, the ToC could be sequential and one-directional. However, as the evaluation system matures in an organization, feedback loops should start to occur in the ToC, for example, when the organization improves its evaluation policies based on implementation experiences. How the ToC evolves will be unique to each organization. It could also guide monitoring and evaluation efforts. We could identify indicators at both the individual and organization level to monitor evaluation PD and OD efforts, and "outcomes" related to evaluation practice and how it has improved policy and programme design, decision making in the organization, etc. We could also study evaluation systems vis-à-vis other organizational functions and systems that contribute to organizational effectiveness. How does the evaluation system in an organization relate to or inform the audit function for example? Are they completely separate or could they work synergistically?

Recently, Stockmann and colleagues have published accounts of the institutionalization of evaluation in Europe (Stockmann, Meyer, & Taube, 2020), the Americas (Stockmann, Meyer, & Szentmarjay, 2022) and most recently in Asia Pacific (Stockmann, Meyer, & Zierke, 2023). This is an immensely useful reference for understanding what has been done in other systems. Moving forward, there is still much to be done especially with regard to published literature and guidance on how institutionalization of evaluation is approached and implemented in organizations and national systems. Our proposed ToC could be used as a frame to facilitate exploration.

Another implication for research is to further expand on what the use of evaluation theory means. Alkin (2023) emphasized that the discipline of evaluation would benefit from more explicit and intentional application of evaluation theory and developed theory prototypes (Alkin et al., 2023) for practitioners to consider in practice. A useful line of inquiry could be on the implications and potential consequences of adopting a pragmatic and eclectic approach to adopting various theory prototypes across different evaluation theories on evaluation practice. For example, do we simply ignore the incompatible and inappropriate parts for our context? At what benefits and costs?

Finally, it would be interesting to continue to document the evolution of evaluation practice in MOE-HQ. For example, to strengthen a more collaborative approach with citizens on policy development, will other relevant evaluation theories from the *Values* branch (e.g., empowerment, culturally responsive, democratic evaluation, etc.) increasingly influence our evaluation policies and practices? How can an organization adapt evaluation approaches for different situations and needs?

Conclusion

We have had the privilege of witnessing and being part of the efforts to drive programme evaluation in action in MOE-HQ and we hope our “insider’s perspective” provides a unique lens on the interplay between evaluation theory, evaluation policy, and evaluation practice. We hope our sharing highlights the importance of making explicit the rich trove of theories and using them to inform ECB efforts, evaluation policy and evaluation practice. We also hope that more evaluators and evaluation scholars in Asia share their perspectives and contribute to the international evaluation literature and field.

Acknowledgements

Ng Hui Leng, Ministry of Education, Singapore, Singapore

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

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References

- Al Hudib, H. (2018). *The role of evaluation policy in organizational capacity to do and use evaluation* [Doctoral dissertation, University of Ottawa]. Research Digital Archive. https://ruor.uottawa.ca/bitstream/10393/38117/1/Al_Hudib_Hind_2018_thesis.pdf
- Al Hudib, H., & Cousins, J.B. (2020). Evaluation policy and organizational capacity building: Application of an ecological framework across cultural contexts. *Journal of Multidisciplinary Evaluation*, 16(36), 37–55. <https://doi.org/10.56645/jmde.v16i36.623>
- Al Hudib, H., & Cousins, J.B. (2022a). Evaluation policy and organizational evaluation capacity building: A study of international aid agency evaluation policies. *New Directions for Evaluation*, 173(173), 29–48. <https://doi.org/10.1002/ev.20494>
- Al Hudib, H., & Cousins, J.B. (2022b). Understanding evaluation policy and organizational capacity for evaluation: An interview study. *American Journal of Evaluation*, 43(2), 234–254. <https://doi.org/10.1177/10982140211007573>
- Alkin, M.C. (2017). *Evaluation roots: Tracing theorists’ views and influences*. SAGE Publications.
- Alkin, M.C. (2023). Evaluation theory. In M.C. Alkin & C.A. Christie (Eds.), *Evaluation roots: Theory influencing practice* (3rd ed., pp. 6–11). The Guilford Press

- Alkin, M.C., Christie, C.A., & Stephen, N.A. (2023). Theory influencing practice. In M.C. Alkin & C.A. Christie (Eds.), *Evaluation roots: Theory influencing practice* (3rd ed., pp. 273–291). The Guilford Press.
- Boruch, R.F., & Turner, H.M. (2023). Randomized field experiments: Advances in practice. In M.C. Alkin & C.A. Christie (Eds.), *Evaluation roots: Theory influencing practice* (3rd ed., pp. 55–66). The Guilford Press.
- Brousseau, A., & Champagne, F. (2011). Program theory evaluation: Logic analysis. *Evaluation and Program Planning*, 34(1), 69–78. <https://doi.org/10.1016/j.evalprogplan.2010.04.001>
- Chen, H.-T. (1990). *Theory-driven evaluations*. Sage Publications.
- Chen, H.T., & Rossi, P.H. (1983). Evaluating with sense: The theory-driven approach. *Evaluation Review*, 7(3), 283–302. <https://doi.org/10.1177/0193841X8300700301>
- Christie, C.A., & Alkin, M.C. (2023). An evaluation theory tree: A framework for guiding a range of evaluation practice. In M.C. Alkin & C.A. Christie (Eds.), *Evaluation roots: Theory influencing practice* (3rd ed., pp. 12–51). The Guilford Press.
- Christie, C.A., & Fierro, L.A. (2012). Evaluation policy to implementation: An evaluation of scientifically based research in practice. *Studies in Educational Evaluation*, 38(2), 65–72. <https://doi.org/10.1016/j.stueduc.2012.05.003>
- Christie, C.A., & Lemire, S.T. (2019). Why evaluation theory should be used to inform evaluation policy. *American Journal of Evaluation*, 40(4), 490–508. <https://doi.org/10.1177/1098214018824045>
- Cousins, J.B., Goh, S.C., Elliott, C.J., & Bourgeois, I. (2014). Framing the capacity to do and use evaluation. *Organizational capacity to do and use evaluation. New Directions for Evaluation*, 141, 7–23.
- Cousins, J.B., & Leithwood, K.A. (2008). Building evaluation capacity in organizations: A critical review of the literature and internet resources. *Evaluation and Program Planning*, 31(2), 99–125. <https://doi.org/10.1016/j.evalprogplan.2007.10.001>
- Cummings, T.G., & Worley, C.G. (2019). *Organization development and change*. Cengage Learning.
- Dillman, L.M., & Christie, C.A. (2017). Evaluation policy in a nonprofit foundation: A case study exploration of the Robert Wood Johnson foundation. *American Journal of Evaluation*, 38(1), 60–79. <https://doi.org/10.1177/1098214016642864>
- Donaldson, S.I. (2007). *Program theory-driven evaluation science: Strategies and applications*. Routledge.
- Fetterman, D.M. (2023). Empowerment evaluation: It works in practice, but does it work in theory? In M.C. Alkin & C. A. Christie (Eds.), *Evaluation roots: Theory influencing practice* (3rd ed., pp. 193–210). The Guilford Press.
- Fujita-Conrads, E., Christie, C.A., & Fasthorne, E. (2023). Evaluation policy as a bridge between evaluation theory and practice: The office of Indian health services, a case example. In M.C. Alkin & C.A. Christie (Eds.), *Evaluation roots: Theory influencing practice* (pp. 292–299). The Guilford Press.
- Funnell, S.C., & Rogers, P.J. (2011). *Purposeful program theory: Effective use of theories of change and logic models*. Jossey-Bass.
- Goh, C.B., & Gopinathan, S. (2008). Education in Singapore: Development since 1965. In B. Fredriksen & J.P. Tan (Eds.), *An African exploration of the East Asian Education* (pp. 80–108). The World Bank.
- Goldman, I., & Mbele, T. (2018). The emergence of government evaluation systems in South Africa: The case of Benin, Uganda and South Africa. *Evaluation Matters, Second Quarter*, 6(1), 2–12. <https://doi.org/10.4102/aej.v6i1.253>
- Holvoet, N., & Renard, R. (2007). *Monitoring and evaluation reform under changing aid modalities: Seeking the middle ground in aid-dependent low-income countries*. Research paper, UNU-WIDER, United Nations University (UNU), No. 2007/52. <http://hdl.handle.net/10419/63293>
- Jones, D.S. (2016). Governance and meritocracy: A study of policy implementation in Singapore. In J.S.T. Quah (Ed.), *The role of the public bureaucracy in policy implementation in five ASEAN countries*. Cambridge University Press. <https://doi.org/10.1017/CBO9781316340653.007>
- Knowlton, L.W., & Phillips, C.C. (2012). *The logic model guidebook: Better strategies for great results* (2nd ed.). SAGE Publishing.
- Kotter, J.P. (1996). *Leading change*. Harvard Business Review Press.
- Kwek, D., Ho, J., & Wong, H.M. (2023). *Singapore's educational reforms toward holistic outcomes: (Un)intended consequences of policy layering*. Brookings Institution. <https://policycommons.net/artifacts/4139429/singapores-educational-reforms-toward-holistic-outcomes-unintended-consequences-of-policy-layering/4947832/>
- Lewin, K. (1951). *Field theory in social science: Selected theoretical papers*. Harper & Row.
- Mark, M.M., & Hart, N.R. (2022). The future of evaluation policy. *New Directions for Evaluation*, 173(173), 117–124. <https://doi.org/10.1002/ev.20488>
- Ministry of Education. (2023a). *Education statistics digest 2023*. <https://www.moe.gov.sg/about-us/publications/education-statistics-digest>
- Ministry of Education. (2023b). *Pathways and possibilities: Singapore's education journey*. MOE corporate brochure. <https://www.moe.gov.sg/about-us/moe-corporate-brochure>
- Ministry of Education. (2024). *About Us*. <https://www.moe.gov.sg/about-us/organisation-structure>
- National Research Council. (2002). *Scientific research in education*. National Academy Press.
- Ng, H.L., Poon, C.L., & Pang, E. (2020). Using IEA studies to inform policymaking and program development: The case of Singapore. In H. Wagemaker (Ed.), *Reliability and validity of international large-scale assessment: Understanding IEA's comparative studies of student achievement*. Springer Cham. <https://doi.org/10.1007/978-3-030-53081-5>
- Patton, M.Q. (2011). *Essentials of utilization-focused evaluation* (1st ed.). SAGE Publishing.

- Patton, M.Q. (2018). Evaluation facilitation and evaluation capacity building: A selective review. *American Journal of Evaluation*, 39(1), 55–78. <https://doi.org/10.1177/1098214017726114>
- Patton, M.Q. (2023). The ongoing evolution of utilization-focused evaluation: Practice informed by theory, research, and reflection. In M.C. Alkin & C.A. Christie (Eds.), *Evaluation roots: Theory influencing practice* (3rd ed., pp. 183–192). The Guilford Press.
- Preskill, H. (1994). Evaluation's role in enhancing organizational learning: A model for practice. *Evaluation and Program Planning*, 17(3), 291–297. [https://doi.org/10.1016/0149-7189\(94\)90008-6](https://doi.org/10.1016/0149-7189(94)90008-6)
- Preskill, H., & Boyle, S. (2008). A multidisciplinary model of evaluation capacity building. *American Journal of Evaluation*, 29(4), 443–459. <https://doi.org/10.1177/1098214008324182>
- Preskill, H., & Torres, R.T. (1998). *Evaluative inquiry for learning in organizations*. SAGE Publishing.
- Quah, J.S.T. (2018). Why Singapore works: Five secrets of Singapore's success. *Public Administration and Policy: An Asia-Pacific Journal*, 21(1), 5–21. <https://doi.org/10.1108/PAP-06-2018-002>
- Rannisto, P., & Saloranta, A. (2019). Evaluation as a tool for leading change. In A. Kangas, J. Kujala, A. Heikkinen, A. Lonnqvist, H. Laihonen, & J. Bethwaite (Eds.), *Leading change in a complex world: Transdisciplinary perspectives* (pp. 183–200). Tampere University Press.
- Robbins, S.P., & Coulter, M. (2021). *Management* (15th ed.). Pearson.
- Robinson, T.T., & Cousins, J.B. (2004). Internal participatory evaluation as an organizational learning system: A longitudinal case study. *Studies in Educational Evaluation*, 30(1), 1–22. [https://doi.org/10.1016/S0191-491X\(04\)90001-6](https://doi.org/10.1016/S0191-491X(04)90001-6)
- Rossi, P.H., Lipsey, M.W., & Freeman, H.E. (2004). *Evaluation: A systematic approach* (7th ed.). SAGE Publications.
- Scriven, M. (1967). The methodology of evaluation. In R. Tyler, R. Gagne, & M. Scriven (Eds.), *Perspectives of curriculum evaluation* (pp. 39–83). Rand McNally & Co.
- Scriven, M. (1991). *Evaluation thesaurus*. SAGE Publications.
- Senge, P.M. (2006). *The fifth discipline: The art and practice of the learning organization*. Random House Books.
- Singapore Department of Statistics. (2023). *Singapore population*. <https://www.singstat.gov.sg/modules/infographics/population>
- Stake, R.E., & Visse, M. (2023). Responsive evaluation. In M.C. Alkin & C.A. Christie (Eds.), *Evaluation roots: Theory influencing practice* (3rd ed., pp. 100–109). The Guilford Press.
- Stockmann, R., Meyer, W., & Szentmarjay, L. (2022). *The institutionalisation of evaluation in the Americas*. Springer International Publishing.
- Stockmann, R., Meyer, W., & Taube, L. (2020). *The institutionalisation of evaluation in Europe*. Springer International Publishing.
- Stockmann, R., Meyer, W., & Zierke, N. (2023). *The institutionalisation of evaluation in Asia Pacific*. Springer International Publishing.
- Trochim, W.M.K. (2009). Evaluation policy and evaluation practice. *New Directions for Evaluation*, 123(123), 13–32. <https://doi.org/10.1002/ev.303>
- Weiss, C.H. (1998). Have we learned anything new about the use of evaluation? *American Journal of Evaluation*, 19(1), 21–33. <https://doi.org/10.1177/109821409801900103>