



Deposited via The University of Sheffield.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/id/eprint/236417/>

Version: Accepted Version

Book Section:

McKinney, P. and Haworth, A.C. (2026) Theory of change: Impact evaluation for information literacy research and practice. In: Kaufmann, K. and Maybee, C., (eds.) The Information Literacy Handbook: Charting the Discipline. Facet Publishing, pp. 257-262. ISBN: 9781783306343.

This is a preprint of a chapter accepted for publication by Facet Publishing. This extract has been taken from the author's original manuscript and has not been edited. The definitive version of this piece may be found in The Information Literacy Handbook: Charting the Discipline, Karen F. Kaufmann & Clarence Maybee, 2026, Facet, London and can be purchased from www.facetpublishing.co.uk. The author agrees not to update the preprint or replace it with the published version of the chapter.

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

Theory of Change impact evaluation for information literacy research and practice

Dr Pamela McKinney

Amy Haworth

<A>Abstract

This chapter presents an argument for the adoption of the Theory of Change approach to impact evaluation to support information literacy modes of inquiry. There is increasing interest in evaluation of information literacy teaching development and research, and Theory of Change has been shown to provide a useful framework for evaluation. The chapter covers the principles of the design of Theory of Change from its beginnings as an approach to impact evaluation in community development projects, and how it can be used as a participatory and inclusive method to engage stakeholders in articulating the intended outcomes for a project, and how these should be achieved. Examples are provided of the use of Theory of Change to evaluate curriculum development projects and information literacy initiatives in a Higher Education context. The chapter concludes by asserting the value of Theory of Change for providing a standardized and shareable framework for articulating the value of information literacy initiatives.

Keywords

Impact evaluation, Theory of Change, accountability, participatory

Introduction

This chapter provides a rationale for the adoption of a Theory of Change approach for the evaluation of both information literacy research, and innovations in information literacy teaching practice. The maturing discipline of information literacy is predicated on five criteria: (1) a community of scholars, (2) communications networks, (3) a code of ethics, (4) traditions and history, (5) modes of inquiry, and (6) shared ideas about what constitutes knowledge (Maybee et al., 2023). Theory of Change provides a framework for understanding the impact of information literacy modes of inquiry and has the potential to support a shared conception of knowledge in the discipline if applied consistently across a range of contexts. As Markless and Streatfield (Markless & Streatfield, 2017) note, it is much easier to focus on the practical business of providing information literacy teaching and development, than it is to clearly articulate the changes that such teaching intends to create. Theory of Change facilitates this articulation and supports teaching development, as evidenced at the University of Sheffield (McKinney, 2014, 2018; McKinney et al., 2011)

The Theory of Change approach, which is described in detail below, provides a framework for the articulation of outcomes and impacts expected through changes to practice or research. A particular strength is that it can support a participatory reflective analysis by information literacy educators, researchers and their stakeholders of the success factors of their project of intervention. In the recent report by (Cruickshank et al., 2022) that analyses the literature on information literacy impact, it was noted that evaluation should be focused on determining the effectiveness of an intervention and surfacing the defined outcomes that have been achieved. In addition, the report makes a strong case for the adoption of evaluation methods that encourage collaboration between stakeholders, and those that provide clear frameworks and structures to measure impact. It is stated that “any IL intervention needs a strong Theory

of Change, i.e. ‘a description and illustration of how and why a desired change is expected to happen’, although there is no detail given about the intricacies of the Theory of Change approach and how it should be applied. This chapter will therefore provide a summary of the background to the Theory of Change approach to impact evaluation, and provide examples of how it has been applied at both programme and project level to provide evidence for the impact of information literacy interventions in the Higher Education context in the UK.

Description

Theory of Change was developed in the 1990s by the Aspen Institute in Colorado to formalize an approach to impact evaluation for community development initiatives. Connell & Kubisch (Connell & Kubisch, 1998) provide a comprehensive rationale for the approach summarized below. Theory of Change supports stakeholders in defining the intended outcomes for the intervention the expected pathway to achieving those outcomes and the contextual factors that influence, constrain or enable those activities. Articulating these aspects of the intervention supports the creation of a causal narrative of the project and a theory of how the desired outcomes can be achieved. Any Theory of Change should satisfy three central characteristics, it should be **plausible**, in that the intended activities should lead to the desired outcomes based on common sense and knowledge of the area. It should be **doable**, in that the funding should be sufficient, there is support from key stakeholders and a fertile environment for the project. Finally, it should be **testable**, in that it should provide enough information about the project to inform credible progress tracking. The recommended process is for stakeholders to engage with a backward mapping process at the beginning of a project, working from outputs and impacts to the activities needed to achieve them and then the resources required. Establishing this process as part of project design encourages stakeholders and evaluators to identify key performance indicators in advance rather than retrospectively.

Connell & Kubisch (1998) state that the Theory of Change approach was intended to provide a demonstrable link between funding for community projects and their outcomes, something that is notoriously hard to establish. Theory of Change is participatory, it is designed to be collaboratively created by multiple project stakeholders and increases a sense of ownership of the evaluation process, which otherwise might feel as if it’s simply an external process that is done to projects. One of the strengths of Theory of Change is that it facilitates a longitudinal evaluation process, as it encourages project stakeholders to articulate the longer-term impact of their project. Due to this, a Theory of Change can be revisited long after a project has been completed to understand and evaluate its impact. Connell & Kubisch (1998) emphasize that Theory of Change is an *approach*, it is not an evaluation methodology in itself. However, it is flexible enough so that evaluators and stakeholders, once a theory has been defined, can select the evaluation methods that best fit the situation, the indicator to be evaluated, and the time and funding available.

While Connell & Kubisch (1998) make a compelling case for Theory of Change there are challenges to the adoption of the approach. Mackenzie & Blamey (Mackenzie & Blamey, 2005) discuss the challenges they faced using Theory of Change in two public health improvement projects in Scotland. They note that while it is advised that the initial Theory of Change definition with stakeholders should take place at the beginning of the project, often external funder requirements for projects to begin immediately upon funding mean that this window of opportunity is absent. Projects are funded based on detailed plans created by project teams, there simply isn’t the flexibility to redefine activities once funding has been approved. A further issue is that of scale. In the context of a complex multi-agency project with multiple stakeholders and wide-ranging activities and outcomes, it can be very challenging to articulate and then prove that certain activities have led to specific outcomes.

Applying Theory of Change in Higher Education in the UK

I was introduced to Theory of Change when I was employed as an educational developer at the Centre for Inquiry-based Learning in the Arts and Social Sciences (CILASS), a Centre for Excellence in Teaching and Learning (CETL) based at the University of Sheffield. CETLs were required to put in place robust evaluation strategies to provide evidence of impact for the funding body, The Higher Education Funding Council for England (HEFCE). Theory of Change had been adopted at the University of Sheffield as an organizational approach to the evaluation of internally funded curriculum development projects, standardizing evaluation practice and leading the identification and sharing of good practice (Hart et al., 2009). The process adopted at the University of Sheffield is an adaptation of Theory of Change approach combined with the use of *EPO (Enabling, Process and Outcome) Performance Indicators* (Helsby & Saunders, 1993).

CILASS aimed to provide support for the development of inquiry-based learning pedagogies at the University. Inquiry-based learning describes a range of open-ended student-centred, constructivist pedagogical approaches that provide students with the opportunity to pursue topics of interest and shape their learning (Levy & Petrulis, 2012). Integral to the programme was a focus on the support and development of information literacy, based on the premise that students must be proficient in engaging with academic literature and the knowledge-creation processes for their discipline to engage effectively with inquiry-based learning (McKinney, 2018). The process of defining Theories of Change for curriculum development projects was mediated and participatory and took place at the start of the project facilitated by CILASS staff.

For each project, a standard poster-sized document was created (Figure 1) to capture the Theory of Change as outlined by Hart et al. (2009), employing the backward mapping process recommended by Connell & Kubisch (1998)

<i>Drivers for change</i>	<i>Resources/ Enabling factors</i>	<i>Activities</i>	<i>Desirable outcomes</i>	<i>Anticipated impact</i>
What are the current problems or opportunities for the programme or project?	What is needed to do the activities leading to the desired outcomes for the programme or project? (Enabling indicators)	What activities need to be undertaken to achieve the desired outcomes for the programme or project? (Process indicators)	What is desirable and feasible for the programme or project to have achieved? (This will be time constrained by e.g. funding, legislation, timescales set by institutional strategies.) (Outcome indicators)	What will be different for learning and teaching in the future as a result of the project or programme? (Outcome indicators)

Once the Theory of Change was finalised, an evaluation plan was defined which identified what data would be collected to evidence each of the EPO indicators. The data collected for each project was often determined by pragmatic reasons, constraints such as the availability of contributors and the time cost of certain data collection methods. However, every project featured 6-monthly reflective interview with project leaders, which provided valid and informative evaluation data.

Theory of Change for supporting information literacy modes of inquiry

The learning from CILASS curriculum development projects with a strong information literacy focus has been shared in multiple journal publications and conference presentations summarised in (McKinney, 2018). (McKinney et al., 2011) presents a project in the Psychology Department, which created an

inquiry-based task to develop students' understanding of the differences between scholarly and non-scholarly information in Psychology and build competencies in searching for scholarly information. The Theory of Change evaluation process demonstrated that the task was successful in developing information literacy and proved the value of partnership working between educational developers, academics and librarians for IL development. A second journal paper (McKinney, 2014) summarised the evaluation of a suite of eleven curriculum development projects that featured a strong focus on developing information literacy. These projects provide evidence of the value of peer support, reflective approaches, collaborative approaches and a discipline-sensitive approach in this context. Furthermore, this paper makes a strong argument for the involvement of librarians as key stakeholders in devising Theories of Change to embed information literacy in curriculum development.

More recently, conference workshops to support the application of Theory of Change by information literacy educators and researchers at the European Conference on Information Literacy (McKinney & Webber, 2021) and the LILAC conference (McKinney & Webber, 2022) have sparked interest in this approach in the information literacy community. Following the LILAC workshop, Theory of Change was adopted for an information literacy development project at the University of Sheffield Library. This project aimed to refresh and review the information literacy offer by aligning with the institutional approach to employability, and improving discoverability by linking to Library content and presenting the offer using student-centred language. Theory of Change was chosen as it builds collaboration and reflection into the process, ensuring that stakeholders with a range of views and priorities could feed these into the project planning. The participatory approach to creating a Theory of Change was successful in bringing the group together to work towards the same aims. It also engaged all staff involved by combining discussion of the longer-term impact and vision with practical activities and outcomes, ensuring that there was collaborative understanding of what we were going to do, and why. Library staff valued the creation of a practical plan of action. Theory of Change also enabled the project to be broken down into a number of smaller projects, but with a clear sense of cohesion and purpose.

The inclusion of reflection as a key part of the process enabled a range of views and emotions to be surfaced at the very start of the project. It also ensured that the views and experiences of staff could be central drivers and measures for evaluation. Given mixed experience within the group in working as reflective practitioners, reflective writing training was delivered which was felt to be very valuable. As well as ongoing reflections being kept, the project evaluation includes collaborative reflections and discussions; setting this out as an evaluation method at the start of the project is one of the ways that Theory of Change has supported the active ongoing engagement of stakeholders.

Conclusion

This chapter provides a brief overview of the Theory of Change approach to impact evaluation, and outlines the benefits and challenges of applying it in practice. The examples above of the application of Theory of Change provide excellent evidence of the value of this approach for supporting information literacy modes of inquiry. Information literacy educators, and researchers can be confident that Theory of Change is a robust, suitable approach to understanding the impact of their practice or research. One of the advantages of Theory of Change is that it provides a shareable summary of any intervention or project that has been created in a collaborative and participatory way. As such it can be argued that applying Theory of Change can provide a framework for sharing research and scholarship, contributing to a shared understanding of information literacy disciplinary knowledge.

.Connell, J. P., & Kubisch, A. C. (1998). Applying a Theory of Change Approach. In K. Fulbright Anderson, A. C. Kubisch, & J. P. Connell (Eds.), *New Approaches to Evaluating Community Initiatives, vol. 2, Theory, Measurement, and Analysis*. Aspen Institute.

- Cruickshank, P., Ryan, B., & Milosheva, M. (2022). *Information literacy impact framework: Final project report*. Media and Information Literacy Alliance. <https://infolit.org.uk/wp-content/uploads/2022/09/IL-impact-framework-final-report.pdf>
- Hart, D., Diercks-O'Brien, G., & Powell, a. (2009). Exploring Stakeholder Engagement in Impact Evaluation Planning in Educational Development Work. *Evaluation*, 15(3), 285-306. <https://doi.org/10.1177/1356389009105882>
- Helsby, G., & Saunders, M. (1993). Taylorism, Tylorism and Performance Indicators: Defending the Indefensible? *Educational Studies*, 19(1), 55-77.
- Levy, P., & Petrulis, R. (2012). How do first-year university students experience inquiry and research, and what are the implications for the practice of inquiry-based learning? *Studies in Higher Education*, 37(1), 85-101. <https://doi.org/10.1080/03075079.2010.499166>
- Mackenzie, M., & Blamey, A. (2005). The Practice and the Theory: Lessons from the Application of a Theories of Change Approach. *Evaluation*, 11(2), 151-168. <https://doi.org/10.1177/1356389005055538>
- Markless, S., & Streatfield, D. (2017). How can you tell if it's working? Recent developments in impact evaluation and their implications for information literacy practice. *Journal of Information Literacy*, 11(1), 106. <https://doi.org/10.11645/11.1.2201>
- Maybee, C., Kaufmann, K., Tucker, V., & Budd, J. (2023). Recognizing information literacy as a discipline: Reflections on an ACRL 2023 panel discussion. *College & Research Libraries News*, 84(10). <https://doi.org/10.5860/crln.84.10.363>
- McKinney, P., & Webber, S. (2021, 20-23 September 2021). Using Theories of Change to evaluate Information Literacy initiatives. European Conference on Information Literacy, online.
- McKinney, P., & Webber, S. (2022, 11th - 13th April 2022). Using Theories of Change to evaluate information literacy initiatives. LILAC, Manchester.
- McKinney, P. A. (2014). Information literacy and inquiry-based learning: Evaluation of a five-year programme of curriculum development. *Journal of Librarianship and Information Science*, 46(2), 148-166. <https://doi.org/10.1177/0961000613477677>
- McKinney, P. A. (2018). *Facets of Inquiry-based Learning: the role of Information Literacy, collaboration and reflection in the support and development of inquiry-based pedagogies in Higher Education*, <http://etheses.whiterose.ac.uk/22840/>
- McKinney, P. A., Jones, M., & Turkington, S. (2011). Information literacy through inquiry: A Level One psychology module at the University of Sheffield. *Aslib Proceedings: New Information Perspectives*, 63(2-3), 221-240. <https://doi.org/10.1108/00012531111135673>