Embedding a Theory of Change approach to plan and disseminate STEM scholarship projects

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Embedding a Theory of Change approach to plan and disseminate STEM scholarship projects

Shailey Minocha and Trevor Collins
The Open University, UK

Overview

• **Context:** OU STEM faculty’s Scholarship and Innovation Centre (‘eSTEeM’)

• **Problem:** Evidencing the impact of scholarship / Developing a Theory of Change

• **Approach:** Scaffolding a Theory of Change approach to plan and disseminate scholarship projects

• **Resources:** Question-driven template, impact case studies and facilitating conversations

• **Outcomes:** Awareness, suspicion, insights and recognition

• **Reflections and next steps:** Changing practices / changing evaluation mindsets and coalescence
Context

- eSTEeM: The OU Centre for STEM Pedagogy (Dec 2010)
  - Management Team: Director 0.4 FTE, Deputy Director 0.3 FTE, Scholarship Manager, Support Assistant and Project Officer
  - School Scholarship Leads
  - Student Reference Panel (meet quarterly)
  - Advisory Group (meet annually)

- Biannual call for project proposals (Jan and July)
- Project portfolio: over 60 projects in progress (over 200 completed)
- Professional development and support for project teams (HEA Fellowship)
Problem: Evidencing impact of SoTL

• Planning for impact *
  – What support is needed to support project teams to plan for impact?
  – How can we encourage teams to design their project activities to achieve their intended outcomes?
  – How can dissemination and engagement with stakeholders during the project establish pathways to (future) impact?

• Evaluation types
  – Formative evaluation
    • Ensure activities are feasible, appropriate and acceptable before implementation
  – Process / implementation evaluation
    • Checks if the activities have been implemented as intended
  – Outcome / effectiveness evaluation
    • Assessing progress in the outcomes or objectives of the activities
  – Impact evaluation
    • Evaluates the activities’ effectiveness in achieving the ultimate goals

* SoTL in STEM Badged Open Course: Impact Evaluation Framework
Approach

• **Theory of Change (ToC)**
  - A theory of change seeks to identify why a change is needed and how it will be achieved
  - Explains the process of change through causal linkages

• ToC workshop for Access and Participation Plan related projects
  - 19 APP scholarship projects primarily focusing on ethnicity and disability (mental health and wellbeing)
  - Feedback on resources and (useful) conversations

• **Resources**
  - Theory of Change Question-driven template
  - Pre-filled logic model template
Question-driven template: Designed to identify the key information required to develop a theory of change

Structured template: Guidance, example, questions and answer

1. Problem statement or situation
2. Context
3. Stakeholders
4. Resources or inputs
5. Activities
6. Outputs
7. Outcomes and measures
8. Desired end goal or impact
9. Assumptions
10. Risks
11. Time
Resources: Logic model and ToC

• Logic model: A visual representation of the key information and the links between them

• Theory of Change: Using the key information (question-driven template) and the visual representation (logic model) identify the key causal pathways for impact
Outcomes

- Ongoing process: Awareness, suspicion, insights and recognition
- Project teams initially struggled to develop causal pathways to impact (‘miracle occurs here’)
- The terminology of outputs, outcomes and impact was not clear to some colleagues who found it difficult to adopt these terms in their contexts/projects

Comments / feedback
- Question-driven template perceived as useful for developing shared understanding of project aims and strategy by teasing out different views and assumptions
  - “It’s a really good tool to create discussion and reaffirm what you have as a project team.”
- Logic models and template prompted further discussion
  - “This [ToC’s visual] has been useful to identify/think about outputs, outcomes and longer-term impacts.”
Reflections and next steps

- Changing practices / changing evaluation mindsets and coalescence
- Question-driven template seems to help scaffold the process of developing a theory of change and can be more accessible than a completed ToC flowchart or a blank flipchart and post-it notes
- A ToC approach to impact evaluation enables the planning and monitoring of impact right from the start of a project even if the impact is not generated during the project’s lifetime
- Developing a theory of change provides a framework for the evidence that needs to be collected during and after a scholarship project
- SoTL impact can be broad and far-reaching: Learning and teaching, transfer to others, stakeholder benefits, cultural and economic benefits
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trevor.collins@open.ac.uk

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@OU_eSTEeM