Applying Theory of Change for Project Planning, Adaptive Management, and Evaluation: Experience and Ways Forward

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Sustainability Research Effectiveness Program
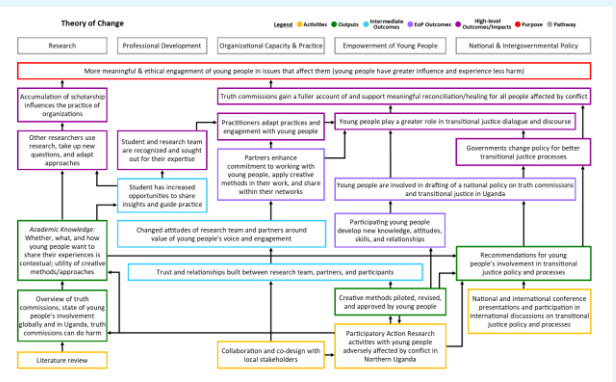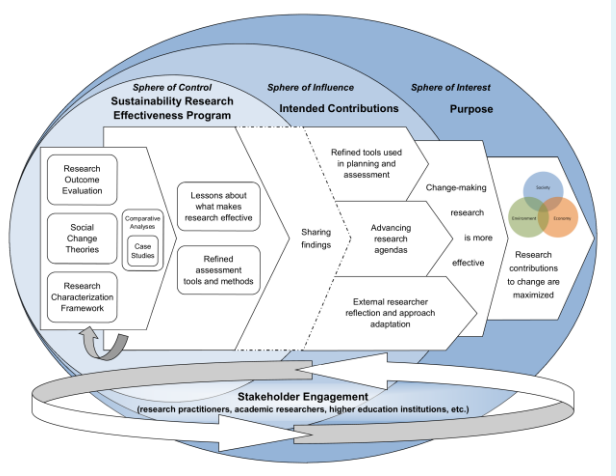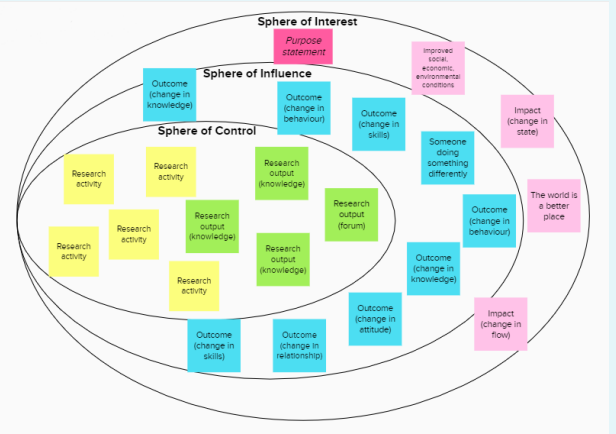
Royal Roads University

Application Experiences

- **Research planning:**
  - Supporting Royal Roads doctoral students in early stages of project design

- **Monitoring and adaptive management:**
  - Revisiting our program's theory of change, supporting non-profit monitoring and evaluation strategies

- **Evaluation:**
  - 10 (*ex post*) evaluations of completed international research for development projects/programs
  - 5 (*ex post*) evaluations of completed Royal Roads graduate student projects

Experience Demonstrates…

- Utility in project/program planning **(inception phase):**
  - Guides outcome-oriented design and implementation
  - Encourages critical thinking, integration, and collective visioning
  - Helps identify and engage boundary partners

- Utility in monitoring and adaptive management **(implementation phase)**:
  - Provides structure for learning and reflection to adjust/adapt planned activities, take advantage of unexpected opportunities

- Utility in evaluation **(post-project phase)**:
  - Can be tested empirically to qualify the extent to which and how a project/program contributed to change

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Context-sensitive Methodology

- ToC development process considers participant, time, and resource constraints
  - Document review (e.g. of proposals) helps to frame specific questions, guide probing, and triangulate intentions
- ToC output provides adaptable analytical framework
  - Encourages systematic reflection on intended outcomes to determine appropriate methods for realization and measurement
- ToC evaluation process considers the intended outcomes
  - Mixed methods support evaluation of outcomes – flexible method pairing
  - Mixed methods we have applied: outcome evaluation approach, document review, semi-structured interviews, surveys, qualitative coding and analyses, bibliometric and altmetric analyses, transdisciplinary research quality assessment framework

Challenges Encountered

- In ToC development:
  - Confusion of concepts (outputs, outcomes, impacts, assumptions, indicators)
    - Facilitators need to provide clear consistent definitions and careful guidance
  - Difficult to measure outcomes
    - Use of KASRB framing has been effective
    - Facilitators can support participants to identify progressive indicators (expect to see, like to see, love to see)

- In adaptive management:
  - Tendency to remain static, not used effectively for learning
    - We encourage and facilitate continuous use and periodic revision of ToC

- In evaluation:
  - No reliable counterfactual estimate
    - Need to elicit expert judgment of significance and consider alternative explanations

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Next Steps

- Package and share research ToC training

- Develop user-friendly data management tools to support ToC development and use

- Improve theoretical basis of ToC and explicitly document and test assumptions

- Share learning from successes and failures broadly

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