

## UTILIZING THEORY OF CHANGE IN DESIGNING IMPACTFUL SOCIAL AND EDUCATIONAL PROGRAMS

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### ABSTRACT

The Theory of Change (ToC) is a critical tool for nonprofit organizations and philanthropic entities. ToC provides a structured approach to designing, monitoring, and evaluating social change initiatives. This study focuses on a community development activity aimed at building the capacity of Creative Commons Indonesia (CCID) and Wikimedia Indonesia (WMID) through a ToC training. The training employed the Service Learning (SL) method, which emphasizes practical application and community interaction. Seven participants engaged in a comprehensive program that included pre- and post-tests, presentations, group discussions, case studies, and practical exercises. Evaluation through paired t-tests revealed a significant increase in participants' understanding, with pre-test scores ( $M = 6.14$ ) rising to post-test scores ( $M = 8.86$ ). Participants successfully developed structured ToC frameworks for their projects, demonstrating their enhanced capability to design effective social and educational interventions. The success of the training underscores the value of ToC in program planning and evaluation, contributing to more sustainable and effective social and educational programs.

**Keywords:** Theory of Change; Quality Education; Nonprofit Organization, Community Development; Service Learning

### INTRODUCTION

Theory of Change (ToC) is a methodology used by nonprofit organizations or philanthropic entities to design, monitor, and evaluate social change programs. ToC serves as a detailed framework explaining how and why a certain change is predicted to occur in a particular context (Dhillon & Vaca, 2018; Rad & Rad, 2021). It is a purposeful model that illustrates how an initiative, such as a project, a

program, an intervention, a strategy, or a policy, leads to the desired result through a series of early and intermediate outcomes (Rad & Rad, 2021). ToC helps to understand the complexity of social change and has been widely used and related to program evaluation (DuBow & Litzler, 2019; Reinholz & Andrews, 2020; Wilkinson et al., 2021).

Although ToC is widely recognized, it is not the only program evaluation framework used in nonprofit and philanthropic settings. Other approaches, such as the Logical Framework Approach (LFA) and Outcome Mapping (OM), provide alternative perspectives on program evaluation. LFA, for example, offers a structured and hierarchical model that connects a project's goals, outcomes, outputs, and activities to ensure a logical flow of activities for achieving the intended outcomes (Martinez & Cooper, 2020). However, LFA has been criticized for being overly simplify complex situation and fail to consider “unforeseen routes and unintended effects” (Gasper, 2000). In contrast, Outcome Mapping focuses on behavioral changes among key stakeholders in development programs rather than linear cause-and-effect pathways (Smutylo, 2005). Compared to these approaches, ToC is more flexible and allows organizations to articulate causal assumptions and adjust strategies based on ongoing learning (DuBow & Litzler, 2019). This adaptability makes ToC particularly useful for nonprofit organizations that operate in dynamic environments.

Using the ToC in constructing social project funding proposals has become a mandatory requirement set by grant providers (Reinholz & Andrews, 2020; Vun, 2021). ToC helps in designing more structured projects with clear impact, thereby increasing the chances of success and securing funding. However, ToC serves more than a tool for securing funding. It helps in designing impactful social and educational projects through step-by-step logical process that guides strategic thinking and actions (DuBow & Litzler, 2019; Laverack, 2015). Thus, in recent years, many non-governmental organizations (NGOs), nonprofit organizations, civil society organizations, donors, and other organizations in the development world have started working with a ToC, both for their programs and for their organizations.

Despite the increasing adoption of ToC, smaller and community-based non-profit organizations often lack familiarity with this framework. Without a robust ToC, social and education interventions may be superficial with no underlying logic as well as comprehensive monitoring and evaluation that helps navigate to what extent the intervention leads to the desired goals (Mayne, 2017). Our partners, Creative Commons Indonesia (CCID) and Wikimedia Indonesia (WMID), are among the non-profit organizations that could benefit from this targeted capacity building efforts. As community-driven entities, they rely on dedicated volunteers that share common values and goals to run their programs. Securing funding helps these organizations to sustain their programs and allow for new initiatives to emerge. Therefore, strengthening their ability to construct successful ToC-based proposals for funding their social and educational programs is important. In this community development activity, we provide a ToC training for the program staff and the evaluation team from these social organizations.

The training has four objectives: 1) to provide a basic understanding of the ToC (ToC) and its general structure, 2) to enhance participants' ability to develop ToC for social and educational program proposals, 3) to facilitate participants with real case studies from various organizations to analyze Theory of Change, and 4) to encourage active participation in discussions and ToC development exercises. The ToC training was designed to equip participants with a comprehensive understanding of its importance in social and educational project planning. By mastering these principles, participants were expected to develop more effective proposals, thereby increasing their chances of securing funding from relevant donors.

## **IMPLEMENTATION AND METHODS**

This community development activity used Service Learning (SL) method, which emphasises practical aspects and application of knowledge in the midst of society or community while interacting with them and offering a solution to the problems faced by the community. The intensive, 3 hours face-to-face ToC training was held in Cikini, Jakarta. There were seven participants consisting of

members from Creative Commons Indonesia (CCID), Wikimedia Indonesia (WMID), and the Wikimedia Jakarta Community. Participants hold various roles within their organizations, ranging from Project Manager, Deputy Project Manager, Project Coordinator, Program Staff, and Volunteers. Participants were purposefully selected as they were the leaders and team members who were currently applying for program funding. The training consists of pre-tests, presentation, group discussion, exercises and case studies, question & answer (Q&A) session, and post-test. The training materials were as follows:

### 1. Introduction to ToC

- Definition of ToC
- The importance of Theory of Change in social program planning
- Differences between Theory of Change and logical framework and their applications
- Key components of a Theory of Change and their interconnections (activity, input, output, outcome, and impact)

### 2. Developing ToC

- Differences between ToC components (activity, output, outcome, intermediate outcome, and impact)
- Common mistakes in developing ToC
- How to evaluate ToC
- How to communicate ToC to donors and other stakeholders

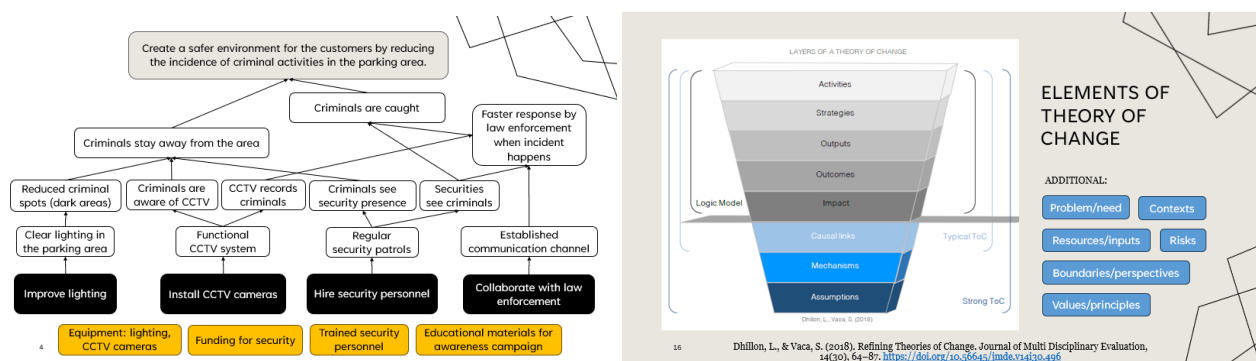
### 3. Case Studies and Exercises

- Examples of successful social projects using ToC
- Exercises in identifying and differentiating ToC components (activity, output, outcome, intermediate outcome, and impact)
- Simulation of ToC development

To measure the effectiveness of the training in improving participants' understanding of ToC in designing impactful social and educational programs, pre-test and post-test were administered before and after the training. Ten multiple choice questions were designed for the pre- and post-test, that included:

1. What is a ToC
2. Essential components in a ToC
3. Why is it important to include assumptions in a ToC
4. The primary purpose of a ToC
5. The term "outputs" in a ToC
6. The term "outcomes" in a ToC
7. How a ToC helps in evaluating a project
8. The role of stakeholders in developing a ToC
9. Steps in creating a ToC
10. How a ToC differs from a logic model

Figure 1 below illustrates several slides from the training materials that include the analogy and simulation of ToC, the important elements of ToC, the benefits of ToC, and how to communicate briefly and effectively about the social and educational interventions using ToC.



### BENEFITS OF THEORY OF CHANGE

- Be clear about our assumptions
- Gaps between steps and outcomes become evident
- Novel solutions may emerge
- The initiative is more likely to be effective

- As a framework to check milestones and stay on course
- Document lesson learned about what really happens
- Transparent implementation and evaluation plans and criteria
- Justified communications and reports to stakeholders (funders, policymakers, boards)

### COMMUNICATIONS USING THEORY OF CHANGE

Komunikasi	Element of ToC
Berdasarkan masalah yang <u>teridentifikasi, yaitu ...</u>	Problem / Root Cause
Kami <u>menyusun</u> rangkaian <u>aktivitas berupa ...</u>	Activities
Yang <u>akan menghasilkan ...</u>	Outputs
Dengan <u>harapan ...</u>	(Intermediate) outcomes
Sehingga ...	Outcomes
Dengan begitu, <u>cita-cita besar ... dapat tercapai.</u>	Goals

Figure 1. Example slides from the Theory of Change training materials

## RESULTS AND DISCUSSION

Considering the importance of understanding ToC for planning, implementation, monitoring, and evaluation of their social and educational programs, participants in this community empowerment activity were actively engaged in the training session that lasted for 180 minutes. They attentively learned from the presentations, posted thoughtful inquiries, engaged in group discussions, worked on exercises and case studies, and developed their own ToC for their social and educational programs or initiatives. Figure 2 shows some pictures of the ToC training conducted by the authors with participants attentively paying attention to the authors during the intensive training.



Figure 2. Pictures of the Community Empowerment Activity (Theory of Change training)

The ToC training was evaluated through a pre-test and post-test assessment to measure participants' understanding and improvement in the application of ToC concepts. A paired t-test was done to compare the pre-test and post-test scores of the seven participants. The results indicated a

statistically significant increase in scores from the pre-test ( $M = 6.14$ ) to the post-test ( $M = 8.86$ ),  $t(6) = -4.48$ ,  $p = 0.0042$ . The effect size, measured using Cohen's  $d$ , was 1.69, which indicates a large effect. This suggests that the training led to a meaningful improvement in the participants' understanding of ToC. Given the  $p$ -value is less than the 0.05 significance level, we can conclude that the training was successful and likely influenced participants' understanding, implying a positive impact of the training. This increase demonstrates a substantial gain in participants' knowledge and their ability to apply ToC principles effectively. Figure 3 below illustrates the individual improvements in understanding from pre-test to post-test, which highlights significant gains across all participants.

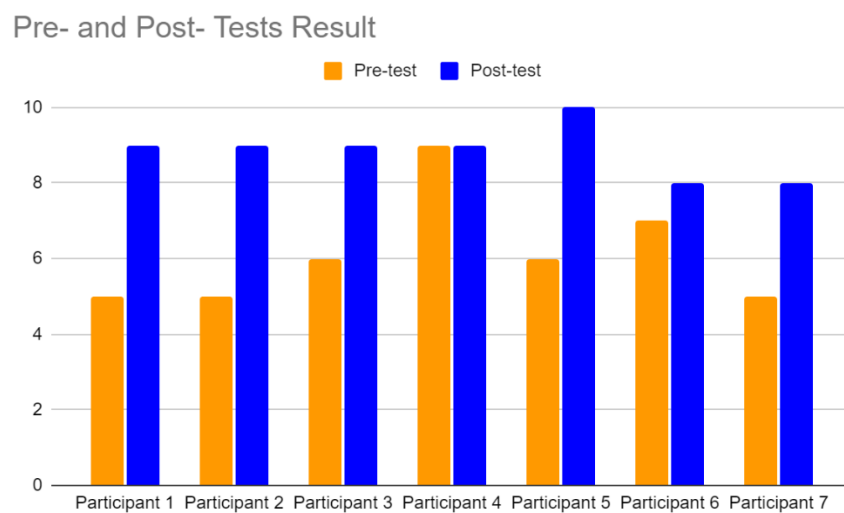


Figure 3. Pre- and post-test results for individual participant's understanding of Theory of Change

During and after the training, participants worked on developing a ToC for their social or educational projects. The ToC produced by the participants showcased a clear and logical structure, including the project activities, the tangible outputs, the short and intermediate term results, and the long-term impact of the projects. Figure 4 exemplifies a ToC developed by one of the participants. The participants' ToC reflected a strong understanding of how to map out and connect different components of a social program.

The pre-test and post-test evaluation data showed that the participants improved their understanding and utilization of Theory of Change concepts after attending the training program. The

marked increase in test scores underscores the success of the training in bridging knowledge gaps and equipping participants with the skills needed to develop robust ToC frameworks for their social and educational programs. The significant improvement observed across all participants suggests that the training was well received and that the instructional methods, including presentations, group discussions, and case studies, were effective in facilitating learning. The pre- and post-test scores highlight not only an increase in theoretical knowledge but also an enhanced ability to apply this knowledge practically.

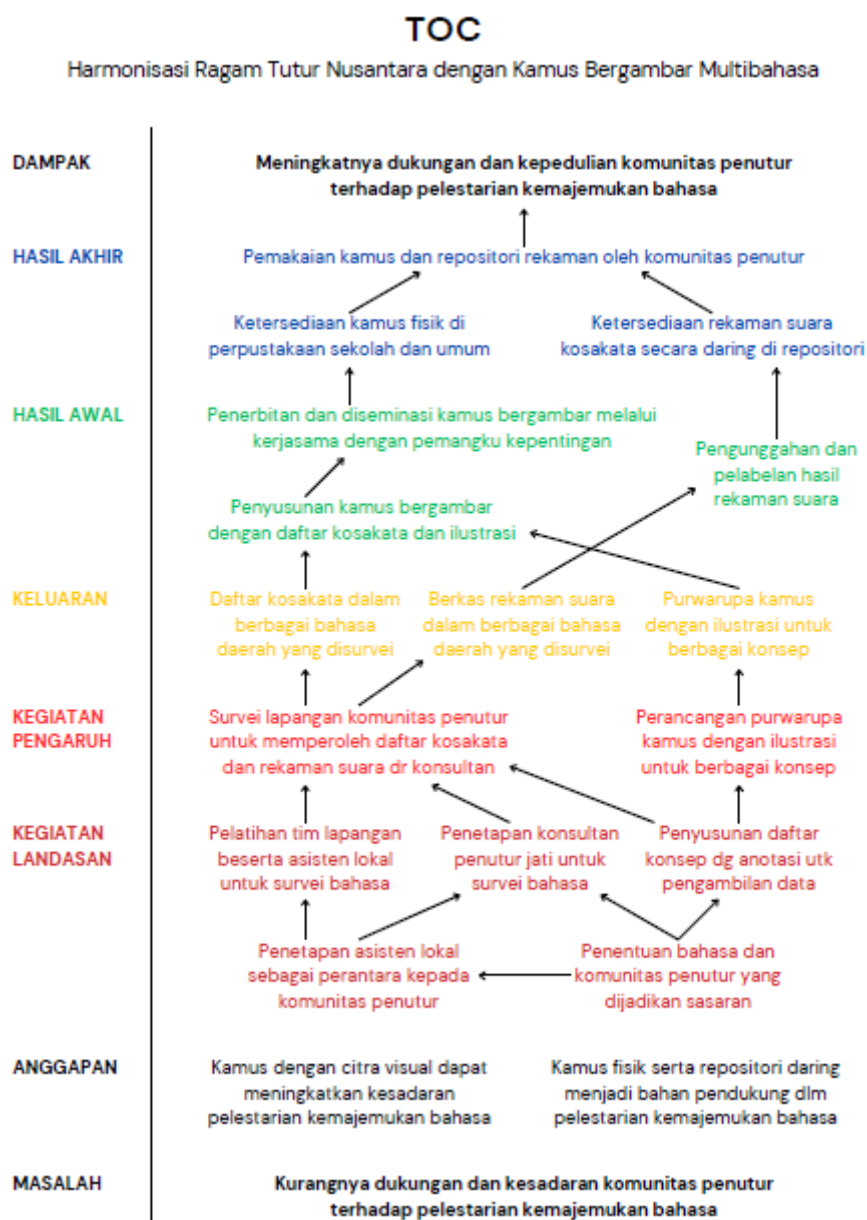


Figure 4. An example of Theory of Change developed by participant of the training



The ToC developed by participants during the training demonstrates their newfound capability to create logical and structured frameworks for social interventions. This aligns with the training objectives and indicates that participants can now design more impactful proposals, potentially leading to better funding opportunities and more effective program implementation. The success of this training reinforces the value of ToC as a tool for program planning and evaluation. By equipping community-based organizations with the knowledge and skills to develop comprehensive ToCs, the training contributes to their ability to design and implement impactful projects, ultimately fostering more sustainable social and educational interventions.

Participants shared positive feedback on the training by highlighting its practical relevance and applicability to their work. One participant noted, "This training has given me a clear structure for designing programs. I now feel more confident in developing project proposals." Another remarked, "The hands-on exercises helped me understand the logical flow of a ToC framework." Such feedback underscores the value of experiential learning in improving participants' comprehension.

While the training demonstrated significant improvements in participants' understanding, certain challenges were observed. The limited training duration (three hours) constrained the depth of discussion, and some participants expressed the need for additional sessions to further refine their ToC frameworks. Moreover, varying levels of prior knowledge and experiences among participants posed difficulties in maintaining a uniform pace for all attendees. Future improvements could include extending the training duration, incorporating follow-up mentoring sessions, and integrating more hands-on activities to reinforce learning.

These findings contribute to improving ToC-based training in nonprofit settings by emphasizing the need for structured and interactive training approaches. Nonprofit organizations could benefit from integrating ToC training into their regular capacity-building programs to strengthen strategic planning and program evaluation. Donors and funding agencies may consider supporting such training initiatives to ensure grantees develop well-structured, impactful proposals.

## CONCLUSION

The ToC training successfully achieved its targets for community empowerment by significantly improving participants' understanding and application of ToC concepts, which addresses their specific needs and challenges. The training methods, including interactive presentations, case studies, and practical exercises, were well-aligned with the identified problems and needs of the community-based organizations and provided them with the tools to develop robust and actionable ToC frameworks. The positive impact of the training is evident in the participants' improved ability to design more effective and strategic social and educational programs, thereby increasing their potential for securing funding and implementing impactful interventions. For future community empowerment efforts, it is advisable to continue focusing on practical, hands-on training that addresses specific organizational challenges, incorporate real-world case studies, and provide ongoing support to ensure the effective application of newly acquired skills.

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