

# Modelling learning programmes

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## Introduction

An overwhelming majority of international development agencies requests that staff and/or recipients use programme logic models to plan and evaluate their programmes and projects. The most common such model is Logical Framework Analysis (LFA). While the models may vary in language, structure, and use, they consistently illustrate programmes as a fixed set of activities implemented in a given timespan. This ‘blueprint approach’ is challenged by the concept of organisational learning, which redefines structures (such as programmes and projects) as an evolutionary process of action, reflection, and adaptation.

This trend affects development in practice by creating a tension between programmes that are driven by organisational learning concepts and the traditional use of various tools and methods in programme implementation. It is argued that if a programme is grounded in the learning perspective then that perspective should inform every aspect of the programme. With regard to planning and evaluation, this requires more than just loosening LFA’s constraints, it means restructuring the model to illustrate change over time.

The following note describes one attempt to update the programme logic models to incorporate organisational learning. It begins with a brief review of learning concepts, describes the traditional LFA, and concludes with a sketch of an alternative programme model, the Temporal Logic Model (TLM).

## Theoretical background

Learning organisations are ‘skilled at creating, acquiring, and transforming knowledge, and at modifying [their] behavior to reflect new knowledge and insights’ (Garvin 1993). The learning is both incremental, in order to ‘focus on refinements of current strategies’,

and transformative, so as to ‘focus on creating strategy because people understand the organisation or its work in new, fundamentally different ways’ (Watkins and Marsick 1993). These processes consist of continuous cycles of action, reflection, and adaptation, which are commonly referred to as ‘learning loops’. Depending on the challenges faced by the group, these learning loops occur (often spontaneously) on a variety of different subjects, stages, and timings. In programme management, single-loop learning correlates with an iterative process of reflection on an issue within the programme, while double-loop learning correlates with a transformative reflection on programme design. Further, Gregory Bateson (1972) introduced ‘deutero-learning’ to integrate the capacity to sustain the process of single- and double-loop learning (Morgan 1999). In essence, deutero-learning describes a learning programme’s ability to continually improve itself throughout the implementation phase.

The above concepts transform how programmes and projects are perceived. They are no longer a set of activities that should be implemented according to a predetermined plan, but an evolutionary process that changes and adapts over time. This process incorporates emerging lessons, responds to the environment, examines intended and unintended results, and actively refines the implementation theories embedded in the programme.

## **Logical Framework Analysis**

Leon Rosenburg, with a team of consultants from Practical Concepts Incorporated (PCI), invented LFA in the early 1970s for USAID (McLaughlin and Jordan 1999). Although there are several variations in structure and language, the model is part of standard procedures for most major funding agencies, including USAID, the Canadian International Development Agency, the UK’s Department for International Development, the German Agency for Technical Cooperation, the Japan International Corporation Agency, the Belgian Administration for Development Cooperation, the Norwegian Agency for Development, the European Commission, and the Swedish International Development Agency (Gasper 2000) (see Figure 1).

The evaluation logic model is used primarily at the programme level to foster a common understanding, help in its design, test its logical linkages and objectives, possibly explain the placement of activities in the larger programme hierarchy, and assist in the structuring of the evaluation (McLaughlin and Jordan 1999).

**Figure 1: Logical Framework Model**

	Narrative summary	Objectively verifiable indicators	Means of verification	Assumptions
Goals				
Purpose				
Output				
Input				

Criticisms of such models have included claims that the framework reinforces hierarchies and can be used as a tool to control programmes; reduce programme vision to achievable results, with negative effects on motivation; impose the blueprint approach which focuses on intended results, thereby overlooking the learning process; and assume consensus on problems and solutions. A final criticism is that LFA does not capture the *unintended* results (Gasper 2000).

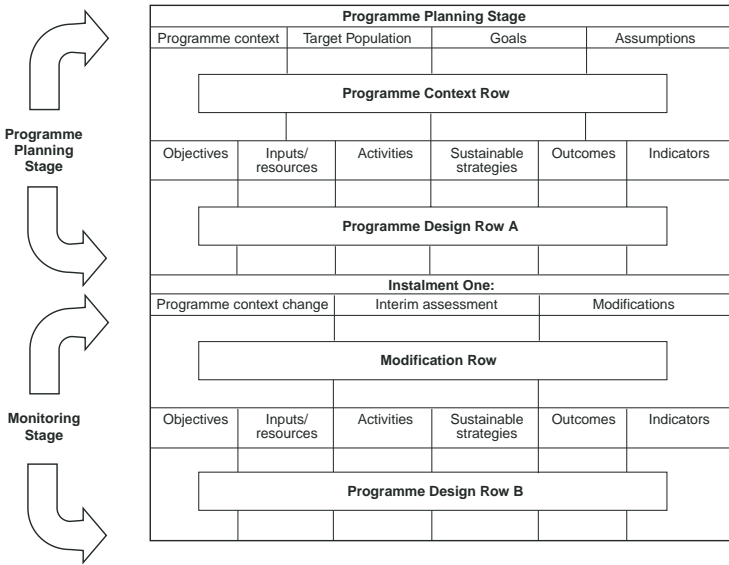
While most of LFA’s weaknesses can be attributed to misuse and institutionalisation, there are several structural issues that inhibit its effectiveness in learning programmes. Specifically, the graphic design illustrates a fixed plan ‘blueprint’ or a closed system that ignores how the programme adapts over time. The following model was designed to address this issue.

## The Temporal Logic Model

Modelling learning programmes requires the mimicking of an iterative process, recording how the programme responds to internal and external fluctuations, and continuous refinement of the theory that underpins implementation – while still remaining user-friendly. The TLM was intended to do this primarily by expanding the model vertically to represent change over time, as well as enhancing the content.

As seen in Figure 2, the TLM illustrates the programme as an iterative process through a series of stages. The first stage, entitled the ‘programme planning stage’, maps out the programme’s context and its internal mechanisms. The subsequent stages, referred to as

**Figure 2: Temporal Logic Model**



‘monitoring stages or instalments’, map out any internal or external changes to the programme, interim assessments, and necessary modifications. These modifications are incorporated into an adapted programme design row. The introduction of ‘rolodex-type’ instalments invites the stakeholders to track the learning loops by monitoring and reflecting on the programme and its environment (den Heyer 2001).

The programme context row acts as an anchor by being the only fixed statement in the model. It provides a general statement of the programme context, goals, target population, and underlying assumptions. It is intended to capture the common reasoning that underpins the programme. Once the broader issues are established, the stakeholders are then asked to fill in the programme design row. This links the internal programme mechanisms: objectives, resources, activities, sustainable strategies, outcomes, and indicators. The programme design row provides a more detailed account of how the programme’s components are logically linked in order to produce a causal effect, often referred to as the implementation theory.

While most logic models stop at this still snapshot of the intended programme, the TLM invites the stakeholders periodically to monitor and reflect on the programme structure. The monitoring stages

comprise a monitoring row and a subsequent programme design row. The modification row asks two reflective questions about changes in the programme context, interim assessments, and an analytical question about whether and how the stakeholders should modify the programme design on the basis of the previously noted reflections. These modifications are then recorded in the subsequent design row. The timeframe for the instalments should be determined on a case-by-case basis and may vary depending on the length, type, and structure of the programme. Programmes may wish to add extra instalments as the need arises.

The programme planning stage and subsequent monitoring instalments should correlate with the learning cycle of action, reflection, and adaptation at the level of double-loop learning (reflecting on the programme design), thereby creating an ongoing record of programme learning that can be shared with the wider organisation. Mapping the programme's change over time also reveals the evolutionary nature of its implementation. There is no defined end, simply instalments that monitor and support learning and adaptation throughout the process.

The LFA addresses the concept of being responsive to and interactive with the environment through assumptions that record potentially disruptive influences to the programme. However, the TLM further develops this concept by including a programme context row (which sets the stage for the programme implementation), and programme context changes in successive instalments corresponding to the monitoring stages. The addition of monitoring stages provides stakeholders with a flexible model to record changes in the context, interim assessments, and changes in the programme design, thereby creating an organic plan to capture the programme's interaction between contextual aspects and design.

The TLM also expands the concept of causation from LFA's presentation of linear and 'attributable' causality. As we saw above, LFA is criticised for assuming linear causality which undervalues the complexity of societal systems and the contribution of multiple causal factors (internal and external); assuming direct attribution for results; and promoting 'programme tunnel vision' by ignoring both positive and negative unintended results of the programme (Gasper 2000). The TLM approaches these issues both in terms of structure and content.

While it is impossible for a standardised model to map out each external contributory causal factor, it can illustrate the traditional

intended causation between a set of activities and intended effects. The TLM adds to this normative illustration by expanding the model to allow the stakeholders to adapt the causation and incorporate unintended effects. This provides a mechanism to refine the implementation theory as the programme develops.

In terms of content, the TLM uses sustainable strategies and a behavioural definition of outcomes. Instead of asking for attribution of long-term impact in society years after the project has been completed, sustainable strategies ask the stakeholders to outline current strategies for ensuring that the programme's effects continue to exist in the target population after completion. This is complemented by outcome mapping's refined definition of outcomes as 'behavioural changes that contribute' to change (Earl *et al.* 2001; Earl and Carden this volume).

These modifications transform LFA into a tool designed for reflective practitioners to record programme modifications based on increased learning, evolving consensus, and contextual changes. In addition, it balances accountability with flexibility by allowing for change and providing space to justify changes in the programme design. It could be said that this results in a more 'accurate accounting' of what is actually happening on the ground.

## Conclusion

The TLM was designed to address the gap between organisational learning theory and the practical application of logic models in programme planning and evaluation. It moves away from the traditional 'blueprint approach' by breaking open the standard '4 × 4 box' to include change over time. While there is a need for further field-testing, it is hoped that the TLM represents one more step in a wider effort to update and redesign traditional development tools for learning organisations.

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