

How to Develop Learning Questions

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“The usefulness of the knowledge we acquire and the effectiveness of the actions we take depend on the quality of the questions we ask.” Eric Vogt

1. Introduction

Designing projects using standardized planning tools such as the logical framework often makes us feel that we have to know precisely how to achieve our specified objectives. Although Logframes may appear to suggest otherwise, no project can be perfectly predicted in advance. The unpredictable nature of our work means that no matter how well we plan, we don't always know exactly how to implement our projects. There are some things we can learn in advance in order to increase the likelihood of our project's effectiveness, and other things that we can learn only by being adaptable during project implementation. Indeed we could say that every project, to some extent, is an experiment during which we try to learn the best way to achieve our objectives (known as single loop learning), or sometimes question whether the objectives were appropriate in the first place (double loop learning). However, we can only do this if we have an open and curious approach to our work, and if our organization (and its donors) is willing to accept partly unachieved objectives. The best way to open our minds is to ask ourselves questions.

2. Learning questions and the learning agenda

Questions are incredibly powerful tools. If we pause to think about it, everything we know has emerged because people were curious and guided their curiosity using questions.

By striving to answer questions (our own questions or those posed by other curious individuals) we learn. Questions help us to learn by prompting us to make sense of our own experience, draw on existing knowledge, test assumptions, seek new explanations, make connections, and generate insights.

At this point we need to draw a distinction between two approaches to learning: planned learning and emergent learning. Planned learning is associated with the development of a learning agenda. In simple terms, a learning agenda is a set of questions (we can call them learning questions) directly related to our organisation's work that, when answered, will enable us to work more effectively. Learning questions are an integral part of planned learning because together they establish our learning agenda.

Although the main focus in this tool is on *planned* learning using a learning agenda, we should also recognise the importance of being open to learn from our day-to-day work experience. This more open, unplanned approach is called *emergent* learning. Both approaches to learning require a supportive learning environment.

Organisations should aim to create and sustain a learning environment that enables, encourages, and values learning at all levels in the organisation. The principles and values of a Learning Framework (see Box 1 for one organisation's example) help to shape the learning environment. Part of that learning environment involves creating an organisational culture that encourages curiosity, questioning, critical reflection and sensible risk-taking among all staff in the pursuit of greater organisational effectiveness.

Box 1: Principles and values underpinning a Learning Framework

1. Learning and sharing are viewed as strategic priorities, essential to the success of all our work.
2. Learning is everyone's responsibility. We all have a role to play in building our organisation as an organisation that learns systematically from its experience.
3. We take a proactive approach to learning guided by our Learning Agenda (whilst also creating opportunities to capture learning retrospectively from current projects and programs).
4. We take an appreciative approach, building on our existing strengths in learning and sharing.
5. We aim to create an environment of trust that encourages curiosity, openness, learning and sharing. We demonstrate this by our willingness to discuss and learn from unplanned outcomes without repercussions.
6. We aim to proactively cultivate and value the learning that emerges from working with communities and other partners.
7. We integrate learning into our existing systems and structures as far as possible rather than creating parallel systems and structures so that learning is embedded in the 'way we do business'.

A learning agenda usually comprises learning questions at three levels: (i) project/program, (ii) thematic area, and (iii) strategic/organisational levels. In this tool we focus on the project/program level but the principles can be applied to the other levels too.

3. The purposes of learning questions

A learning question may address one or more of the following purposes:

- *Seek solutions to problems* – as mentioned earlier, it is not always clear how best to achieve our objectives. A learning question can help us to explore options and devise solutions.
- *Explore assumptions* – our projects and programs are based on sets of assumptions. These may not have been properly tested in the planning stage, although they may be crucial to the success of our work. A learning question related to assumptions can enable us to examine our assumptions in a rigorous and systematic way.
- *Test and revise Theories of Change* – during the course of implementation we may have to think again about the Theory of Change that underpins the design of our work. A learning question can prompt us to do this in a systematic way.
- *Stimulate creativity and innovation* – learning questions can encourage us to consider new approaches to our work, test these out, and adopt them if they work.
- *Contribute to the wider knowledge base* – learning questions can be devised to address gaps in our own understanding and the wider knowledge base.

4. Characteristics of good learning questions

A good learning question has the following characteristics:

- It is an 'open' question that starts with 'How', 'What', 'Where', 'When' or 'Who' ('Why' questions don't work as well as they can create defensiveness).
- It is relevant to the real work of the people who will be exploring the question.
- It is developed in consultation with those who will be involved in answering the question.

- It is a genuine question – a question that is currently unanswered in the given context.
- It is likely to stimulate fresh or innovative thinking / approaches.
- It is understandable and clear - not so complex that it is open to widely different interpretations.
- It states very clearly what you want to learn.
- It avoids hidden assumptions or beliefs.
- It gives direction and a sense of outcome.
- It is likely to generate hope, imagination, engagement, creative action, and new possibilities.
- It encourages new and different questions to be asked as the initial question is explored.
- The potential benefits arising from answering the question be worth the effort

Here are some examples of good learning questions devised by an environmental organisation:

- What are the most effective ways to use forest based enterprises that involve Community Forest User Groups in the protection of flagship species?
- What are the most useful criteria for guiding decisions about the introduction of payments for ecosystem services?
- How can we best respond to the pressure on buffer zones around the Langtang National Park brought about by human migration into the area?

5. Steps for developing learning questions

The following four steps can be helpful for devising learning questions that are relevant, stimulating, and effective: (i) Generate the learning questions; (ii) Assess the learning questions; (iii) Complete a Learning Questions Matrix; and (iv) Build the learning questions into the project management cycle.

5.1 Generate the learning questions

Ideas for learning questions can come from many different sources, including:

<p>The existing project logframe and particularly the assumptions section.</p>	<p>Examine the existing logframe and talk to those who were involved in the project design. What is the Theory of Change underpinning the project design? On what assumptions is the project design based?</p>
<p>Problems that have been identified concerning how to implement the work.</p>	<p>Talk to those involved in implementing the project. What concerns do they have about how best to implement the project? Listen to what community members have to say about their experience of projects</p>
<p>Identified gaps in the existing knowledge base relevant to the project.</p>	<p>Examine websites and literature related to the focus of the project. Get involved in discussions (online or otherwise) about how the project might contribute to expanding the sector's knowledge base. Consider what insights you hope to gain from implementing the project.</p>
<p>Learning Histories</p>	<p>Learning Histories enable participants to look back over a period to gain insights into how events unfolded, how decisions were taken, and to notice patterns of institutional or community change. During the process of creating a learning history, questions arise that can be used to develop learning questions.</p>
<p>Project monitoring data, reviews and evaluations</p>	<p>The formal M&E system may bring to light problems or opportunities for deepening our understanding. These can be translated into learning questions.</p>

5.2 Assess the learning questions

When you have drafted a number of learning questions, look at each one in turn and apply the following checklist:

- Is this an 'open' question that starts with 'How', 'What', 'Where', 'When' or 'Who'?
- Is this question relevant to the real work of the people who will be exploring it?
- Has the question been developed in consultation with those who will be involved in answering the question?
- Is this a genuine question – is the question currently unanswered in the given context?
- Will this question stimulate fresh or innovative thinking or approaches?
- Is this question understandable and clear - not so complex that it is open to widely different interpretations?
- Does the question state very clearly what you want to learn?
- Does the question avoid hidden assumptions or beliefs?
- Does the question give direction and a sense of outcome?
- Is the question likely to generate hope, imagination, engagement, creative action, and new possibilities?
- Will the question encourage new and different questions to be asked as the initial question is explored?
- Will the potential benefits arising from answering the question be worth the effort?

Consult others (including colleagues, partners and community members) about the wording of the learning questions. It is always useful to bring in a different perspective from outside the group that worked on the initial wording. Colleagues and partners may have relevant experience and be able to suggest information that could help you seek answers to the learning question.

Rewrite the learning question if necessary so that it fulfils the criteria in the checklist.

Box 2 applies the criteria to the first draft of a learning question to see how it might be improved.

Box 2: Assessing a learning question using the characteristics

Here is an example of a learning question that may require some additional work to make it a good learning question that fulfils the criteria listed above.

“What are the most effective ways to overcome barriers to women, dalits and socially marginalized groups taking on leadership roles in forest management, biodiversity conservation and natural resource management?”

The learning question above is consistent with characteristics (i), (ii), (iv), (v), (ix), (x) and (xi) above. We will need to check whether (iii) has happened.

However, the question is complex and this may lead to different interpretations. In other words it does not fulfil criterion (vi). This may be because it is based on a number of possible hidden assumptions (viii) that need to be examined. These assumptions are:

There *are* barriers that prevent women, dalits and socially marginalized groups taking on leadership roles.

Barriers prevent them taking on leadership roles in three different settings: forest management, biodiversity conservation and natural resource management.

It is *desirable* that women, dalits and socially marginalized groups take on leadership roles.

Women, dalits and socially marginalized groups *themselves wish* to have leadership roles (unless we consider a lack of ambition in itself as a barrier).

The barriers facing women, dalits and socially marginalized groups *are similar* and, hence, the ways of overcoming the barriers for each group will be similar.

It may be better, therefore, to break the question down into a series of separate learning questions on the basis either of *who* is facing the barriers (ie women, dalits and socially marginalized groups) or where they face the barriers (ie in forest management, biodiversity conservation and natural resource management). By dividing the original learning question into a number of more tightly defined learning questions, it becomes easier to state what we want to learn (criterion vii).

For example,

What are the most effective ways of increasing the number of women taking on leadership roles in forest management, biodiversity conservation and natural resource management?

What are the most effective ways of increasing the number of dalits taking on leadership roles in forest management, biodiversity conservation and natural resource management?

What are the most effective ways of increasing the number of people from other socially marginalized groups taking on leadership roles in forest management, biodiversity conservation and natural resource management?”

5.3 Complete a Learning Questions Matrix

When you are satisfied with the wording of the learning questions, complete a learning question matrix for each question. Table 1 below gives some suggestions about how to complete the learning questions matrix. (Note: Points m. and n. can only be completed after the learning question has been answered.)

a. The learning question	Write the question in full.
b. Who was involved in devising the question?	List the names, designations and email addresses of those involved in devising the question.
c. What is the purpose of the question?	Every question has a purpose (see Section 3). The question may relate to a challenge or problem; an assumption that needs to be tested or some other purpose. Explain why the question is being asked.
d. What are the benefits of answering the question?	Explain in what ways you hope the project, programme or organization will benefit if the question is answered.
e. Who will have overall responsibility to make sure the question is answered?	Every question needs a named individual who is primarily responsible for seeking relevant information and, ultimately, trying to make sure the question is answered.
f. Who else will be involved?	There are likely to be a number of people who are expected to contribute to answering the question. They should be consulted (or at least informed) about the contribution they are expected to make. Although it may not be possible to name them all, the key individuals should be listed in this section of the matrix with their specific roles in answering the question.
g. How will the question be answered?	In some cases this may be through a formal research process but more likely it may involve identifying and testing alternative work approaches; examining monitoring data through the 'lens' of the question; talking to beneficiaries; comparing results from different sites and communities; organizing team discussions; participating in online communities of practice, and so on. On any occasion when there is a significant discussion about the work of the project or programme (for example, at a team meeting), some time should be spent considering the relevant learning questions and critically reflecting on the findings.
h. What capacities are required to answer the question?	The capacities involved may include specific knowledge about the subject of the question; problem-solving skills; critical thinking and reflective practice skills; facilitation skills; data interpretation skills (eg identifying relevant patterns in the data); and others.

Table 1: How to complete a learning question matrix	
i. What budget is required	In most cases the budget may be minimal or related to the time of the individuals involved. For other questions it may be necessary to employ (on a short-term basis) a researcher, interviewer or data analyst in which case a budget may be necessary. A budget may also be necessary for a staff member to attend a relevant conference, seminar or course, in order to access or share information.
j. What other resources are required	The main resource is likely to be the time of those involved in answering the question. This may need to be budgeted (particularly if answering the question is a research task in its own right). Time spent specifically working on learning questions may have to be recorded on a timesheet in which case a specific time code may be needed. Other resources may include online access (for example to communities of practice, e-learning modules).
k. What is the timescale for answering the question?	By making the timescale clear, you make it easier to monitor and review progress. The timescale will depend on the complexity and scope of the question. Simpler questions may be answered in a few weeks or months, more complex ones may take a year or more.
l. How will progress be reviewed	It is important to build the progress review of the question into the normal project or programme reporting and review mechanisms. Whenever a report is written about the overall progress of the project or programme, some consideration should be given to the progress made on answering the relevant learning question(s). Any time there is a review of the project or programme you should also be looking at the progress made on the learning question(s). From time to time it may be necessary to change the wording of the question in the light of emerging understanding.
m. What has been learnt from working on the question?	Sometimes working on a learning question can lead to unexpected insights or understanding. It is important to record these (and the frustrations!) as well as the progress made.
n. How has the learning been applied?	One of the main purposes of learning questions is to improve the effectiveness of the work now and in the future. It is important to recognize that Learning questions can stimulate answers that may help with the 'here and now' implementation of the project or programme.

5.4 Build the learning questions into the project management cycle

Learning questions should have the same status as project objectives so they need to be built in at all five steps in the project management cycle. What this involves in practice is shown in Table 2 below:

Step 1: Project Definition	Identify broad learning goals (that will become more specific Learning Questions) for the project
Step 2: Project Design	<p>Agree Learning Questions with communities and partners and build these into the project/program design.</p> <p>Ensure the M&E plan is designed to assess progress on answering Learning Questions and also gathers evidence to demonstrate how learning has been used to strengthen organizational (and partner) capacity, improve targeting and effectiveness, and how it has been shared with and used by others in the sector.</p> <p>Ensure that the ‘signing off’ process whereby the project designers hand over responsibility to the project implementers is carried out in a thorough way that includes an explanation of the underlying Theory of Change and the Learning Questions.</p> <p>Include contribution to Learning Questions in the individual performance appraisal system.</p> <p>Include Learning Questions in the Logframe for the project.</p>
Step 3: Project Implementation	<p>Build strategies and mechanisms for answering Learning Questions in work-plans.</p> <p>Document progress made in answering Learning Questions including budget for the development of communication materials.</p>
Step 4: Project Analysis/Adaptation	<p>Incorporate Learning Questions in the monitoring system for the project and gather data that will help to answer the Learning Questions.</p> <p>Document any other learning points arising during project implementation (emergent learning).</p> <p>Regularly assess the progress made in answering Learning Questions and identify what the answers are telling us. Re-assess the Learning Questions and, if necessary, make changes to them.</p> <p>Ensure that managers are familiar with the concepts of adaptive management (double loop learning) and can apply what the project is learning to make necessary changes.</p> <p>Document discussions and decisions and the reasons why decisions were taken.</p> <p>Share the lessons that are identified, with colleagues carrying out similar work.</p>

Table 2: How to build learning questions into the project management cycle

<p>Step 5: Project Sharing</p>	<p>Document the answers to Learning Questions in Technical Reports and illustrate these with stories and examples that illustrate both successes and unplanned outcomes. Include discussion of Learning Questions and other lessons learned on the agendas for Project Executive Meetings and Project Steering Committee Meetings. Use a range of mechanisms for internal and external sharing of answers to Learning Questions and other learning (from successes and unplanned outcomes) – and follow up to see how this learning has been used. Ensure that evaluation ToR include evaluation questions related to: assessing learning and knowledge creation in the project, developing and answering the Learning Questions; how learning from the project contributed to capacity development; and how learning from the project has been shared more widely and used.</p>
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6. Answering the learning questions

Organisations will need a plan for answering each of the learning questions. In some cases it may be necessary to divide the learning question into a series of more manageable sub-questions that are more directly related to the work of specific individuals, teams or communities.

Even with the best of intentions it can be easy for learning questions to get lost in the busy-ness of day-to-day work so it is important that the person with overall responsibility (see Table 1, e) keeps their learning question(s) on their own 'to do' list or work-plan and also on the work-plans of all those who are involved in answering the question (see Table 1, f).

How each learning question is answered will depend on the scale and complexity of the question. Answering the learning question may involve a combination of activities including:

- Facilitate discussions with community members focusing on the learning question
- Facilitate team discussions focusing on the learning question¹
- Debrief individuals about their ideas and reflections (see Section 7)
- Test ideas in practice using field experiments

¹ It is important to be creative in the way these discussions are organised. An excellent resource for practical ideas on how to stimulate creative thinking in teams is Gamestorming by Dave Gray, et al (see Section 9, Further Reading)

- Analyse monitoring data with the learning question in mind
- Conduct a literature search
- Involve an expert from another project or other organisation for a 'Q&A Session' (either in person, or online)
- Raise the learning question in a Community of Practice
- Analyse research evidence with the learning question in mind

Everyone involved in answering the learning question (see Table 1, f) needs to be aware of the plan and the role they are expected to play. They will be expected to apply their skills of reflective practice and critical thinking² and be open to sharing ideas that may contribute to answering the learning question.

7. Recording and reviewing progress on the learning questions

One useful way to record progress on a learning question is to include progress on answering the question on the agenda of every relevant team meeting. In this way (assuming notes are taken at each meeting) there will be a written record of progress in answering the question in the notes. Everyone involved in answering learning questions should be encouraged to keep a personal record of ideas and reflections as this is part of good reflective practice. The ideas and reflections can be written in a diary or notebook; voice-recorded on a smartphone; recorded using photographs or video (again, a smartphone is ideal for this purpose); using a shared blog; or using recording sheets designed for the purpose.

Regular reviews on progress made with the learning questions can be built into the usual events of project monitoring and review (see Table 2, Step 4).

8. Using the learning from learning questions

The main purpose of learning questions is to generate learning that can be applied in practice within the organisation and shared more widely (see Table 2, Step 5). The learning that arises from trying to answer a learning question will depend on the purpose of the specific question (see Section 3). Learning gained from learning questions can be used within an organisation to:

- Solve implementation problems
- Re-think the Theory of Change that underpins a project
- Introduce innovative ideas

² See accompanying learning and sharing tool on 'Reflective Practice and Critical Thinking'

- Contribute to the design of future projects
- And for other purposes

9. Further reading

Gray, Dave, Sunni Brown and James Macanuso (2010) *Gamestorming: A playbook for Innovators, Rulebreakers and Changemakers*, O'Reilly Press (see also http://www.gogamestorm.com/?page_id=234)

See also *Developing Your Reflective Practice in Framework Resources*