# 18.1a Experimenter's Guide

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COLLABORATION

## Key Questions

### When and why should we be experimenting?

Experimentation is appropriate when you are facing a complex situation and a level of uncertainty about aspects such as the nature of the problem you face, potential solutions, how to get there, who should be involved and how to get started.

### 'Experimentation' is something scientists do. What does it mean in my context?

It means to learn the way forward through a series of small steps, each one an example of trying something that might just work. Rather than coming up with 'the solution', work towards a better outcome by testing and learning and modifying.

### If I can't be sure of outcomes, what can I be sure of?

While the business as usual approach is to seek certainty by creating the plan, the strategy or the answer, in complex situations this certainty is often an illusion. By experimenting and learning the way forward we have certainty on process, delivering the confidence that we will achieve content outcomes.

## Principles of Experimentation

### Learn, learn and learn

These are the top three principles for experimentation.
Temper your need to get the answer or to solve the problem. Focus instead on continuously learning about the situation you face, how the system you are in works, the patterns that are emerging and what these tell you about how to move towards your desired state.
When experimenting in the face of complexity you are likely to be wrong as often as you are right. T he learning mindset means that either outcome is instructive and useful.

### Don't experiment on people. Experiment with them.

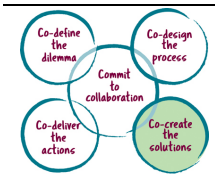
Experiments should be designed and run and analysed and learned from together. Each is an opportunity to test an aspect of the overarching hypothesis that better collaboration will bring better results when facing complexity and disruption.

### Uncertainty is a good thing

If you are feeling unsure how to proceed you are probably doing something right. Don't let it stop you from acting. Embrace the uncertainty and use it as the catalyst to learn by doing. Never stop learning.

### When you get to the end, keep going

Or to put it another way, when working in complexity you never get to the end. Keep your eye on the light on the hill. Keep testing ways to get there. Keep learning.



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## How to Design Experiments

When working together to design your next experiment, these guidelines can be helpful. They can add a framework with some discipline and rigour to the process so removing some of the uncertainty around experimentation that can be uncomfortable for some. They don't comprise a comprehensive list so feel free to experiment with your own.

### 1. Identify your 'light on the hill'

The light on the hill is the distant end point you aspire to together. It may be unattainable, so the point is not to reach it but to aim for it. The light on the hill gives you something to design your experiments for and something to measure them by. It allows you to answer that important question: are we heading in the right direction?

### 2. Identify your hypothesis

It is very useful to state the hypothesis clearly in terms of "if we do X we expect to get Y as an outcome, which will take us towards our goal in this way Z". For example, in an experiment in team building the hypothesis could be described as: *If we get the whole team to eat lunch together once a week in a social atmosphere, we expect some interpersonal barriers to break down and relationships to grow. This will allow us to work better together because trust will be higher, and communication will be easier.*

### 3. Name your experiment and briefly describe it

Giving your experiment a name gives it some focus and helps tell the story of the hypothesis. It can be powerful to choose a metaphor or 'image' as a name as these can add to the richness of the narrative. For example, an experiment about getting clarity on an issue could be called 'clearing the fog'. Add a brief description of the experiment so people can at a glance get a sense of what you are experimenting on and why.

### 4. Why is it safe to fail?

Think through the possible outcomes and make sure, if the experiment doesn't go as expected, that it is safe to fail. That is, that everyone can live with and usefully learn from a negative or poor or unexpected outcome.

### 5. Amplify or Dampen?

Work out together in advance how you will know whether your experiment is delivering what you wanted. If it is, amplify it – do more. If it is delivering unwanted consequences and in need of dampening – do less or do something different. For example, what might be evidence that the weekly staff lunch is moving the team dynamic in the desired direction? What could be evidence that it isn't?

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## Experimentation Template

| | |
|---|---|
| 1. **Define your light on the Hill**<br>(what are you aiming for? At a high level, what does success look like around the complex issue?) | |
| 2. **Identify your hypothesis - what is the idea you are testing?**<br>(i.e. if we do x, I expect we may get y, because…., and that will help get us towards z) | |
| 3. **Describe the activity**<br>(briefly describe specifically what you want to do, and aim to keep it short and sharp) | |
| 4. **Safe to fail?**<br>(explain how this is OK if it does not work as expected) | |
| 5. **Expected outcomes**<br>(how will we know whether to do more or end this activity?) | ***Amplify:***-<br><br>***Dampen:***- |

## Experimentation Template - Example

| | |
|---|---|
| 1. **Define your 'Light on the Hill'**<br>*(what are you aiming for? what does success look like around the complex issue?)* | *People working seamlessly together between our two organisations* |
| 2. **Identify your hypothesis - what is the idea you are testing?**<br>*(i.e. if we do x, I expect we may get y, because…., and that will help get us towards z)* | *If we regularly get each group to talk and listen together, they should understand each other better, and that could build some connections and help the working relationship* |
| 3. **Describe the activity**<br>*(briefly describe specifically what you want to do, and aim to keep it short and sharp)* | *Building Connections- bring groups A and B together for a 2 hour meeting in next 2 weeks to talk about what each does in regard to the issue we are facing.* |
| 4. **Safe to fail?**<br>*(explain how this is alright if it does not work as expected)* | *If nothing changes it's unlikely we will have damaged the relationship any more, and it will be just business as usual. Even if the relationship doesn't improve, talking together will help us explore the content.* |
| 5. **Expected outcomes**<br>*(how will we know whether to do more or end this activity?)* | *Amplify:- we may do more of this if participants report positive changes as result of the conversation- they see the other group in a new light and feel more positive*<br><br>*Dampen:- we should end this if we see no change in the working relationship- people report no change in feelings toward the other group* |