Bureau de Change Laboratory

Homepage: **https://ojs.library.lancs.ac.uk/bcl/**

Technical Report

Designing a Change Laboratory outline plan

Brett Bligh

Department of Educational Research, Lancaster University, Lancaster, United Kingdom;

b.bligh@lancaster.ac.uk

Abstract: This technical report considers the process of designing an outline plan for a Change Laboratory research-intervention. It presents a table that can be used as the basis for producing such a plan and discusses the kind of design process that might occur, using the table, in the initial stages of the project. The technical report assumes that the research designer is a relative novice in using the Change Laboratory methodology and thus addresses some common issues and misconceptions that arise as research designers attempt to engage with the approach for the first time. Correspondingly, it assumes that the project is of a scale that can be carried out over a medium timespan (months, not years). The author bases much of the text on their experiences in supervising doctoral students undertaking Change Laboratory PhD projects: often studying part-time at a distance while working and situating their workplace as the research site.

Keywords: Change Laboratory; Outline plan; Project design.

Reviewers: Philip Moffitt, Yurou Song

Citation: Bureau de Change Laboratory, volume 1, article 8

Received: 05/02/2023
Revised: 16/02/2023
Accepted: 16/02/2023
Online: 20/02/2023

Cover image: Badly Disguised Bligh

1. Why do we need to talk about this?

Starting out with a new Change Laboratory project is a moment of considerable uncertainty, especially where the researcher-interventionist is relatively inexperienced with this kind of formative intervention research. For several years now, I have been supporting PhD students to undertake what, in the majority of cases, is their first Change Laboratory project. In this technical report I want to outline and reflect on an approach that I have used several times in discussing these projects in their early stages.

2. So, is this what I need to be thinking about at the very start?

Yes and no. It is important to be clear from the outset about what this technical report will *not* cover. Designing a Change Laboratory project is not merely a technical task. Among other things, it requires a clear recognition of an urgent problem that requires addressing, a conviction that learning more about the problem can be addressed via a collective process of change and development, and an aspiration to bring together a coalition of stakeholders to address the subject matter in a somewhat intensive way over a period of time. There needs to be some available activity system and/or network of activity systems, in the context of which the problem can be addressed with some prospect of a worthwhile outcome. And that worthwhile outcome needs to be something ethical and emancipatory for those concerned: Change Laboratory projects are, at heart, about envisioning and enacting real utopias, albeit sometimes on a modest scale.

Addressing these issues is central to developing a convincing *purpose* for a Change Laboratory project, without which there seems little point in pursuing the whole enterprise. The present document, however, is not really about establishing what that purpose should be. It is true that, like for many other human enterprises, the purposes of some research project sometimes develop dialectically as the means of pursuing them are explored and concretised. Nonetheless, it will be assumed that a researcher-interventionist reading this document already has *some initial idea* of what the purpose of their project is.

The approach I describe here is concerned, on the whole, with designing the overall sequence of tasks which will punctuate the lifecycle of the research-intervention. I shall refer to this sequence as the "outline plan". It is my contention that this is an important issue that deserves extensive discussion. To approach the issue, I will draw on my experience of discussing it within doctoral supervision meetings, in contexts where my PhD student is attempting to construct their outline plan, and I will share a table document that has proven useful to resource such efforts.

3. When should I begin work on the outline plan?

As soon as possible! Producing an outline plan is not, of course, the only priority that confronts a researcher-interventionist at the start of a Change Laboratory project. It sits alongside other pressing issues, such as familiarising oneself with the thicket of terminology, doing some initial work selecting and negotiating with the intervention unit, and thinking about what kinds of participant to recruit. It also sits alongside a need to prepare documentation, such as project proposals for managers in the intervention unit or—in the case of PhD students in the setting where I work—a Confirmation Document, which sets out a justification for the project in a way that is evaluated on its academic merit by a departmental panel (cf. Bligh, 2018).

But I am determined to reinforce the message that designing this task sequence is not something that should be delayed. While Change Laboratory projects do indeed adapt and evolve as they progress and as the agency of participants increases, their design is not haphazard and does require careful planning. In addition, working on the task design can be a useful supplement to these other, more obviously pressing, priorities. For example, working on the task design is one way of exposing where a researcher-interventionist has failed to understand some aspect of the theoretical framework; some version of the task sequence might be presented in the various pieces of initial project documentation; and understanding *what will be required* to resource the workshop tasks can help frame the initial, less formal quasi-ethnographic work with which many formative intervention projects commence.

4. What do I need to get started with the planning process?

For present purposes, I will present an artefact to mediate this process (see Appendix 1, and the editable copy available under *Downloadable Resource* below). It will be helpful for readers to have the file open and refer to it when reading the text below. The artefact may seem both simple and complicated. It is simple in the technological sense of being a table in a word processing file. Yet it is complicated in the sense of conveying the immediate message that there are many columns; that there will need to be many rows; and that there is quite a bit of technical terminology to grasp.

The table is based on my contention (which may not be shared by all other researchers experienced at using the approach) that, while there are many conventions and useful pieces of craft knowledge associated with Change Laboratory projects, two specific principles are most fundamental. These principles are *expansive learning* and *double stimulation*. For me, it is the way in which these two principles are made to interact that really *drives* a Change Laboratory project; this interaction is the source of the Change Laboratory's power as both an intervention approach (stimulating change in actual activity systems) and as a research approach (generating new knowledge of value to those participating, including the researcher-interventionist). Furthermore, in my view it is this interaction that serves to define the identity of the Change Laboratory as a research methodology. Only projects that use these principles together, in other words, can 'count' as a Change Laboratory in my view.

When sending this table to my own PhD students, I often also provide a 2015 book chapter, which I co-authored (Bligh & Flood, 2015), on the grounds that it provides simple definitions for some of the attendant terms and deals explicitly with issues of conducting such research in higher education settings, which is where many of my own PhD students are working. Most people starting out with the Change Laboratory also tend to be reading the book *The Change Laboratory: A Tool for Collaborative Development of Work and Education*, by Virkkunen and Newnham (2013), as they plan their project—sometimes in a similar haste to that with which I read the text several years ago myself. This is also a very useful resource.

5. What are the principles embedded in the planning document?

The key principles are expansive learning, double stimulation, and the centrality of intertwining the two.

Expansive learning is a theory developed by Yrjö Engeström to address ruptural change in activity systems, with the name deriving from the fact that such change involves the object of activity getting 'expanded'. The theory focusses on the process by which such change is accomplished in cycles of actions, and categorises such actions into types. A considerable body of work has explored both the types of these actions, and the nature of the cycles in which these actions are undertaken. I have tended to recommend the paper by Engeström, Rantavuori, and Kerosuo (2013) as essential reading for those wishing to understand the principles involved.

Two conclusions drawn from such work are crucial when designing a Change Laboratory project. The first is that the order of the actions within a cycle is not arbitrary; while it is to be expected that those involved in enacting change will revisit earlier decisions and deviate from expectations, and that projects might involve "sub-cycles" of actions recursively nested into other cycles, this does not mean that we should take too many liberties with the suggested order of actions at the design stage. In particular, many people, in my experience, become tempted to skip to "modelling" actions prematurely, since this accords better with common sense about

inviting a focus on 'solutions'; I specifically ask designers of research-interventions to firmly *avoid* such temptations themselves, and also to anticipate how to steer participants away from similar temptations as the project unfolds.

The second crucial conclusion is that the action types are fairly broad, and thus that the associated goals can be achieved in a wide manner of ways. For example, the paper by Engeström, Rantavuori, & Kerosuo (2013) finds that people engage in actions of modelling by sketching initial ideas, exploiting existing models, naming and defining their own principles, working on graphic materials, etc. (see especially Table 3 in the paper). With one important exception, the precise form of such engagement is not fundamental at the design stage and the researcher-interventionist can therefore allow considerable latitude in this regard. The important exception, which *is* fundamental, concerns the actions of analysis, where participants must engage in *both* the historical analysis of those activities which have preceded the current situation, and the actual-empirical analysis of the structure of their present activity systems.

In the design of a Change Laboratory research-intervention, I tend to say that expansive learning provides the *overarching strategy* for the project. As a first step, I expect, therefore, that expansive learning actions will be planned for that address each of the following types of actions in the following order: (1) questioning; (2a) historical analysis; (2b) actual-empirical analysis; (3) modelling; (4) examination; (5) implementation; (6) process reflection; and (7) consolidation. I am prepared to concede on the order of the two types of analysis (2a and 2b). But otherwise, I seriously expect the various rows of the table to each be focussed on addressing one of these types of action, and the progression through the imagined cycle to be obvious as I glance downwards through the table.

Double stimulation is a longstanding principle that can be traced back to the work of Vygotsky and colleagues, with much valuable recent theoretical work being undertaken by Annalisa Sannino (e.g., Sannino, 2015). My experience is that inexperienced researchers designing a Change Laboratory task sequence might usefully approach the principle as a way of enabling people to pursue difficult goals by stimulating their own agency as a group. While Sannino's work emphasises that double stimulation often occurs naturally, the designer of a research-intervention is trying to deliberately nurture it. Doing so involves providing a first stimulus that defines the goal of the problem along with a second stimulus which helps those participating to pursue that goal. Within the Change Laboratory tradition, such stimuli are accompanied within task designs by mirror materials, which provide examples and illustrations of the problems being addressed; plans for the social organisation of participants, such as sequences of small group working, individual reflection or plenary discussion; mechanisms for helping participants document their own work; and plans for recording the proceedings—important, among other things, for research purposes.

The obvious question which should arise, when grasping the above description, concerns the nature of the actual goals that the tasks should address. And it is here that the *links between* double stimulation and expansive learning need to be emphasised: for it is to the types of expansive learning actions that the designer should refer when first designing the tasks and, especially, when considering the first stimulus for each task. In initial design conversations I thus tend to refer to double stimulation as providing the *tactics* used to pursue the wider strategy of expansive learning in the project. Engaging with Sannino's work should make clear that double stimulation can be far more than just a set of such design tactics, and I certainly hope that the researcher may get interested in the rich history of Vygotskyan studies of human volition in which double stimulation has a central place. But my experience has been that the above is a

good way for a novice to *start* to think about their design approach for a sequence of tasks across a research-intervention.

The above descriptions should make clear why and how the table format attempts to intersperse the two principles:

- by requiring participants to insert *rows dedicated to tasks*, oriented towards particular types of expansive learning action, and
- by providing a *column structure* which emphasises the relevant aspects of double stimulation.

At first glance, therefore, it should be possible to read an outline plan vertically and horizontally. In a vertical reading, one might expect to notice (1) an obvious progression through the types of expansive learning action, guided by the expansive learning cycle, and (2) that the *first stimulus* for each task corresponds to the relevant type of expansive learning action in each case. For example, if a given task aims to focus on *historical analysis*, then we would expect its first stimulus to be about guiding participants to focus in some way on the prior history of the activity systems! In a horizontal reading, one might expect that the overall task design makes sense as an approach to nurturing and supporting participants to address the *first stimulus* using a *double stimulation* approach.

6. What initial conversations usually happen?

I have historically presented the table to a novice researcher (hereafter, the "research designer") either by email before a meeting, or in the early moments of such a meeting.

The initial conversations stimulated by considering this table tend to have a 'structural' character. Research designers suddenly become very aware that they are expected to have some idea of *how many workshops* they will plan for, and it often turns out that they have hitherto been prevaricating on thinking about this issue. In such discussions, I am honest about the pitfalls of conducting too few workshops (too many projects have been forced to conclude just as the knowledge production was finally getting interesting) and, conversely, of imagining a structure too ambitious for the setting (which may provoke a backlash from institutional decision-makers or some reluctance from potential participants to sign up). I also sometimes mention my various experiences with real projects where participants actively asked to *extend* the number of workshops that had been planned (usually as the project gained momentum after some period of struggle), or where the project was seen as becoming embedded into the institutional fabric and thus never really coming to an end at all. (Conversely, one of my previous PhD students ended up in the unusual position of completing their project at what they had thought would be the penultimate workshop, though this situation of needing less time than first imagined is very much more rare).

Examples of Change Laboratories can be found in the literature that have initially planned to use anywhere from seven to fifteen workshops. Importantly, not all of the actual workshops in such different pieces of project documentation are of equal duration; even inexperienced designers can intuitively see the difference between planning for workshops that last for two hours or for half a day, and that such differences will have implications for the number of workshops which might be needed. My experience is that many PhD students initially try to plan for somewhere towards the lower bounds of this range, probably out of some sense of intimidation at the scale of the project they are taking on. In turn, my feedback tends to encourage them to increase the number towards at least nine or ten workshops, though this unfolds based on my judgment of how they can address their research aims rather than because I am working towards

some predetermined target. I tend to emphasise that these workshops can *feel* genuinely rewarding, rather than being simply a work commitment, but that projects can take a while to gain momentum. It can often be the later workshops that are the most immediately enjoyable! Similar discussions often address the issue of how frequently the workshops should occur (weekly, fortnightly, monthly, and so forth), where I tend to encourage the research designer to schedule the workshops as frequently as conditions at the research site will realistically allow so that the project has the greatest possible chance of developing a momentum.

An associated issue concerns the relationships between workshops, tasks and the various types of expansive learning action. Questions arise that try to unpick these relationships, such as: How many tasks can I put forward for each workshop in my design? How many tasks are required to address a given type of expansive learning action (like *modelling*)?

I should be clear that I regard such questions as important. They are certainly a step forward by contrast with initial assumptions, which I sometimes encounter, that all of these relationships are of a one-to-one nature (which would imply erroneously that all Change Laboratory projects comprise eight workshops and eight tasks). Yet I must be clear that providing numerical answers to such questions from the beginning is difficult. I am usually willing to venture a guess: that, for a first-draft design, we could start by assuming that each type of action will require two to three tasks. With regard to how tasks are distributed into workshops, I tend to say that there are obvious design tensions. On the one hand, having a workshop devoted entirely to stimulating a given type of action, like *examination*, might be able to benefit from synergies between consecutive tasks. Yet if all tasks directed towards a given type of action are encapsulated in the same workshop, then the design might miss the opportunity for participants to reflect on such actions between workshops, and to then come back with new insights next time (the power of what one PhD student referred to as "project homework"). The whole issue is also framed by the different lengths of workshops that are possible. Several previous PhD students have recounted to me that actions of *questioning* did not require an entire two-hour workshop, whereas trying to proceed to some form of *analysis* within that same workshop meant badly running out of time. Thus, thinking about how the final task of a workshop might set the scene for next time, and encourage participants to take some action of their own between the scheduled workshops, can be a useful approach.

7. This seems intimidating! Do I really *have* to start from scratch, or can I find existing designs and just modify them?

Despite offering a range of anecdotal examples in conversations at this moment, I do tend to emphasise that I think it is a good idea for a research designer to work initially from first principles when putting forward a first draft of their own outline plan. An increasing range of previous Change Laboratory outlines can be found on the internet—my hope is that the present website will come to host many such examples—and such designs can indeed be useful in influencing the design of a research designer's own. Yet I tend to ask novice designers *first of all* to try to come up with an *outline plan of their own* that is based on what they know of the intervention site and the nature of the problem being faced there. There are indeed some recurring task designs that tend to crop up in Change Laboratory projects, such as the "history wall" design used in attempts to stimulate actions of *historical analysis*, and many students are aware of these from their concurrent reading of Virkkunen and Newnham's (2013) book. I have no objections to using such stock task designs where these are relevant to the context. But I do regard attempts to import entire *sequences* of designs from other projects as potentially leading

to designers making premature assumptions and designing projects that do not properly fit their research contexts and aims.

Thus, at this point, I tend to ask research designers to work on their design using the table, and I suggest that we reconvene after a suitable period of time to discuss the initial outline plan they have put together.

8. What happens when I have produced a first draft outline?

By the time of the next meeting, we are usually discussing a table with quite a lot of tentative content. At this point, the proceedings of meetings become much more varied and less predictable. But I think a few recurrent themes are worth highlighting.

One immediate issue is that I often notice misconceptions about some of the theoretical concepts in the table. While the research designer might be able to state the formal definition of some given term, the content they have put into the table makes it clear that they have not yet fully internalised some of the implications. Within the terms derived from the expansive learning cycle, for example, those of *questioning* (the critique and potential rejection of established wisdom) and *examination* (unpacking how a new model might deal with test cases, especially those which repeatedly pose problems for the already existing activity systems) seem most commonly misunderstood, and I not infrequently find myself reiterating their meaning.

Yet there is one misconception that stands out above all others in terms both of its importance and the frequency with which it arises: conflation of the *second stimulus* and the *mirror materials* within the design of double stimulation tasks. While more extensive discussion of the respective definitions can be found elsewhere, the fundamental distinction I try to convey at this point is that the *second stimulus* is a means for participants to pursue their goals (which hopefully correspond with the goals of the task), whereas the *mirror materials* are illustrations of the nature of the problem being confronted. (While the analogy is not ideal, I have sometimes resorted to saying that *mirror materials are problem-oriented whereas second stimuli are solution-oriented*). It is relatively common for me to find myself having to ask that certain resources get moved from one column to the other, which sometimes leading to one of the columns becoming empty—leaving a gaping hole in the outline plan that needs to be addressed by subsequent design effort.

In such conversations I sometimes find myself using contrived examples drawn from my prior interactions with the particular research designer. For example, I might discuss how their initial attempts to frame the problem and set out their research motivation constituted various forms of *questioning* and/or *analysis* actions. Given that such discussions will often have influenced some of their early writing, on which I have already provided feedback, I may be in a position to refer directly to such documents in the meeting. I sometimes try to illustrate examples of *mirror materials* and *second stimuli* to the research designer using the documents available at the present meeting; in some cases, for instance, their written accounts genuinely bring into the meeting real mirror illustrations of situations arising in current activity systems that I would not otherwise have had access to. The example of a *second stimulus* that is most readily at hand, of course, is the framework that the research designer has been using to try to devise the project outline—the table structure itself!

9. It sounds like you are structuring these meetings using double stimulation task principles?

They do not match very exactly, but I do at least try to *illustrate* the principles using real examples from within the meetings.

In Table 1, I have tried to illustrate how the goal of mapping out an outline plan for a Change Laboratory project might be analytically disaggregated into a short sequence of tasks. The example is necessarily abbreviated and contrived. It also does not conform to the aspirations of the task sequences I am hoping to provoke because it considers modelling in isolation, rather than as part of a wider project, and has participation from only two people (myself and the research designer). Yet I hope that the table will serve sufficiently to illustrate the intended format for using the downloadable resource and how the research designer might start to fill in the blank table.

Table 1: A hypothetical short series of tasks for designing the outline plan

Expansive learning action	First-stimuli	Second-stimuli	Mirror materials	Social organisation	Documentation	Recording
Modelling (task 1)	Discuss the outline plan for your Change Laboratory project	Outline plan template (the downloadable resource)	Draft confirmation document (especially descriptions of research motivation)	Research designer and supervisor bilateral discussion	Meeting notes kept by research designer	Researcher diary, Meeting record
Modelling (homework)	Map out the outline plan for your Change Laboratory project in more detail	Outline plan template with annotations from supervision meeting	Previous meeting records and diary entries, Draft confirmation document (especially descriptions of research motivation)	Research designer working alone to report back	Draft version of "filled in" table, to be sent to supervisor before next meeting	Researcher diary
Modelling (task 2)	Refine the initial outline plan	Draft version of "filled in" outline plan template	Draft confirmation document (especially descriptions of research motivation), Other examples of Change Laboratory designs	Research designer and supervisor bilateral discussion	Meeting notes kept by research designer, Further annotations on draft version of "filled in" outline plan template	Researcher diary, Meeting record

As well as illustrating the definitions of the terms being used, I hope that Table 1 will also demonstrate an important aspect of Change Laboratory design: an aspiration that artefacts within the project become imbued with meaning and connect the project to the wider cultural constellations in which the participants' activity systems are embedded. That aspiration can be achieved in various ways. In some cases, it is advantageous to use resources directly connected to participants' practices. In Table 1, the focus is on the activity system of supervised research, and thus I am striving to make use of those confirmation documents and meeting records that already form a part of the culturally entrenched activity of doctoral supervision in my academic

department. For the Change Laboratory being designed by the researcher, I hope that resources imbued with a strong sense of local meaning can also be woven into the task designs and I try to convey this message by using such situated examples.

10. What common drawbacks do you identify in first draft designs?

One common drawback is the lack of much sense that tasks build across a *progression* or, in other cases, that the sense of progression seems nascent but fragmented.

Take the modelling tasks being described in Table 1. They necessarily build on earlier actions, without which many of the resources used could not exist. From the point of view of any given task, the designer needs to think both backwards and forwards—taking into account how each task design builds upon earlier actions and opens up subsequent possibilities for later tasks. Many designers have, in my experience, found it useful to think about such possibilities by examining the *flow of resources* within sequences of tasks. Where tasks are supposed to result in certain kinds of documentation, for instance, then it will be useful to think about how such documentation can feed into subsequent tasks: especially as either *mirror materials* or *second stimuli*. Equally, it is useful to think about which aspects of some given task might draw upon resources produced, earlier, by the participants themselves.

Prior experience with Change Laboratory projects has shown that it is particularly powerful to use participants' own products from earlier tasks as the basis for evaluating their current work—thereby holding them to account against standards and priorities they have established themselves. In some projects, it is the gradual constitution of second stimuli by participants themselves that eventually allows them to find a way out of their current situation. In other cases, it may be useful to think about how products flow between sub-groups or from smaller subsets to the whole collective of participants—for example, how some sub-group might "mirror back" the problems their work has identified within the wider project.

Another drawback that I tend to notice and discuss around this point is a lack of resources that are genuinely *provocative*.

In my experience, many research designers start out by focussing on resources that are somewhat detailed and technical. In most cases, I do not doubt the correctness and relevance of such artefacts, but I do query whether they will be sufficient to *move participants into action*. To be sure, for a Change Laboratory research-intervention to achieve success, participants must sometimes step back from the situation and think carefully; but they must *also* be driven by a sense of injustice and a conviction that present practices cannot be allowed to go on. For such reasons, it is worthwhile for research designers to incorporate resources that are less about analytical detail than about illustrating the urgency of problems.

A conventional way of doing this is to illustrate problematic situations using testimonials or short case studies. These are sometimes best presented in the form of short videos or, where producing these is not feasible, as illustrated slides with direct quotations. In other cases, resources might be produced which illuminate how complacent or obnoxious are the established practices or dominant plans for the future. For example, one of my PhD students found a video, produced with fairly high production value, of a leader of the organisation discussing roughly the same issue their project would address, but in a way reminiscent of a sales pitch detached from institutional reality. Certain that the video would provoke some strong objections within the group, the video was incorporated as *mirror materials* into an early task design to illustrate the nature of the problem the group needed to address. Discussion of the potential for using

video materials across the trajectory of a Change Laboratory project has been considered in more detail elsewhere (Moffitt & Bligh, 2021).

Having discussed such issues, research designers usually wish to spend some time amending their emerging design once again.

11. So how do I carry on from here?

Producing the design for a Change Laboratory research-intervention is an ongoing and iterative process. The above sections have attempted to illustrate my experiences of discussing the production of such designs over the course of around two meetings, but it is often the case that several more meetings are required before the research designer and I each feel satisfied that the outline meets the general aspirations of the project, takes advantage of the underlying theoretical principles, and describes a sequence of workshops that build on each other coherently.

As subsequent iterations of the design are produced, I gradually encourage the research designer to draw more inspiration from the designs of previous Change Laboratory projects. Once the designer has established what they are trying to achieve and has identified some specific design difficulties in their initial outline, they will be better placed to actively engage with the logic of earlier designs. In other words, they will be in a better position to draw inspiration from previous work without thoughtlessly importing ostensibly just-the-ticket solutions which are actually unsuited to their own research context. My own experience of encouraging research designers to look elsewhere for inspiration has drawn heavily for resources on the theses of those PhD students I have supervised before. Over time, however, I hope that this *Bureau de Change Laboratory* website will provide a range of such worked examples, accompanied by text reflecting on the design intentions.

As such design conversations unfold over a number of meetings, I progressively expand the emphasis to focus on the work that will be required *prior* to the first workshop. As standard accounts make clear, prior to commencing the workshops, Change Laboratory projects usually involve a period of investigating the research site, talking to stakeholders, and negotiating aspects of the project with local decision-makers (Virkkunen & Newnham, 2013). While the details of doing so are beyond the scope of the present resource, it is worth noting that the design of the project outline often proceeds alongside these other actions and develops in tandem with them. For example, it may become obvious when composing the outline plan that certain kinds of resources will be useful in the workshops, and so action can be taken in the research site to generate or acquire appropriate materials. Conversely, the initial fieldwork or negotiations might make clearer the range of opportunities (including existing resources and sources of enthusiasm) and constraints (such as periods of peak workload) that will regulate how the project unfolds in the research site.

Moving back and forth between actions of project design, fieldwork, and negotiation with decision-makers can also help the research designer to think about how they will position themselves in the research site—especially if, as is common for the doctoral projects I supervise, they propose to lead the project endogenously in their own workplace. In turn, such conversations tend to drift towards logistical issues: how to recruit participants, manage their expectations, explain the principles of the project, elicit their initial commitment, and so on. In other words, having set out the basic outline in terms of expansive learning actions, there comes a time where it becomes necessary to consider a range of "support actions" that will enable and nurture the project. One common point of discussion concerns whether or not to introduce a "workshop

zero", at which potential or actual recruits might be provided with an overview of the project without being expected to engage actively in tasks. Such issues are already discussed in other places on this website, and new perspectives will doubtless continue to emerge over the coming period.

12. So, I will be planning and designing all the way through the project?

I hope that I have conveyed in the preceding sections that Change Laboratory research-interventions require careful design. Though this report has focussed mainly on the initial work undertaken to produce an initial outline plan, it should be understood that this design work will continue as an integral part of the project throughout its lifecycle. Later workshops will often need to be adapted to take into account the action unfolding in earlier ones; indeed, if every workshop simply "goes to plan" then we may get concerned at the lack of transformative agency being developed by the participants. Moreover, Change Laboratory projects are inevitably situated within wider networks of activity systems, and we should embrace the possibility that ongoing cycles of expansive learning will be influenced by wider, concurrent changes occurring within those networks.

Yet we should avoid the temptation to think that designs will somehow 'work out in the end' through some sort of serendipity. While no plan survives contact with reality, this is not a reason for not having a plan in the first place! Indeed, the very act of *detecting* deviations from the intentions of the designer—especially important for researcher-interventionists who wish to identify where transformative agency is emerging—is made easier by having those intentions clearly documented in the first place.

I therefore advise research designers to document an *overall* research-intervention design prior to commencing the first workshop. That design can be a good starting point for planning individual workshops in more detail, for noticing subsequent deviations, and for making subsequent changes. Hopefully this resource, based on recounting previous instances of project development and by providing a table structure, has provided a useful insight into how one might approach the production of such an outline plan.

Acknowledgements

I would like to extend my thanks to Phil Moffitt and Yurou Song for their very helpful comments on a draft version of this report. The final product, and especially its shortcomings, remains my responsibility.

Downloadable resource

An editable version of the outline table in Appendix 1 can be found alongside this report on the *Bureau de Change Laboratory* website as a supplement.

About the author(s)

Brett Bligh works in the Department of Educational Research, Lancaster University. He is co-Director of the *Centre for Technology Enhanced Learning* and Director of the Doctoral Programme in *E-Research and Technology Enhanced Learning*. His research interrogates the nexus of technology mediation, physical environment, and institutional change in higher education. Brett's work prioritises Activity Theory conceptions of human practice, and interventionist methodologies. He is a founder of the *Bureau de Change Laboratory* website.

Email: b.bligh@lancaster.ac.uk

ORCID: 0000-0003-4591-8897

Twitter: @BrettBligh

References

Bligh, B. (2018). *Notes on Confirmation Documents*. Version 1.2. Technical Report. https://doi.org/10.5281/zenodo.3663061

Bligh, B., & Flood, M. (2015). The Change Laboratory in Higher Education: Research-intervention using activity theory. In J. Huisman, & M. Tight (Eds.), *Theory and Method in Higher Education Research, Volume 1* (pp. 141-168). Emerald Group Publishing Ltd. https://doi.org/10.1108/S2056-375220150000001007

Engeström, Y., Rantavuori, J., & Kerosuo, H. (2013). Expansive learning in a library: Actions, cycles and deviations from instructional intentions. *Vocations and Learning*, *6*(1), 81-106. https://doi.org/10.1007/s12186-012-9089-6

Moffitt, P., & Bligh, B. (2021). Video and the pedagogy of expansive learning: Insights from a research-intervention in engineering education. In D. Gedera, & A. Zalipour (Eds.), *Video Pedagogy: Theory and Practice* (pp. 123-145). Springer. https://doi.org/10.1007/978-981-33-4009-1_7

Sannino, A. (2015). The principle of double stimulation: A path to volitional action. *Learning, Culture and Social Interaction*, *6*, 1-15. https://doi.org/10.1016/j.lcsi.2015.01.001

Virkkunen, J., & Newnham, D. S. (2013). *The Change Laboratory: A tool for collaborative development of work and education*. Sense Publishers. https://doi.org/10.1007/978-94-6209-326-3

Appendix 1: Initial outline plan of Change Laboratory sequence design

Session number	Task number	Expansive learning action	First stimuli	Second stimuli	Mirror materials	Social organisation	Documentation	Discussion and Recording
Typically 7-15 sessions	Typically 2-3 tasks per session, but depends on session length	Refers to the *main* actions you are focussing on within the design, not an exhaustive list of everything that might happen. 1-2 actions per session is the norm. Expansive learning involves a rough ordering of the actions as follows: Questioning; Historical analysis; Actual-empirical analysis; Modelling; Examination; Implementation; Process reflection; Consolidation. In practice, there will be more flexibility by the end of the project than at the beginning. Do NOT jump to 'modelling' before finishing the earlier actions.	What goals will you set for participants to pursue? Identify x, Analyse y, Map out the range of z, Find the differences between a and b, and so on.	What analytical *frameworks* or *assistance* will be offered to participants to address the first-stimulus problem? Activity system diagram, conceptual framework, blank tables to fill in, blank graphs to draw on, …. Again, for some later sessions, second-stimulus materials might be derived from earlier sessions, so that the knowledge-building is cumulative.	What information will you provide to the people in the room to illustrate the problems that the first-stimulus task addresses? Institutional documents, videos of interviews with students, … In later sessions, mirror-data might be taken from earlier sessions—if those sessions have been recorded properly.	How are participants to be organised? Whole groups, part groups, individual working … Working in the room, going to examine some resource nearby, homework tasks before the session….	How will participants document their own work? How will they take notes to refer to themselves later? How will they feed sub-group or individual working into the larger group? Sheets provided to groups or individuals.	How will you document what has been said? This is (a) so that it can be drawn on in later sessions, and (b) so that it is captured in a manner amenable to your research analysis. Those two aims have slightly different requirements; please ensure that you have amply considered *both*. Appointing a scribe within the session to take flipchart notes or minutes, video recording of sessions, collecting in some parts of the Documentation, ….