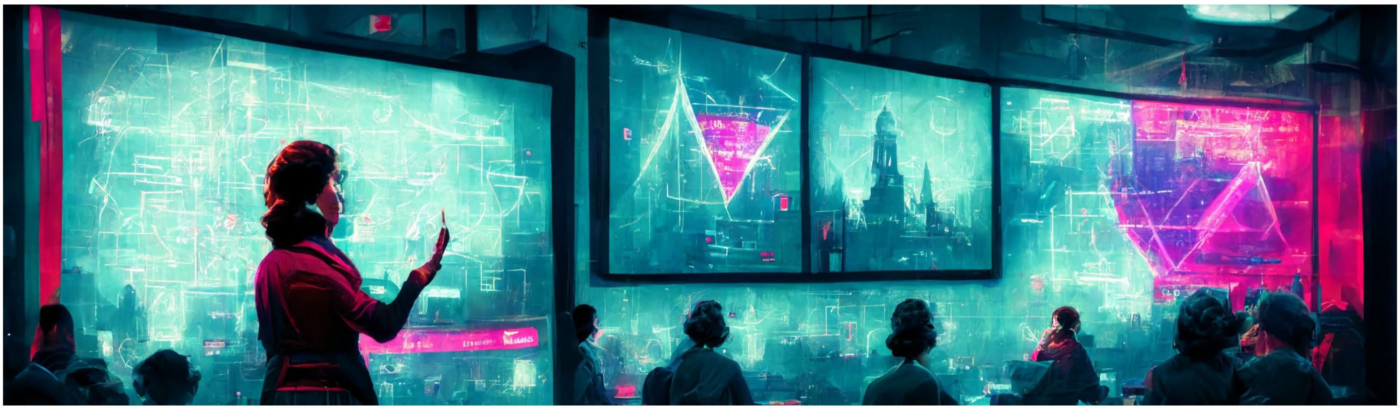
Bureau de Change Laboratory

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



Technical Report

Explaining the principles of Cultural Historical Activity Theory and the Change Laboratory to participants in a research intervention

Jane Nodder

Northern College of Acupuncture, York, United Kingdom; nutriworks@aol.com

Editor: Brett Bligh

Citation: Bureau de Change Laboratory, volume 1, article 7

Received: 20/01/2023
Revised: 14/02/2023
Accepted: 15/02/2023
Online: 20/02/2023

Abstract: This resource describes the approach I used to explain key concepts relating to Cultural Historical Activity Theory (CHAT) and the Change Laboratory to participants at the start of a synchronous, online Change Laboratory intervention I delivered over seven months as part of my PhD research during 2020/2021. The intervention was designed to allow a group of online educators to explore their professional development needs and engender changes in their workplace to optimise delivery of online teaching and learning for learners and for themselves.

I start this resource by introducing the background to the Change Laboratory intervention before describing the purpose of the resource, explaining the approach I took to positioning key concepts of CHAT and the Change Laboratory with the study participants and offering some personal reflections on the intervention. I have also included materials for other researcher-interventionists to use as a possible starting point when designing and describing their own formative intervention to participants.

Keywords: Project planning; Workshop planning; Task design; Online Change Laboratory.

1. Introduction and background

The Change Laboratory intervention I delivered was designed to contribute new knowledge to two domains within the existing literature. Firstly, I aimed to add to the literature about the professional development of online educators in Higher Education Institutions (HEIs) in the UK. Previous studies on this topic mainly consulted experts or managers many of whom had not actually educated online. In direct contrast, participants in my study were all actively working as online educators providing a tangible opportunity to hear the voice of professionals with first-line knowledge and experience of those factors that influence their development needs over time. Previous studies had also largely focused on face-to-face professional development initiatives that prepare campus educators to transition to online teaching in individual institutions largely outside the UK. These interventions typically use generic training and development materials designed for individual study. My research included both novice, *and* more experienced, online educators who could consider their development needs beyond any initial transition phase.

My second aim was to contribute to the literature about the use of the Change Laboratory methodology as a formative intervention for education, and Technology Enhanced Learning (TEL), research. Within this aim, I particularly wanted to explore how the methodology could be used in a fully synchronous, online research environment. My findings did indeed add to the small body of existing literature about how a researcher-interventionist can apply the core theoretical tenets of CHAT and Activity Theory in a Change Laboratory intervention so that participants can use expansive learning to develop sufficient transformative agency to innovate practice in their activity system(s). In addition, my study identified how the Change Laboratory can be adapted and developed for use in a wholly synchronous online research environment, thereby extending the options for education researchers to conduct synchronous online research with participants who are geographically dispersed.

For my intervention, I recruited fourteen participants with a wide range of experience and expertise in designing and delivering online education at under- and post-graduate level. The educators represented nine different HEIs and a range of academic disciplines. Three educators were working entirely online, whilst eleven were working in a hybrid environment of online and on-campus. The participants took part in nine, fortnightly Change Laboratory sessions followed by two review sessions one and two months after session nine respectively. All of the sessions lasted two hours and were run entirely online in synchronous format.

2. Creating the resource

Participants for a Change Laboratory intervention are recruited because they work in particular activity systems (UK HEIs in my intervention) pursuing a particular object (the professional development of online educators) (Bligh & Flood, 2015; Engeström, 2007). Typically they have little, or no, experience or knowledge of Activity Theory, CHAT or the Change Laboratory. Indeed only one of my participants had previously experienced the Change Laboratory methodology. This meant that although the participants were ideally placed to engage with the actual subject matter of the intervention, they were not familiar with the concepts, language, tools and principles of Cultural Historical Activity Theory (CHAT) which help Change Laboratory participants make sense of how people in different communities, or activity systems, carry out their activities. However, these are potentially difficult to access, understand and apply in practice for both the novice and the expert user.

I therefore needed to create resources that would help my participants familiarise themselves with the core theoretical aspects of CHAT and the Change Laboratory quickly and efficiently before the first full Change Laboratory session. My goals were to:

- be honest about what was likely to happen in the Change Laboratory sessions so that participants could trust the process and the mechanisms that were going to underpin the study;
- answer any questions or concerns and deal with any misunderstandings;
- create the conditions for the intervention to run as smoothly as possible from the very first session.

I took a number of actions to achieve these goals.

3. Step 1: Participant information sheet (PIS)

All of the participants received a Participant Information Sheet (PIS) when they responded to my calls for study participants. As I was effectively using the PIS to 'sell' the study to potential participants, I thought it was important to be clear about the commitment participants would be making if they engaged in a Change Laboratory intervention not just in terms of time, but also with regard to the type of activities they would be carrying out.

When putting the PIS together, I was very aware that potential participants were unlikely to be familiar with the jargon or terminology associated with the Change Laboratory, CHAT or Activity Theory. I therefore used everyday language to provide some very basic information about the Change Laboratory to help participants decide whether or not to join the study. I explained that in the Change Laboratory sessions participants would be invited to:

- discuss topics relating to their professional development needs as an online educator;
- consider how they were currently meeting their needs and how they might meet them in the future;
- give feedback on their experience of being involved in the Change Laboratory process;
- offer any thoughts on how the process might be improved for future use.

I also set out the time commitment—which was quite considerable at 11 two-hour sessions over seven months—and the processes that would be put in place to ensure anonymity and confidentiality throughout the intervention.

You can find the actual text I used to provide basic information about the Change Laboratory in the PIS below as Resource 1 under 'Examples for Download' at the end of this resource.

4. Step 2: Pre-recorded briefing

Despite providing basic details about CHAT and the Change Laboratory in the PIS, I knew I would need to give more details if my participants were to engage fully with the Change Laboratory sessions. Part of my Ethics approval for the study had focused on managing the burden of time for my participants as busy educators, given that attending the Change Laboratory sessions themselves was already scheduled to take 22 hours per person. This meant that I was not really able to bring the group together for a full session to explain the concepts etc. before the main Change Laboratory intervention started. As a result, once the final participants had signed the consent form agreeing to join the study, I invited them all to listen to a 30-minute pre-recorded briefing before the first full session of the intervention. This recorded briefing covered:

- the Change Laboratory: how it is organised and how it works;
- the concepts of: an activity system, expansive learning, double stimulation, mirror data;

- two core tools: Engeström's Expansive Learning Cycle and Engeström's Activity Systems Model;
- the research questions for the study.

I chose to cover how the Change Laboratory is organised/works to give the participants some understanding and familiarity to hopefully help them feel more comfortable when they joined their first session. I chose to explain the particular concepts and tools noted above as they were going to be fundamental for the participants to complete tasks in the intervention from the very first session.

Providing a recorded briefing (Figure 1) minimised the amount of time participants needed to commit 'up-front' which satisfied the Ethics requirements. It also allowed me to reduce the time I needed to spend in Session 1 talking about the concepts, principles, tools and language as I could recap the recorded material briefly and deal with any questions that the participants had. I was also able to return to the information in the recording in later sessions and the participants also had the recording to refer to if necessary.

Figure 1. Briefing explaining the principles to participants in a Change Laboratory research intervention. View the video at: https://www.youtube.com/watch?v=zeYTdbi_gSU

5. Step 3: PowerPoint presentation

Having set the ball rolling with the pre-recorded briefing, my third step was to create a PowerPoint presentation for the first Change Laboratory session to help me recap the basic information in the recorded briefing in a 'live' setting. The PowerPoint presentation reiterated the content in the recorded briefing (see below—Examples for Download, Resource 2), but the live, face-to-face setting gave the participants a chance to ask any questions and clarify any concerns. It also gave them an opportunity to get up to speed if they had not had time/been able to listen to the recorded briefing (I did not check up on them on this!). In my timeplan, I allowed 20 minutes for this activity in the Session 1 after the participants had had a chance to introduce themselves to each other.

6. Step 4: Reinforcement through task design

As a further step in reinforcing the briefing material and translating theory into practice, I made sure I designed the tasks for the first session of the Change Laboratory intervention to bring 'to life' the concepts, principles, tools and language I had explained from the very outset. This gave me an opportunity to show the participants how 'theory' relates to 'practice'. For Session 1, the participants had a chance to work on practical tasks using Mirror Data, the Expansive Learning Cycle and Engeström's Activity Systems Model. When setting the tasks, I was able to make links between the theory I had presented in the recording and the PowerPoint presentation, and application to practice in the first Change Laboratory session. The participants' actual tasks for Session 1 were:

- *Task 1:* to discuss a number of set questions using Mirror Data (first stimulus) for background information as part of stage 1 (analysis) in the Expansive Learning Cycle;
- *Task 2:* to populate Engeström's Activity Systems Model (second stimulus) using data from the first stimulus discussions.

Further detail can be found in Resource 3 under 'Examples for Download'.

7. Step 5: Reflection and feedback

In order to generate data for my research question about how the Change Laboratory might be adapted and developed for use in a wholly synchronous online research environment, I invited the participants to reflect on their first meeting in terms of:

- how they found the experience;
- what was helpful/worked well;
- what was less helpful/worked less well;
- how they found the online process.

This task gave the participants a specific opportunity to raise any issues or concerns relating to the tools, principles, language, concepts etc.

There was not actually much time to gather feedback at the end of the session, and there were just two main comments:

- *participants would like to work in breakout rooms:*

> 'I love a breakout room. And I think they're really useful, even when there's only 15 people in the group. Just a small, small, you know, opportunity to speak with two people is actually just really helpful. Maybe for my eyes as well, I'm not sure … something about moving between the 15 screens, and then, but then just having a few people is yeah, I would like to incorporate that if that's possible'.

- *participants preferred just to see presentation slides in small format on the Zoom screen, to allow more space to be able to see each other at the same time.*

I took both these pieces of feedback on board explaining that I was planning to use breakout rooms in future sessions, but that I had deliberately chosen to keep the group together for the first session to help them get to know each other.

The following extract from the Zoom chat at the end of Session 1 also demonstrates that many of the participants valued the opportunity to engage with the Change Laboratory intervention:

> 02:07:52 This feels like a constructive space, thank you Jane!
>
> 02:08:01 Just a comment on the session, it's fantastic to meet/see everyone and this is a lovely community to discuss and learn in.
>
> 02:08:05 Yes, so interesting and really insightful!
>
> 02:08:16 There is a great variety of experience here - this is going to be a great community. Thanks Jane
>
> 02:08:25 Good idea xx, break outs would mean that everyone can have space within the time
>
> 02:09:14 Echo xx comments about being part of a learning and sharing community here, thanks Jane
>
> 02:11:52 Thanks Jane. Great to be part of the research
>
> 02:11:54 Thanks Jane :-)
>
> 02:12:03 Thank you

I repeated this reflective feedback task at the end of each Change Laboratory session to see how the participants' experience developed over time.

8. Reflections

As noted above, both CHAT and the Change Laboratory methodology have been described as challenging for researchers and participants to understand without support. Although researchers and research participants often need to get to grips with unfamiliar concepts and language, the Change Laboratory methodology is somewhat different in that the success of the intervention depends very much on the participants using new concepts and tools effectively. My experience demonstrated how, as the researcher-interventionist, I was able to understand the concepts, tools and language of CHAT and the Change Laboratory enough to underpin an entire online intervention. This learning then helped me develop fairly simple guidance to explain to the Change Laboratory participants how they could use the same concepts, tools and language throughout the intervention.

Reflecting on the first Change Laboratory session for me as the researcher-interventionist, I thought the session went very smoothly and the participants started to get to know each other. There were no questions from the participants following the PowerPoint presentation, and everybody seemed to embrace the concepts and models to engage in and complete the planned tasks. I think taking time to deliver information about the main concepts, tools and language before the intervention started really did give me and the participants a common starting point in the Change Laboratory environment. Thinking through and designing the 'pre-work' also helped me reflect on the key elements of my study and prepare mentally for the whole Change Laboratory intervention.

The idea of using a pre-recorded briefing worked well, although for a future Change Laboratory I would probably prefer to run a separate information session before the main intervention starts. Such a session would give the participants more time to fully introduce themselves (this took a while in Session 1 with 14 participants) and me, as the researcher-interventionist, more time to deliver the background material in a live environment and promote discussion around the content.

9. Summary

My study demonstrated that the Change Laboratory is highly adaptable to the wholly synchronous online environment. As such, the methodology offers the researcher a practical, workable option for engaging with expansive learning tasks to build transformative agency for change with groups of subjects who are geographically dispersed across activity systems. While running my Change Laboratory intervention, I identified that taking time at the beginning to explain the concepts, tools and language of CHAT and the Change Laboratory really did help the intervention run smoothly. It was also useful to reinforce the initial explanations by designing tasks that encouraged the participants to use the concepts, tools and language from the very first session. Recapping the conceptual material either at the start of subsequent sessions, or when needed, also contributed to keeping understanding alive. I hope the resources I have provided will be flexible enough to allow you to design and deliver your own Change Laboratory intervention.

Examples for download

- Supplement 1: An example of how I explained aspects of the Change Laboratory concept to potential participants in the Participant Information Sheet (PIS).
- Supplement 2: The presentation that I used as to recap material from the pre-recorded briefing is provided here. The presentation was produced in PowerPoint format. An additional PDF version is also provided for those who do not use PowerPoint.
- Supplement 3: A plan providing more detail on how I put together the first session.

About the author

Jane Nodder has worked in higher education for over 20 years as a research supervisor, senior lecturer and course director of under- and postgraduate programmes for healthcare professionals. Her research interests focus on using Activity Theory and the Change Laboratory to promote expansive learning and transformative agency in online academic communities. She is particularly interested in developing practical tools (take from discussion section). Jane completed a Masters in Research in E-Research and Technology Enhanced Learning at Lancaster University in 2022.

Email: nutriworks@aol.com

ORCID: @JaneNodder

References

Bligh, B., & Flood, M. (2015). The Change Laboratory in Higher Education: research-intervention using activity theory. *In Theory and method in higher education research (pp. 141-168)*. Emerald Group Publishing Limited.

Engeström, Y. (2007). Enriching the theory of expansive learning: Lessons from journeys toward coconfiguration. *Mind, Culture, and Activity*, *14*(1-2), 23-39.