Online Transformative Learning

An ongoing enquiry

transformation hosts international publications

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CONTENT

PART 1: INTRODUCTION

Sources

The sources for this report have been many: desk research, a series of introductory webinars, experiments, monthly meetings of a Community of Practice (CoP), interviews. The contributors are listed in Annexe 3. The sources are indicated in the text as follows:

(Name, Year)	From the desk research
(nnxx) (eg 12SE)	From experiment or interview no. nn, in country xx
(webinar)	From one of the introductory webinars in late 2020
(CoP xx)	Community of Practice, where xx is the month in 2021

Preliminary conclusions

Yes, transformative learning works online

The COVID-19 pandemic has acted as a kind of pressure cooker, forcing many educators to rapidly adapt, learn, and innovate online praxis: learning by doing. We made plenty of mistakes, but some of the results are outstanding and the mistakes led to new insights. We begin to see and imagine ways of working online that are as good as or even superior to face-to-face work, including when the aim is to support transformative learning.

At the same time, the beneficial aspects of face-to-face learning were also thrown into relief by the pandemic. Many people have been reporting feeling relief and liberation when physical meetings were permitted again, and disappointment or even annoyance when forced to go back online again due to a new wave of the pandemic.

We see a difference between higher education (HE) and other adult education: whereas many HE institutions have scurried back to the familiar world of physical events, with anything up to several hundred students in one room, other hosts of adult education seem convinced that online is here to stay.

So will we go back? Or forward? The jury is still out. See the chapter "What we still want to know''.

How does it work?

This project started with the question: "What are the opportunities and limitations of transformative learning (TL) online?", with an ambition to enable practitioners to push the boundaries. It has focused on

- how an online learning situation may be used to create an enabling
- environment for transformation towards sustainable action

– in other words, to create the conditions under which transformative learning for sustainable development may take place.

Following the initial webinars and building on project outcomes, an 'enabling environment' has come to be seen as primarily the provision of 'a safe enough space' through skilful use of program design opportunities, facilitation, assessment processes, and choice of methods and software.

One conclusion is that the major challenge is for educators to accept and embrace the potential of transformative learning as such. The step from acceptance to an online environment is the lesser challenge.

That the online environment per se is no obstacle to deep personal work is evidenced by the fact that psychotherapy, both individual and in groups, is successfully carried out online. (13SE, 59HR, 68SE)

Interpersonal connections

It is difficult at this stage to generalise about advantages and inconveniences of online settings in regard to interpersonal connections. "Maybe we are all still in an imposed accelerated learning process regarding communicating in remote settings?" (23FR)

Nonetheless it is clear that, at least for some people, the potential is there:

"We can achieve a surprising degree of team-building… by online-only means, and in less than two full days' time." (22DE)

"Connecting on deep levels is possible." (13SE, 59HR, 60HR)

'Home alone' effects

Many educators and learners reported difficulties and frustrations at being abruptly expected to work from home, online, with frequently unfamiliar technology and insufficient preparation. However it would seem that for many participants the change was positive. For example, "The personal development of introverted students benefited from the online situation. The hypothesis is that it's an effect of a safer and peaceful space at home combined with more individual work" (30NO). See further in the chapter 'Some clusters of observations'.

Teaching vs learning

An ongoing discussion was the distinction between 'teaching' and 'enabling learning'. It was agreed that transformative learning is more likely to take place when the educator sees his or her role as 'enabling learning'. This shift was in focus i.a. at the June 2021 online meeting, starting from the question: How do we as online educators handle learners who want to be taught? Some tentative conclusions are presented in the chapter 'Some clusters of observations'.

Writing is out, audio is in

Numerous experiences testify to the (increasing?) difficulty of organizing exchange of experience in writing. Most people want to meet and speak, whether online or in person. And indeed there may be a trend away from reading and writing, and even message-chat. Written language seems to be going out of fashion; it is becoming more and more popular to communicate via photographs and emojis.

The spoken word is however still important. In an online situation, "audio is more important than the camera" (CoP September). This is borne out by the upsurge of interest in podcasts; by April 2021, for example, over a third of the population of Sweden were regular listeners with 22% listening daily (The Media Barometer).

Transformative learning

The role of transformative learning

The transformative quality of adult education will in several ways shape the future; this has been acknowledged by those discussing how to achieve Agenda 2030, and recently by UNESCO (see below). To the existing critical challenges of climate change, increasing migration, persisting inequalities, and precarity of employment and of food regimes were added the abrupt need to face the COVID-19 pandemic and, not least, to discover ways to build a more resilient society in its aftermath.

International recognition

These challenges cannot be met through marginal change and small technical fixes here and there. In order to survive and thrive, broad swathes of the population need to be engaged in the search for viable transnational transformative solutions, while also dealing with local issues:

> *We believe that the urgency of these challenges, exacerbated by the COVID-19 pandemic, requires a fundamental transformation that sets us on the path of sustainable development based on more just, inclusive, caring and peaceful relationships with each other and with nature.*
>
> *We are confident that education is a powerful enabler of positive change of mindsets and worldviews and that it can support the integration of all dimensions of sustainable development, of economy, society and the environment, ensuring that development trajectories are not exclusively orientated towards economic growth to the detriment of the planet, but towards the well-being of all within planetary boundaries. [...]*
>
> *Transformative learning for people and the planet is a necessity for our survival and that of future generations. The time to learn and act for our planet is now.*

(UNESCO, 2021).

Role of online learning

Increasingly, this engagement has been understood to encompass online learning opportunities. However, in the present upsurge of different, uncoordinated initiatives regarding online education the emphasis in most cases is on a transfer of existing knowledge to individuals. This is indeed the 'traditional' sphere of MOOCs and many other online educational initiatives. What is lacking, or is just beginning to emerge, is an appreciation of the skills and competences needed to design and deliver an online programme enabling the emergence of new and transformative knowledge, skills, attitudes, values (OECD, 2019) - and action - in other words, of Transformative Learning.

Previous online experiments and experiences of project partners in the past few years have been promising. The project "International Partnership for Transformative Learning" created an embryo portfolio of online materials for transformative learning which currently, with the aid of several following projects, has evolved into a framework Hosting Transformation site and methodological database.

For a facilitator with ambitions to enable transformative learning, online delivery is particularly challenging because so much hinges on personal qualities that have traditionally been conveyed face-to-face - for instance attentiveness, empathy, compassion, inclusion. It is however beginning to be clear that these qualities can indeed be expressed online, both one-on-one and in groups.

Experience of the partners

In the networks represented by the partner organizations of this project, there was and is innovative experimentation with these questions, based on different models or theories, working in formal and non-formal contexts, building on different face-to-face skill sets, and benefitting from the possibility of exploring entirely new ground in these times where virtual communication and experience rather suddenly became predominant.

For more information about the work of the partners, see Annexe 3.

This OnTL project has aimed to synthesize ongoing experimentation and add experiments of its own, in order to further explore the boundaries of the possible. The seminal question of this project was: What are the opportunities and limitations for Transformative Learning online?

What do we mean by transformative learning?

Two definitions have guided our framing of transformative learning (TL).

Transformative learning "...refers to the process by which we transform our

taken-for-granted frames of reference (meaning perspectives, habits of mind,

mind-sets) to make them more inclusive, discriminating, open, emotionally

capable of change, and reflective so that they may generate beliefs and opinions

that will prove more true or justified to guide action." (Mezirow, 2012, p. 76)

Transformative learning "...involves experiencing a deep structural shift in the basic premises of thought, feelings, and actions. It is a shift of consciousness that dramatically and permanently alters our way of being in the world. Such a shift involves our understanding of ourselves and our self-locations; our relationships with other humans and with the natural world; our understanding of power relations in interlocking structures of class, race, and gender; our body awareness, our visions of alternative approaches to living; and our sense of possibilities for social justice and peace and personal joy." (Morrel and O'Connor, 2002, p. xvii)

Both definitions show that transformative learning must be understood as an interrelated individual and collective process. This is particularly important in the context of sustainable development, which predicates sustainability on the ability of society to live according to "5 Ps": People, Planet, Prosperity, Peace, and Partnership (UN, 2015).

The process of Transformative Learning

A mindshift

As described above, 'transformative learning' refers to a type of learning, or change, that is basically irreversible: it stems from insights that cause a shift in values, beliefs, or perceptions. Once seen from this new, broader perspective, the world can

no longer be seen as before, whether the learner is an individual or a collective body. Mezirow calls this a shift in "meaning perspective" (Mezirow, 2012, 82 ff).

When many individuals in a community 'shift' in the same direction, the transformative effect can be amplified and expressed as new societal norms (AtKisson, 2010).

An enabling environment

Such a shift may take place spontaneously, or it may be the outcome - immediate, or delayed - of a conscious educational strategy. For this project, with its focus on sustainable action as an outcome of online learning, a key question has been how an educator can create the conditions under which transformative learning for sustainable development may take place - an ecosystem to hold the process.

It is widely accepted that a ‚safe space' is a primary requirement for transformative learning. Following the initial webinars and building on project outcomes, an 'enabling environment' has come to be seen as primarily the provision of 'a safe enough space' (Singer-Brodowski et al, 2022) - neither too threatening nor too comfortable - through skilful use of program design opportunities, assessment processes, and choice of methods and software. Beyond those, the most important element is skilful facilitation to transform the potential into an actual experience (Dana, 2020).

Ethical questions are also frequently raised. As an educator, have I the right to impart knowledge or trigger learning processes that turn the lives of learners upside down? Without their consent, this can be seen as manipulation. Thus other basic components of the enabling environment are support and encouragement for participants to make explicit their own values, and to learn and practice Critical Thinking (Siegel, 2010).

The process

Transformative learning is an intensely personal experience. It can take place in tiny incremental steps or in big leaps. And yet there is a commonality, a trajectory of personal development where the learner may repeatedly experience transformative learning. Together with other adult educators, Dimitri Glaskov distinguishes between different developmental stages, each of which can be triggered by transformative learning (Glazkov, 2020; Figure 1).

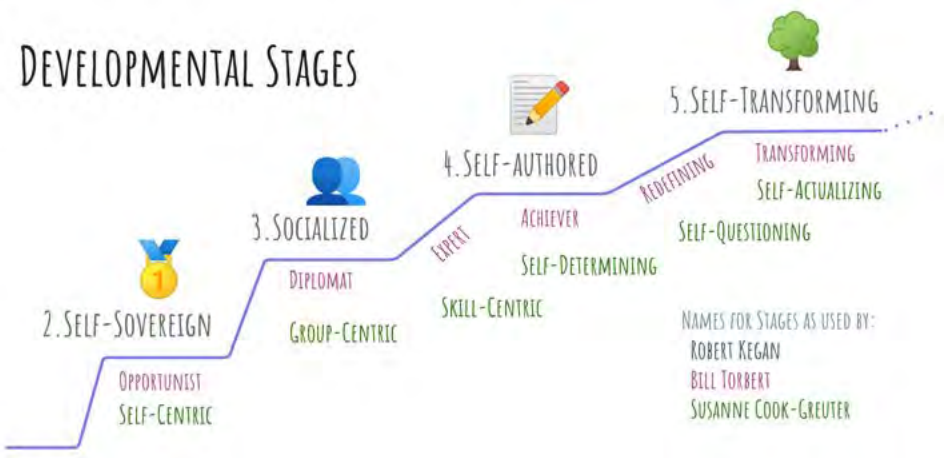

Figure 1: Glaskov's (2020) illustration of developmental stages in adult development, based on work by Robert Kegan, Bill Torbert, and Susanne Cook-Greuter (CC BY 4.0, Slide 61)

One model for the transformational process at each step was proposed at the May CoP, which focused on 'edge-emotions' (Mälkki and Green, 2014; Mälkki 2019) that lead to a learning edge (Figure 2).

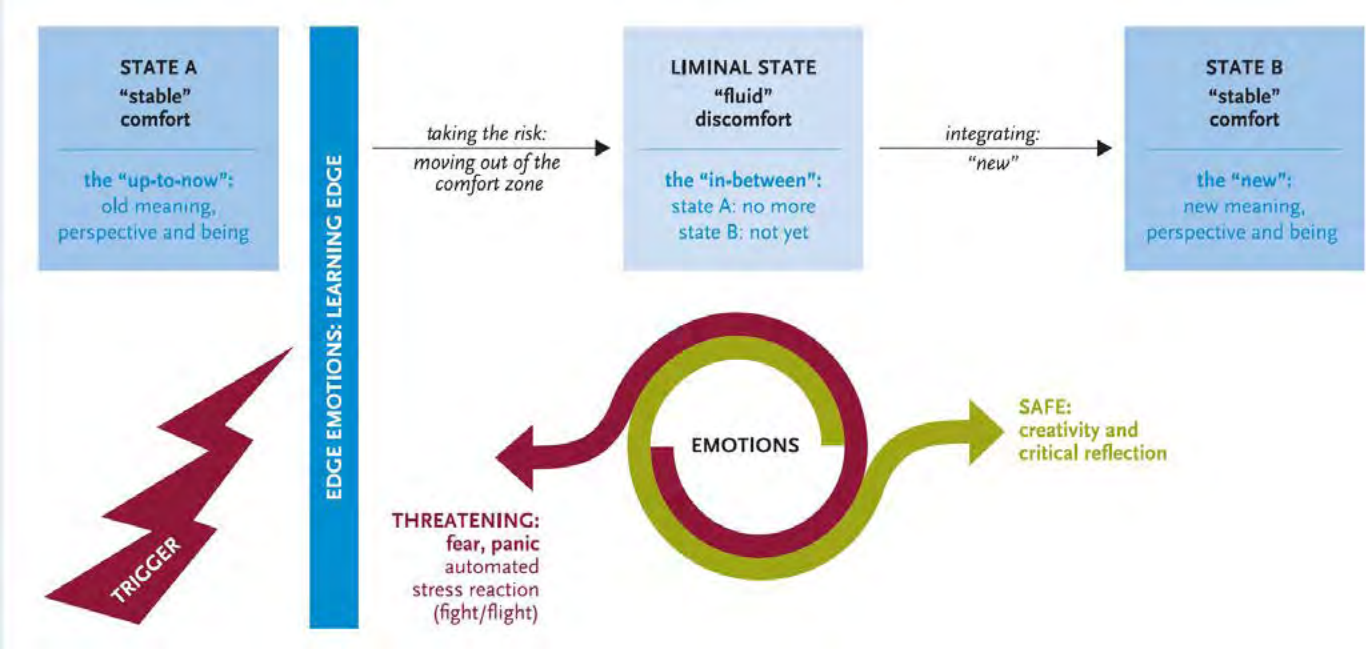

Figure 2: A model of transformative learning including liminality and emotions. (First published in Förster et al, 2019)

The discussion concerned not least what allows the 'safe' emotions to dominate over the 'threatening' emotions and thus enables the transformation to State B to take place. Not surprisingly, a key was found to be 'safe enough space'. Why this is so, what to consider with regard to this space, and how to hold it has recently been explored by Singer-Brodowski et al (2022), with a special focus on the higher education context.

While everyone agreed on the need for a "safe enough space" for the process of transformative learning to take place and was interested in how safe spaces could be generated online, participants in the project had different understandings of what actually triggers transformation. The concept of "edge-emotions" coined by Kaisu Mälkki was complemented by other concepts from other theorists and practitioners (e.g. Danaan Parry's "Parable of the Trapeze"; Parry, 1997). Further exploration is warranted (see "What we still want to know").

Background

The project

Who are these draft findings for?

The intended audience/beneficiaries of this project are experienced practitioners of offline transformative learning wishing to make the best use of online opportunities within their own sphere, and online practitioners interested in fellow practitioners' joint exploration of this specific form of program design and delivery.

This report details what we did, as well as our learnings and sources, principally intended for researchers and others wishing to continue this inquiry. Separate documentation intended for practitioners is available under the title Online Alchemy: how to boost transformative learning online.

Purpose

The project partners, as described in Annexe 3, have broad networks and unusually long experience in both transformative learning and online delivery of adult education programs in different contexts. The purpose of the project was to build on those networks in order to:

Bring together/consolidate the work of several networks engaged in TL, and seek out others with similar interests;

Explore the opportunities and limitations for TL online;

Publish and publicise our findings.

Good practice

There is much in common between online and face-to-face events and programs when it comes to the quality of program design, facilitation, methods, and even assessment and evaluation.

Moving from an offline to an online environment, at a forced pace due to the COVID-19 pandemic, has in some cases led to innovations. Some of those innovations can also be 'retrofitted' to a face-to-face environment. In other cases the move has served to clarify the conditions and processes involved in transformative learning, and has given new insights, applicable to both online and offline contexts.

Our ambition here has been to assemble insights harvested from the project work and - primarily in a companion report (Online Alchemy: how to boost transformation processes online) - to offer draft guidelines for quality online transformative learning, regardless of whether those insights also apply to face-to-face work. These are far from exhaustive: they are tentative insights on and guidelines to good online practice based on experience garnered in the recent past.

A special case is the growing phenomenon of hybrid events, with some participants physically together while others are simultaneously present online. It has given rise to interesting experiences, both positive and negative, and raises even more questions; see also the chapter 'What we still want to know'.

The learning contexts

Contributors were from three distinguishable learning contexts with different institutional demands and expectations, and different enhancing and hindering factors for transformative learning.

Higher education

Education is one of the three missions assigned by society to the higher education (HE) sector; together with research, it is generally conceived by the academic world to be characterised by freedom and objectivity. The education mission is also perceived as subservient to research, considered by the academic world to be the top priority of most HE institutions. What students learn is thus determined by the needs of (disciplinary) scientific production, characterised by performance indicators such as high-impact factor journals and number of publications, or usefulness for economic advancement (usually from the perspective of the unlimited growth paradigm).

This system leaves little space for learning of a transformative kind, but researchers and teaching staff in the HE sector who have had sustainable development in mind since the 1970s have been introducing other educational aims and methods into the system in order to cater for the need for including critical thinking, attention to values, collaborative skills, and reflection on action in their work and that of students. While this should be considered important progress, it is only a niche development: transformative learning is still far from being a mainstream objective in the HE sector. Efforts to introduce it into HE teaching are confronted with structural requirements such as marks and measurable indicators, as well as a lack of pedagogical skills among teachers and disciplinary silo thinking (Bornemann et al., 2020).

Online transformative learning is thus a challenge for the HE sector not because of the attribute "online", but because of the very nature and aim of transformative learning: introducing transformative learning into HE implies introducing values, emotions, and relation to action into pedagogical situations, all of which are widely considered to be contrary to scientific objectivity. Increasingly, however, transformative learning is finding its way into HE pedagogies, spearheaded by academic staff for whom inter- and transdisciplinarity have become a must in research and teaching, often related to a concern for sustainable development (Rodríguez Aboytes & Barth, 2019). For some of these pedagogues, going online has offered a space for additional experimentation.

Workplace education

Business and other workplaces have rapidly embraced online courses, a trend accentuated by the COVID-19 pandemic. The benefits have been so clear, for both the client organizations and for the participants, that it seems unlikely that there will be a return to 'business as usual'.

From the point of view of transformative learning the challenge has been the same as in an offline environment:

When the focus of the course is personal development, the transformative potential is always present; the question is whether and how to deepen the participants' experience.

When the focus is on knowledge transfer, there may be a transformative ambition expressed for instance in such phrases as 'We want the participants to own this knowledge', or 'We need to improve the flexibility and action competence of staff'. A key question is then how to enable such development without either encroaching on the liberty of participants or retraining the trainers.

One aspect of online education that contributes to answering these two questions is the potential to extend courses over time, to include coaching and peer coaching between sessions, and to introduce a continuity that is often lacking in offline courses.

Other adult education

Informal and non-formal adult education are perhaps the sectors that have most readily embraced the opportunities for blended and hybrid courses, since the only constraint - apart from any built-in staff inertia to working in new ways - is 'Will working in a new way bring advantages of either quality or profitability?' To judge from the response to date, both blended and hybrid have a promising future.

What we did

Registration and introductory events

The project was initially announced and launched through the partners' networks, including an introductory workshop at the Higher Education Summit 2020, an online event in September 2020. Partners invited people from their networks to register interest in participating or following the project, which yielded ca. 60 registrations.

Building on comments during the launch events, and responses on the accompanying registration form, a series of webinars was held in October-December 2020. From these additional events emerged a set of challenges that served to inspire some of the ensuing experiments, as well as overall agreement on the various 'arenas' that could be studied, other useful comments on the design of the project, and a growing sense of the immediate relevance of the subject area.

Interestingly, during these events, transformative learning practitioners from very different environments (higher education, workplace education, other adult education) and educators interested in transformative learning but not yet familiar with it, met in groups discussing the challenges and were confronted with the fact that their contexts, the declared purposes of learning, and the participants in learning events (i.e. "learners") were very different, leading to different understandings of the challenges. This increased the possibility of learning from one another: when what you expect is so different from what you get, the learning effect is indeed very strong.

Arenas

Five arenas were identified, and used throughout the project:

1. Program design
2. Facilitation
3. Assessment and evaluation
4. Methods and materials
5. Software options

Types of event

Four types of event were initially identified. Later a 5th (asynchronous) was added:

a) Webinar or other one-off event
b) Up to one week intensive
c) Recurring over a longer period
d) Hybrid (not exclusively online)
e) Asynchronous/self-study

The challenges

Altogether, eight challenges (see Figure 3) emerged out of the initial webinar discussions; contributors agreed to consider them when defining their experiments. Challenges 1-2, 4-5, and 7 were indeed taken up, as reported in the chapters concerning what we learned. Challenge 6 was approached but not seen through to completion. No opportunities to carry out experiments focused on Challenges 3 and 8 were found during the lifetime of the project. Consequently they were dealt with only tangentially or not at all.

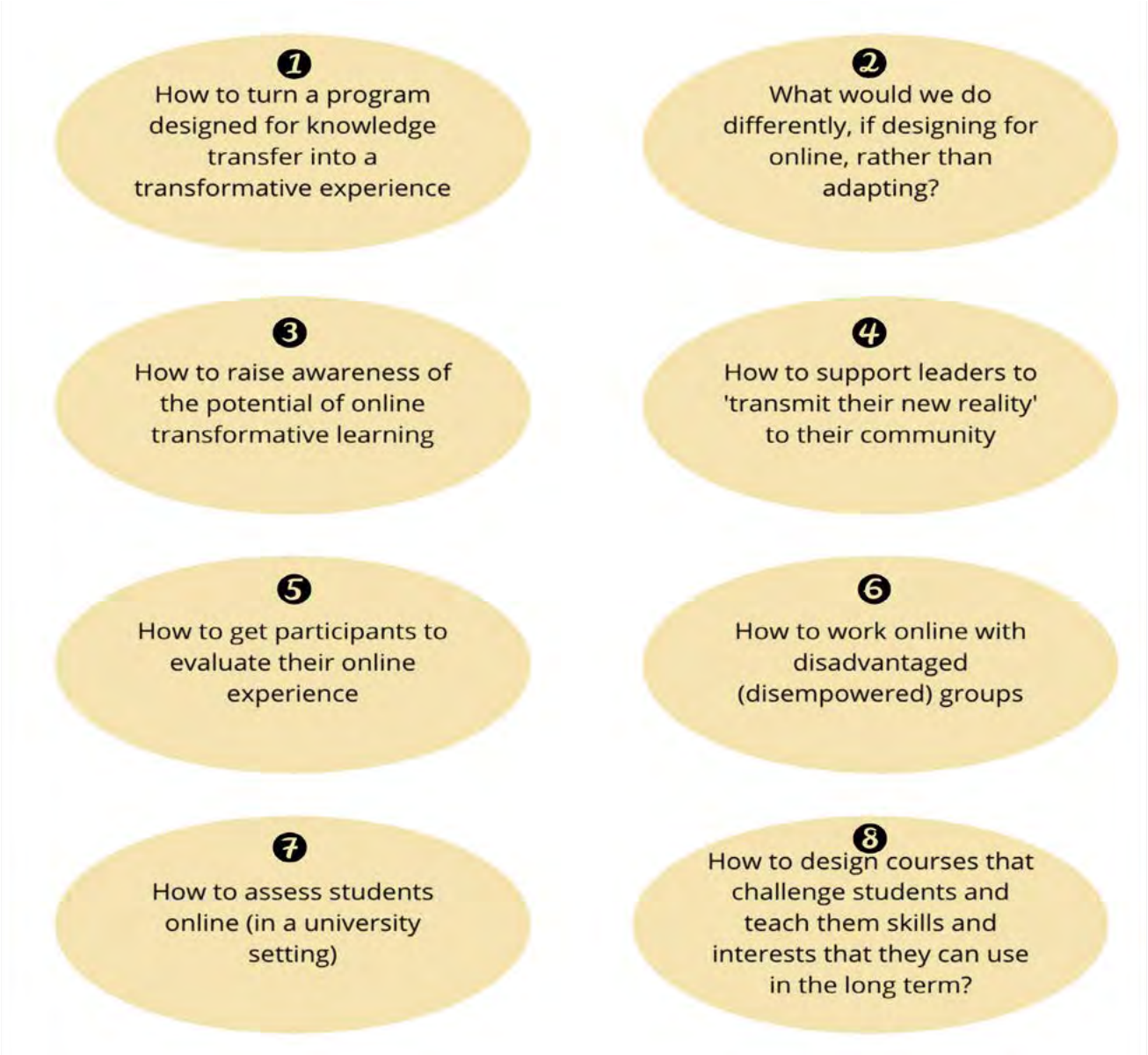

Figure 3: Online transformative learning challenges and questions identified and discussed by project contributors

Challenge 1. How to turn a program designed for knowledge transfer into a transformative experience

Q. Is it possible to turn a program designed for knowledge transfer into a transformative experience? If so, is it different when the program is online?

Q. What type of online facilitation is required?

Q. How can participants support the change?

Challenge 2. What to do differently, if designing for online, rather than adapting

Q. What timings, logistics and situational constraints should we consider?

Q. Can we teach the same content online as face-to-face?

Q. Is there a need to articulate the objectives and learning outcomes differently?

Q. Would the instructional strategies and assessment methods change?

Q. How do we plan the creation of safe spaces online? And how can we deal with comfort and discomfort of participants when designing online transformative learning?

Challenge 3. How to raise awareness of the potential of online transformative learning

Q. How best to counter a culture that sees online work as a necessary evil rather than an opportunity?

Q. How to enable practitioners to create their own experience of transformative learning through online support?

Challenge 4. How to support leaders to 'transmit their new reality' to their community

Q. General approaches to transforming workplace culture

Q. What are each leader's specific needs and how best can we know them?

Challenge 5. How to get participants to assess their online experience

Q. What methods and approaches are more useful in engaging learners (and students in the HE context) to assess their online experience?

Q. How can these methods reinforce learners' transformative learning experience?

Challenge 6. How to work online with disadvantaged and disempowered groups

Q. What are the benefits and challenges of working with disadvantaged groups online?

Q. What techniques can be used to engage these groups more effectively in an online transformative learning experience?

Challenge 7. How to assess students online in an HE context

Q. What approaches and methods can we use to assess online, in particular when there is a need for providing marks?

Q. What does this institutional requirement lead to and how can one deal with it in a transformative learning environment?

Q. How can student online assessment itself support transformative learning?

Challenge 8. How to design courses that challenge students and teach them skills and interests that they can use in the long term

Q. What strategies and techniques can be used online to challenge students' thinking and actions?

Q. Can we support the development of all types of skills online? Can we support the development of different skills?

Experiments

A total of 22 experiments by 18 experimenters in 10 countries were tracked in the course of the project, more than initially anticipated. Continuous contact with experimenters and other people interested was maintained throughout the project period with the monthly meetings, leading to a sense of a Community of Practice, or CoP (see also chapter below), as well as through telephone and Zoom interviews with some of the experimenters and other contributors.

Following ongoing tracking and analysis, work at the Transnational Project Meeting in Croatia in September 2021 marked the start of an intensive period where the collected material was examined for relevance to the five arenas of experimentation, while cross-referencing against the three above-mentioned learning contexts (higher education, workplace education, other adult education), as well as types of event.

The desk research gave an additional source of material.

Desk research

The aim of the desk research was to find material on online transformative learning and to enrich our findings with this material or to show where experiments brought new insights to the discussion. While preparing this report, we added material of relevance to transformative learning in general. This is documented in Annexe 4.

Interviews with experimenters

After realizing how diverse the community of practice was and how different were questions of concern to the potential experimenters, a series of 40 individual interviews were conducted with those who had signed up, as well as with others attracted to the project at a later stage, or consulted along the way. Most of the interviews were conducted by Annika Piirimets, with some carried out by Marilyn Mehlmann and a few more by other project team members.

The interviews proved to be a valuable additional source of insights, later incorporated into the learnings. They also strengthened the building of the Community of Practice.

Monthly on-line webinars/discussions

The initial plans did not include this ambitious program of 'Community of Practice' events. However, the introductory events where numerous practitioners met completely new fellow practitioners from very different professional contexts proved so attractive and so rich in content that it was decided to offer them on a monthly basis starting in March 2021.

Each monthly event took place twice, at different times on the same or consecutive days, to enable as many people as possible across Europe, and indeed also from other continents, to join. It was not unusual for one person to attend both events in the same month.

March: How do I know it's working? Evaluation and assessment

14 people attended the open discussion, introduced by Annika Piirimets. Ideas were exchanged, in particular about how to assess or measure success. Four metrics were jointly developed: enhanced self-knowledge, enhanced social competence, enhanced action competence, enhanced tolerance for uncertainty.

April: Online Meetings and Exchange of experience

Thomas Herrmann introduced the first session and Boris Goldammer the second, with a total of 20 people attending. Several experiments were presented and ideas exchanged. It was agreed to have regular meetings and agreed that each should have an overall topic and if possible a person to introduce the topic.

May: Edge emotions

Anne Zimmermann and Sandra Wilhelm introduced research and ongoing discussion on the subject of 'edge-emotions', as a significant factor in transformative learning. 25 people took part altogether.

June: Enabling learning

Marilyn Mehlmann introduced the topic with questions designed to elicit contributors' own experience of learning online. The focus was on how to encourage and enable students/participants to take responsibility for their own learning process. 18 people took part altogether.

August: Integrating learning in life

Alan Ramic initiated the discussion with examples from his experience in workplace education. "Integration is crucial. If you don't integrate, there is no learning and people don't use the learning in their work." All in all, 17 people attended.

September: Failure!

Where have we failed in our efforts to enable online transformative learning? Marilyn Mehlmann led into the topic by providing an example of a failure that provided new insights. A total of 17 people participated.

October: What is emerging?

Have we, individually and collectively, learnt anything from our experiments and exchanges in the OnTL project? What are we doing differently? What did we need to stop doing? What do we most want to learn more about? Annika Piirimets introduced the topic with a 'walking tour' of the project Miro board. 16 participants altogether.

November: Experimenting with an online festival.

In the spirit of an 'ongoing enquiry', contributors were invited to bring their personal passions and burning questions regarding online transformative learning to a dynamic mingle-and-talk online festival, attended by 17 people.

Continuation

In view of the considerable interest, the partners have undertaken to continue to convene monthly meetings during the post-project period February-June 2022.

PART 2. WHAT WE LEARNED

Key findings and lessons learned are presented in several chapters below under headings related to the 'arenas of experimentation' defined early in the project. The 'arena' chapters are preceded by a chapter on clusters, i.e. learnings that refer to several arenas.

Some clusters of observations

Program design

Facilitation

Assessment and evaluation

Methods

Software and technology

The reflections and conclusions in those chapters are drawn from an analysis of the different experiments carried out by contributors and the online exchanges that took place with the project community of practice (introductory sessions, monthly meetings and personal interviews with experimenters), as well as from material garnered during desk research.

Synthesizing material from the very different learning contexts proved fruitful. Questions of assessing and evaluating education, for instance, carry very different associative burdens in academic and non-academic contexts, which sparked discussions not only on how to conduct assessments but also on how and whether transformative learning can or should be pre-defined as a 'learning objective'.

It was also observed that the different contexts responded differently to the exigencies of the pandemic; or, rather, that while all contributors reported rapid transition to online learning, the reports from higher education differed sharply in the quantity and quality of support given. In the academic world, with some notable exceptions, there seemed to be a widespread attitude that online education was a necessary evil, unlike the other sectors; and many educators were 'sent home' with very little support.

Experimenters from the higher education sector also reported a widespread tacit assumption that the role of (their) education is primarily transfer of knowledge, and thus that teaching - understood as transfer of expert knowledge from lecturer to student - is in focus rather than the facilitation of learning.

Some clusters of observations

Safe space and trust

There is agreement in the literature as well as among contributors in the OnTL project that facilitators of transformative learning processes need to provide and hold a "safe space" where transformative learning can take place. It is indeed generally regarded as a basic element not only of transformative learning but of almost all significant learning, notably in the informal and non-formal sectors (Förster et al., 2019). There is a parallel to the concept gaining support in business of "psychological safety" as a prerequisite for effective organisational learning in uncertain conditions (Edmondson and Nickisch, 2019).

In this project we identified two specific aspects of safe space that implicate all arenas:

The concept of 'safe enough' space: too safe can be as disabling as unsafe

The paramount importance of trust at all levels and in all directions (initial webinars)

These are not specific to an online environment, though their manifestation may call for innovative approaches and methods.

'Safe enough' was explored through the concept of edge-emotions (CoP May), which points to a learning environment in which positive emotions are able to counter-balance negative edge-emotions. Or, in the words of a renowned futurist, "Change happens when there is a reasonable balance between disappointment [fear] and hope" (Ziegler, 1995). Ziegler continues: "The future is a metaphor for the present": the balance between fear and hope enables a realistic presence in the here-and-now that in turn opens a space (Wheatley, 2009) for transformation.

Trust is seen as a key component in creating and maintaining a 'safe enough' space. Trust at many levels: in oneself, one another, the group one identifies with ("Scouts come with a pre-built safe space. The scarf around the neck gives trust." [31SI]), the organisation (Edmonson and Nickisch, 2019), the method, the process and/or the content. Or perhaps most importantly: the facilitator. "As long as we trust the facilitator, we will get our learning done, no matter what. As soon as we think that the course leader is trying to talk down to us, lecture to us, or is not in control of the process, we get derailed in our learning." (June CoP). This, obviously, requires that facilitators be highly proficient in listening to participants and making them feel listened to. But fostering participants' ability to listen to one another also helps to increase trust.

Safe space, and indeed trust, need to be seen in relation to the expectation of each participant. Expectations have numerous impacts on outcomes, several of which are mentioned below. One negative factor specific to the online environment is the immediacy of attendance, reducing the opportunity for a participant to (re-)set expectations to a realistic level.

Balance

Balance, mentioned above, has emerged as a ubiquitous key word in the project for all arenas and all levels. Finding the sweet spot between too much and too little has repeatedly come up as being essential for transformative learning, whether offline or online. For example, the degree of variation, structure or transparency can help make or break safe enough space. At an even more granular level one can talk about how to balance the number of participants in breakout rooms, distribute breaks, or deal with silence online.

Perhaps the most important and at the same time most difficult balancing act for educators of TL is to help the transformative process to keep moving forward. This requires a balance within the participant between a visceral sense of safety and a motivation to explore. Different traditions and theories of human development have expressed this in different ways: the balance between love and will, being and doing, and hope and disappointment, to name a few. The need for this gauging and the challenges connected with it have been brought up numerous times by the contributors to this project. See in particular conversations from the May CoP sessions.

Home alone effect

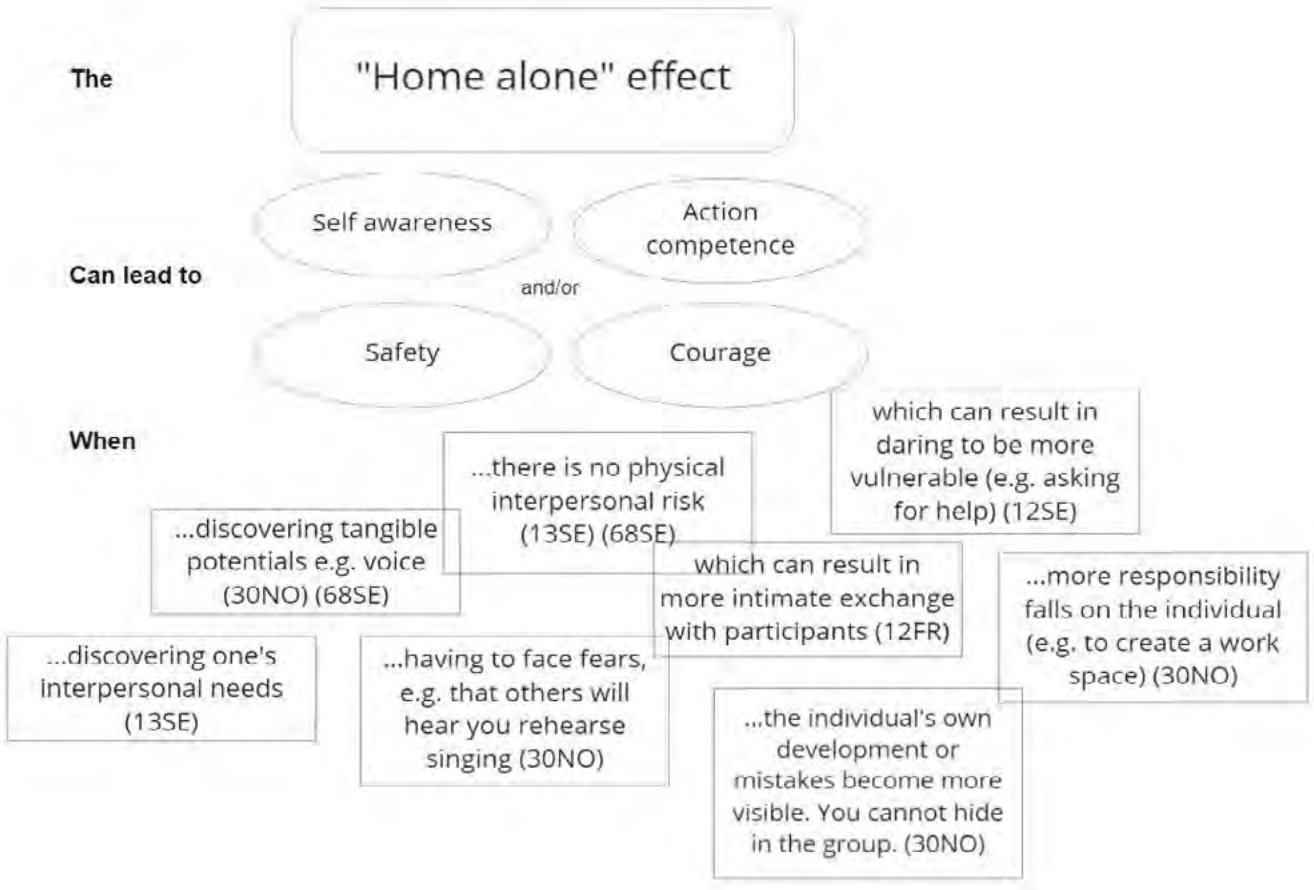

Figure 4: Clustering of ideas and insights related to the home-alone effect

The positive effect of being at home alone referred primarily to participants, particularly in an HE context. "The personal development of introverted students benefited from the online situation. They came back to class blooming. The hypothesis is that it's an effect of a safer and peaceful space at home combined with more individual work. A reflection is that they normally took other students (and others' feelings) too much into account. Now they could and were forced to focus on themselves." (30NO)

Some facilitators also reported benefits for themselves (eg webinar, CoP March, CoP October, experiments referred to in Figure 4). Others, on the other hand, spoke of very high stress levels when being thrust abruptly into a "home alone" situation and expected to simply do online what they previously did face-to-face. Their experience highlights the importance of offering training in the use of the technical platforms, at the very least; something that should perhaps have been obvious in an educational institution but clearly was not, at least not everywhere, or was not welcomed by academic staff unwilling or unable to invest time in exploring the possibilities of online teaching. The pandemic threw everyone into cold water. In some cases, students in the HE context suffered a lot from isolation, missing the opportunity to literally be a student with other students, in a cohort of learners doing many things together in addition to acquiring new knowledge in their field of study (Karrer et al., 2020).

Software as an empowering factor

For some contributors (experienced facilitators!), being confronted with new software initially led to frustration: "I felt disempowered by not knowing how to use this software [Miro] and being thrown back into the role of a complete beginner" (webinar). Some degree of handholding is essential when introducing new software; importantly, it fosters empowerment (31SI).

There seems no doubt that software, judiciously chosen and skilfully used, can smooth the path to transformative learning. (12SE, 13SE)

Some risks are equally clear. Those discussed at the April CoP were focused on the consequences of poor software choice, i.e. mismatched to the needs and capability of the participants (or the facilitators); and lack of skill in delivery, particularly the absence of any necessary training and practice for participants and facilitators alike.

From knowledge transfer to transformative experience

Is it possible to turn a program designed for knowledge transfer into a transformative experience (both face-to-face and online)?

Answering this challenge is basically giving a blueprint for how transformative learning takes place; and it is equally challenging in online and face-to-face environments. The responses below are partial or preliminary answers derived from our source materials concerning online activities; much remains to be explored, especially in the HE context, where knowledge transfer is the usual pedagogical norm and is associated with

a disembodied learning experience. This leads students to expect being told what to learn (see also below).

"Online is just a format with its own tricks and challenges, but first and foremost there is facilitation." Adding a transformative edge to a university course requires the educator to be able to shift between teaching, facilitation, and facilitating transformative learning processes; and to know when to do what. (5NL)

Staffing ratios and group size are often limiting factors, because transformative learning is more likely to occur through intensive personal support. These factors are particularly acute in the higher education sector.

On the other hand, there is the urgent need for socio-ecological transformation, which can hardly be achieved without transformative learning (UNESCO, 2021). We may also assume that someone who enrols for a course will have a certain curiosity both about the subject matter and about his or her own attitude toward it.The easiest and perhaps best way out of this dilemma is for teachers/facilitators to be open with their own intentions. If, in addition to teaching the material, the goal of an expanded worldview is already written in the invitation, no one will feel caught off guard.

However, transformative learning cannot be a testable learning goal (Mälkki and Green, 2014). One's own worldview is not something that can be prescribed by an examination regulation, nor should it be (Reinhardt, 2017). But it can be authentically exemplified by the educator. If a number of students are inspired by this, much has already been gained.

Why isn't knowledge transfer inherently transformative?

It's important to distinguish between knowledge on the one hand and insight and understanding on the other. There is a border between knowledge and understanding, or insight, and crossing it enhances action competence and thus brings transformation closer, once the learner takes ownership of the learning process.

Knowledge leads to debate, understanding leads to action.
- quoted by Kurt Larsson

There can be a direct path to transformative learning by knowledge transfer, if a body of knowledge is sufficiently extraordinary - and disturbing - to cause individual participants to start questioning what they thought they knew. (CoP June)

Facilitation and design

The facilitator can influence the degree of transformative learning in a program. For example, what facilitation tools and processes are used to create safe space?

Of the myriad ways of building caring connections, one critical example is the ability of the facilitator to trust the innate ability of participants to determine how 'deep' they can go (Pollak, 2014). Another is the level of self disclosure of the teacher/facilitator, one approach to which can be storytelling about personal examples in answer to participants' questions. (11SE)

Program design is another path. The possibilities of variation and duration enhance transformative learning. (11SE and 8HR). One suggestion: approach a traditional subject by starting with the perspective that the student must be able to reinvent the subject, due to a rapidly changing reality. This leads to more openness to transformative aspects. (March CoP)

Another perspective: often action comes before understanding (CoP June).

As many as 80% prefer to try something first and then get the theory. Educators need to cater for both, and to be aware of their own preferences.

"To learn to formulate an intention and act upon it is a skill we sometimes forget to use and teach."

Learning vs being taught

The question of the core role of an educator was present in many of the discussions and was a specific focus of the June CoP, starting from the question: How do we as online educators handle learners who want to be taught?

In general there seems to be consensus that in transformative learning the key role of an educator is best expressed as "to enable learning", implying that participants are ultimately responsible for their own learning and should not simply wait for knowledge to be transferred to them.

The question is thus generally valid, not only for online environments, as are some of the specific frustrations mentioned:

If the employer or person who assigned the task of training or teaching to the educator had other intentions than the students.

If the educator's own expectations are higher than the students' expectations.

If the educational system requires a marking system that focuses exclusively on knowledge transfer (this is particularly the case in HE) and students come with this expectation.

Online environments have been found to present or exaggerate such challenges as

Difficulties handling inclusion in very interactive teaching sessions, from an intercultural point of view (CoP June) - which in a sense is counter-intuitive, since online there is no such thing as a 'home game advantage'.

Language and cultural barriers, not least because adequate interpretation services online have so far rarely been made available.

The general measures that are suggested to counteract these tendencies (e.g. 8HR) could be summarised as

Facilitator-oriented, primarily in the form of professional development for facilitators

Design-oriented, i.a. by including peer coaching in the program structure

It was also pointed out that program structure is important in relation to expectations; see below in the chapter Program design. Curiosity is seen as an antidote to frustration with a loose structure or not enough information. High intrinsic motivation can compensate for under-structuring.

Specific methods to enable learning were also suggested, including teaching how to listen (see above, Safe space, and below, Building a safe space by design) and role play (e.g. 18IT). However, in accordance with general principles of successful pedagogy, the choice of methods was found to be secondary to the skills of the facilitator (Ferrucci, 1982/2009).

Transparent friction

A situation with strong reactions can be a transformative learning experience in itself. At the June CoP it was suggested to make the friction transparent and discuss it. One experimenter had asked students to self classify as:

Explorers (really want to know something/ learn everything)

Shoppers (want to learn or find one useful thing)

Visitors (are happy to be here even if they don't learn anything)

Prisoners (would rather be somewhere else if they weren't forced to be here)

"In one course, of 26 we had 22 prisoners. We invited the prisoners to name something that would make their life in prison a little easier, and then go from there." (22DE)

Advice from the experimenters: take it slow, be gentle, address and invite everyone in an open way to share and contribute, and appreciate whatever the participants contribute, while keeping your own focus constantly in mind.

New opportunities open up online

Among the new and different opportunities that have been observed when working online, contributors mentioned (eg in April CoP):

The possibility of anonymity or at least distancing for participants, thus removing some of the barriers to engaging in significant inner work

Greater flexibility in program design, for example in dividing a long educational program into shorter sessions than are practical when people need to travel physically

Greater opportunities to bring together, at low cost, people from different regions, cultures and disciplines

An opportunity for regular exchange of experience (eg CoP) with no geographical and few temporal limitations

A possibility to bring learning to learners, rather than the other way around. Not only in terms of geography as mentioned above, but to insert learning where offline learning is not possible, due for example to lockdowns. (8HR)

A question of a different order concerns self image. When mirrors became common property, the perception of self was deeply affected - in several different ways (Well, 2018). Now, through platforms such as Zoom, it is for the first time possible to observe oneself from 'outside' as a member of a group. How will this affect self image and team building?

Program design

Clearly, the opportunities and constraints for program design vary considerably depending upon the type of event. Even a very short event can have transformative potential, as several of our experimenters have demonstrated (12SE,15SE). However the recommendations concerning program design refer primarily to educational programs that span more than one event, ranging from several days to months of calendar time.

Methodologies

One route to effective program design can be to use or adapt an existing methodology for reaching pedagogical goals. Four such methodologies were explicitly mentioned by experimenters: Theory U (Trigger, 2019), Learning for Change (Benaim & Mehlmann, 2017), Genuine Contact (Genuine Contact, 2021), and Dragon Dreaming (Koglin et al., 2021). Each was designed for face-to-face events and has subsequently been used for online and in some cases hybrid events.

A tentative conclusion is that the processes embodied in methodologies can be successfully used in program design, while the individual methods used at each step of a process may need to be adapted or reinvented.

The challenge

One challenge identified during the initial webinars was the question: what would we do differently, if designing for online rather than adapting? There could in fact be a sliding scale, from a strict adaptation, even "translation" from offline to online, to completely new online design.

A simple example of a straight translation is a series of (offline) lectures broadcast online for the same audience, for convenience and the possibility of asynchronous access.

Another example of a straight translation might be in order to lower the threshold for those less confident in the online environment. It could for instance be when participants draw the seating arrangement on a piece of paper, use a "real" talking stick in the form of a pen, etc. It is a familiar thing to do. The design for online might have the same procedure for other reasons, to bring in tactile practises for varied learning, etc. (15SE)

On the other hand a new design for online delivery can take into account the reduced cost of bringing people together. Whereas a long program for face-to-face education is often planned in one or a few gatherings to reduce travel costs, an online (or blended) program can be conceived to make the most of the participants' time and receptivity to learning, with more but shorter gatherings.

Equally, a new online program can take advantage of the physical location of the participants. For instance, a workplace program can bring in aspects of the workplace (8HR), an environmental program can bring in aspects of each participants' actual environment.

An additional factor is that instructions need to be given differently online; they need to be clearer than offline, and this has implications for the program design. It might necessitate more time and perhaps a specific method, for example dividing big movements into small actions, and thus dividing the instructions (31SI, 7HR). This is particularly important when using more than one software.

Building a safe space by design

We have mentioned the importance of safe space in a transformative process. This is to a large extent a question of skilful facilitation, but program design can also contribute. For example, the design can include:

Teaching how to listen, not least to oneself

Space to build personal relationships

Allowing anonymity of participants

The 'right' amount of structure

The good listener

Time allocated to help participants become better listeners is well repaid. Indeed, some educators believe that this should be a prominent element at the start of all programs with transformative intent, whether online or offline (34UA). Particularly supportive of transformative learning is the approach of Deep Listening, not only listening to others but also to oneself (Mehlmann & Pometun, 2013).

Personal relationships

The question of physical comfort or discomfort needs careful attention in an online environment, both with regard to program design and facilitation. See under Facilitation below. This includes the question of comfort or discomfort with the level of interaction with fellow participants. It appears that in an all-online environment, participants may lack the unstructured socialisation that normally occurs in breaks.

In other words, a safe space for participants to build relationships "outside the virtual classroom" is beneficial for transformative learning processes. The smallest interactions sometimes make a big difference. The benefit of being able to attend a conference in one city and go seamlessly into a meeting in another, is at the expense of small informal social contexts that shouldn't be underestimated, according to our experimenters. The online context not only deprives us of experiencing each other's energies, touch and smell, but also the extended experience of the visual and auditive, as there is no time and room for small talk.

"There is something missing if you don't physically go to a meeting. The way to the event is part of getting attuned, feeling one's expectations, raising anticipation and strengthening the purpose/ willingness to go to this event. Whereas if you join an online meeting you might have just before answered some emails and been involved in a totally different topic. The transition from one to another topic / meeting is missing then." A question to further explore might be how to find adequate substitutes for the journey to a workshop in order to host the transition (65DE).

One solution for this is to actually actively host such interaction: a program design can include and provide online spaces where participants/students can meet outside the learning context, and even by happenstance (56CH). Two such experiments were highly successful (13SE, 65DE).

One example is the program gather.town, another is the use of the program Wonder, where people can meet and mingle without a host or time limitations. The results from one experiment showed that all participants found this particular online space to influence the groups' collective safety positively (13SE). See also under Facilitation, Careful preparation.

"To have authentic online interactions, we must strive to change our mindset towards more natural interactions. I would even dare to hypothesise that social interactions are just as easily possible [online]. We just have to change our approach and especially our prejudice against this new form of contact. We must start treating virtual interactions the same as physical interactions." (56CH)

Other suggestions (56CH) are:

Leave the virtual main room open during breaks, lunch, and right after a course/ workshop, and also make a few breakout rooms available for spontaneous face to face chats. Encourage the participants to chat with a beverage of choice, just as they would if the meeting were physical.

Include enough breaks throughout a day and randomly place small groups of people into breakout rooms during these breaks. The choice is theirs whether they stay or leave.

Encourage people to contact each other with specific questions.

Allow private messaging.

Moderate discussions so that everyone has a chance to speak.

Set up a virtual room where people can meet even when the course/workshop has finished.

Anonymity

One unique aspect of online learning is the possibility for participants to be anonymous, whether 'permanently' or in a particular situation.

When working with particularly vulnerable groups, participants can for instance be enabled to use an icon instead of a photo or video image; or simply be 'permitted' to switch off the camera or give a pseudonym.

It can be easier to share and give feedback when you can be anonymous, both regarding personal information and feedback to a facilitator. An online whiteboard can be used for participants to post feedback while the facilitator is absent. (April CoP) - though with the caveat that in some programs (e.g. Miro) the board owner can see who placed which post-it in the board history.

One experimenter reports that Zoom workshops challenged the social competence of the participants, as most of them were reluctant to share their experience and opinions at the beginning of the program. Work in small groups helped to ease that fear/anxiety (8HR). An observation in the reverse direction is that recording participants' reflections may have a positive effect in itself, as it supports self-reflection and meta-level thinking. (33SE)

Both anonymity and enhanced visibility can thus have positive effects. And both anonymity and enhanced visibility in the online mode raise the question of the role of and potential for authenticity in the virtual space - a value that is known to be key in facilitating transformative learning events (Kreber, 2013).

The 'right' amount of structure

As noted at the June CoP, even slight over or under-structuring can cause frustration and even trigger strong reactions - by educators as well as participants. While an open structure is in principle positive since it enables participants to 'own' the learning space, too much flexibility also carries risks; for instance, the risk of straying off-topic, or the risk that participants' trust in the facilitator is eroded because of a suspicion that s/he is not sufficiently well prepared.

The level of structure may thus influence safe space as well as focus and productivity. Some points from the June CoP for facilitators/educators:

It takes more time to structure for online learning.

Understructuring can lead to a multitude of questions that the educator might not be able to answer.

If things are left too open the risk is that participants stray away from the topic.

Too little structure may make it seem that you are not prepared, and affect the perception of the quality of your program.

Although many students like orientation, over-structuring can hinder experiential learning.

Structure can be varied according to the shifting needs in a course or program. One example is to keep a more firm structure at the start, and eventually loosen it. (33SE)

Different audiences need different levels of structure, compare e.g. a big class of first year university students and a small homogenous group of colleagues. (59HR)

Variation

Most emphasis in discussions has been on the benefits of varying the pedagogy. A point was also made that transformative learning is helped when the participants come from varied backgrounds: "Other people with different worldviews, other environments than disciplinary arenas" (initial webinars).

Single sessions

A single, well-designed and facilitated session can be long, productive and include collaborative and fun elements, and still not be exhausting. Variation is one important factor to achieve this. Examples (CoP April, 33SE)

Set the session to start 10 minutes before it really starts and 'have coffee' together

Make space for individual reflection

Breakout rooms and polls with questions/ work that result in something useful for the outcome of the meeting

Make room for participation, e.g. methods to take turns to talk, or put post-its on boards

Include something for all senses, as well as paying attention to aesthetics

Include body work: dance, work with clay, drawing ... Extra preparation time for this is needed, possibly including sending materials beforehand (44US)

Take advantage of access to online media, eg make presentations with multimedia content

Long-term programs

Variation is important for the successful design of long-term programs, particularly variation between knowledge/content and action/implementation. (11SE, 8HR, 5NL).

This can mean including both asynchronous and synchronous activities, of which the former are content/knowledge focused (MOOCs, videos, readings, quizzes, etc.) and the latter are used for interaction.

Such programs also tend to have well functioning peer exchange/support systems (oral) and systematic opportunities for reflection.

As mentioned above, text-based platforms for peer support have generally not been successful. Also, in one experiment participants preferred to change text-heavy assignments for longer synchronous workshops. (5NL, 8HR)

Self-study programs

Self-study programs offline are at least as old as the workers' education movement in Europe. The traditional use has been for knowledge transfer. Online, such functions are today frequently the province of either MOOCs or apps.

Two experiments reported on testing such an approach: one small, individually oriented, totally time-independent, and unmoderated (12SE), the other bigger, with some ambition to achieve not only individual but also collective results and thus with a limited timespan (19AT). The outcomes to date are inconclusive.

The small experiment appears to have succeeded in its major objectives, using an approach where the content itself is the triggering factor for a transformation in perspective on a particular activity, namely written communication as a vehicle for empowerment.

The larger experiment received positive feedback by participants in a survey carried out after the end of the course. They appreciated the functionality of the course platform (Moodle) and claimed that they gained new knowledge and improved their understanding of the provided topic. However, the survey results do not permit any judgement about whether transformative learning happened or to what extent. It seems safe to say that it is difficult to achieve transformative learning in a self-study course with little interaction between facilitators and learners and it is even more difficult to assess such. The technical setup of the course and the didactical concept (including a forum for interaction, implementation of quizzes, etc.) need to be well thought out in order to compensate for the lack of immediate feedback and interaction.

Time and timing

Learning proceeds differently online, regarding time. In general it takes longer to anchor the subject, introduce and do the work.

In a performance context, eg dancing, singing, acting, the online situation requires of participants that they practice individually. It was observed that this inability to 'hide' in a context of group performance in the end led to more lasting and integrated knowledge and skills, which made their progress more successful and advanced. They simply had to understand everything individually. (30NO)

A general observation is that online course modules need to be short - generally, shorter than their offline equivalents.

Use of time was also brought up at the March CoP. It was noted that depending on the topic, context, and participants, online learning can take either more or less time than face to face.

The need to focus can speed things up. One experiment reported "unprecedented pace" in decision-making processes in a workplace setting. (22DE)

The anchoring of the material individually becomes more solid, but it also tends to take more time.

It was also agreed that an online program has the possibility to offer offline elements to give participants more time to carry out tasks. One of the major advantages with online learning in the workplace is indeed the possibility to extend the program, for instance with time for reflection or experimentation between sessions. Such alternation is of course a characteristic of blended learning, shown to be successful when combined with an extended time-frame (5NL, 8HR, 65DE).

Several experimenters reported substantial differences between shorter on-site training and longer online programs, where the longer programs were adjudged more satisfactory. (8HR, 22DE)

Another aspect of time is continuity. Long programs and regular, frequent synchronous meetings create the possibility for deeper relationships and transformative experiences. (60HR)

Time and continuity also enhance the potential in asynchronous activities, and the opportunity for them to blend with daily life. Firstly, the activities can be done at the participant's own pace and own timing. Secondly, asynchronous activities can consist of microlearning units, very small moments of reflection, action or learning units of only a few minutes that can easily be set aside by the learners if it can be done as part of a daily schedule and does not need to be synchronized with the whole learning group: it would not be feasible to arrange a meeting for just five minutes. In this way, small bits of learning can happen more often in a learner's daily life.

These factors are particularly interesting for building habits, a key topic in transformative learning. Microlearning units bring ease to the transformation processes as they enable connection with the new way of thinking or behaving in baby steps that bypass the 'Inner Bodyguard', the inner defence system of the status quo (Sher, 2015), and continuously nourish the desired new state over a long period of time until the new way is naturally incorporated into the learner's life. (65DE)

The potential of online events to include people from around the globe poses the additional question of time zones. The monthly OnTL CoP meetings were scheduled twice each: once in the morning and once early evening, to enable more people to participate. This proved to be a successful strategy. A few people chose to attend both sessions; mostly, attendance was different.

Ongoing support and blended learning

A critical program component

Offering individual or small-group support to participants before, between and after sessions is not exclusive to the online environment, but emerges with clarity from our source material as something to be planned, structured and facilitated. Such support can of course itself also be provided online; when offline, it brings the event into the category of 'blended' learning.

It is hard to overestimate the importance of such support for transformative learning, since it adds two critical dimensions to regular educational events: continuity over a longer period, in itself an important component of empowerment and thus of transformation; and the opportunity to 'dig deeper' into the personal ramifications of the topic studied. In addition, a heightened level of support helps to ensure that the ‚safe enough space' is held beyond the training events.

Several forms of support have been reported by experimenters.

Preparation in the form of (eg) a video to view, questions to consider, or observations to make (5NL, 8HR, 33SE)

Peer coaching (5NL, 8HR), including Learning buddy (August) (33SE, 8HR)

(Self-defined) tasks to undertake and report on (8HR)

Individual or group coaching by the facilitator (5NL), generally impractical offline except in the form of conventional tutoring, but made much more accessible in an online environment

Another example of enhancing the experience of communication between the

facilitator/educator and participant is to increase the number of individual emails or messages. More emails before, during and between the days of a workshop and to make them more personal, is a way of compensation. Also, to include the participants' (asynchronous) written contributions during a workshop, verbatim, may enhance the experience of being seen and heard. (33SE)

Is this the future for adult education?

In future, adult learning may take the form not only of hybrid events - combining online and offline teaching synchronously in a classroom - but also offer an opportunity to introduce blended learning into the work week.

For instance, it might be increasingly accepted...

… for employees to set aside (say) one day a week for principally online education, for a limited or extended period, making 'sandwich education' a realistic choice for many

… for students to attend school physically half of the week and digitally the other half, which would permit school buildings either to be used for twice as many students, or to serve other purposes as well. (11SE)

Triggers

It seems clear that an educational program can be designed to bypass the 'rational' brain and trigger a shift into an enabling zone. Some discussion has concerned whether or not this is an ethical choice (14CH, CoP May); see also the chapter What we still want to know. In summary, it is deemed important for ethical as well as practical reasons that any movement towards the 'edge' is encouraged from a 'safe enough space', that it is on an invitational basis, and transparent, and that the facilitator is equipped and prepared to handle any difficulties that may arise.

Given that this ethical dimension has been sufficiently well addressed, it can be useful to examine different types of trigger. Some of those proposed by experimenters were in the categories of:

Play and gamification

Role play

Some methods proposed within those categories are given in the chapter Methods.

It has been suggested that there could be other triggers. One example is content: if the ‚science' presented is sufficiently unsettling, it can start a TL process. Or exposure to other worldviews among participants, in a welcoming, accepting atmosphere (webinar).

From the May CoP, a word of caution concerning play: Offering play does not automatically invite everybody into a playful mode; instead it may reactivate childhood states such as envy or competitiveness. It's about the culture, and the atmosphere within which the invitation to playfulness is made.

If negative emotions such as envy arise, they need to be acknowledged. Recognizing and understanding their source can help not only the individual but the whole group move forward.

Other program design considerations

Transparency

Especially if there is not much trust yet in the facilitator or in the programme, or if the group is very insecure, making the course programme visible is very important, either before the start or at the very beginning. This enables participants to attune themselves to what they can expect and what is expected from them, and reduces fears and insecurities.

Once the participants trust the facilitator and trust that the learning journey is worthwhile, and are confident that they will be able to handle what they encounter in that journey, the transparency of the course programme loses its importance. Still it can be a good means for co-creating the course programme by inviting participants' ideas, feedback and wishes into the programme.

On comfort and discomfort

The question of physical comfort or discomfort needs careful attention in an online environment, both with regard to program design and facilitation. See under Facilitation below.

Representation vs participation

Online and hybrid events offer a new possibility for workplace education, namely the opportunity to include more people: whole teams vs single individuals.

Where it may be prohibitively expensive or logistically demanding to send whole teams off for a workshop, it may be feasible to gather them online - especially if the workshop is extended over time (8HR), so that only short absences from the workplace are necessary.

It would seem that this might get around the well-known phenomenon of new knowledge or skills acquired by one person being rejected by the group as 'He's been on a course - he'll get over it.' Indeed, one experimenter (15SE) reported rapid diffusion of new skills leading to "a shift in the meeting culture of the organization".

Higher education curriculum constraints

Much of the above is most relevant for non-formal adult education. In higher education, the constraints for implementing transformative learning can be higher. For instance, in many HE institutions there is resistance to some important aspects of transformative learning, which are regarded as having no place in a scientific institution: the need to cope with emotions and to integrate whole-body-and-spirit experience, the explicit intention to link learning to behaviour change, its link to reflecting on values related to learning and knowledge.

While this apparently is still an impediment for many, there is ample evidence in the literature that faculty staff can find ways of overcoming the apparent dilemma, redesigning curricula to include 'the world out there', for instance with real-world labs or living labs (eg European Network of Living-Labs). One transformative learning experiment in the OnTL project dealt explicitly with the issue of going beyond simply teaching gender theory as an intellectual exercise and doing this online: it linked knowledge about gender issues with a) a deeper concern about the impacts of gender inequality on individuals and b) a self-reflection on physical and emotional being triggered by gendered aspects of individual lives, including very intimate physical experiences. Each course participant was asked to write a gendered autobiography and share it with one other participant, then the pair reported in the plenum about what they had learned in this exchange. This worked also in the online mode, though a majority of participants thought the face-to-face exercise would have been preferable (23FR).

A further impediment can be the expectations of the students. Many students simply expect to be taught, and they want to be assessed on the basis of the knowledge and skills learned. They have difficulties accepting self-assessment as part of their learning process.

Facilitation

While many aspects of online education affect the conditions for transformative learning, it has become clear that the type and quality of facilitation has a crucial role. It requires that educators, in whatever context, are able to see themselves not so much as teachers, more as enablers of learning. The gleanings from this project paint a clear and colourful picture of an empowering facilitator, in general one who is on her or his own journey of exploration and transformation and is thus able to empathize and guide.

The more deeply embodied the facilitator, the higher the level of realization for everyone involved. (7HR)

Much of the transformative quality of learning concerns creating and maintaining a 'safe enough' learning space (see above). Other aspects touched upon are the willingness/ consent of the learners, the role of pain, edge emotions, liminality and support.

A general conclusion is thus that the quality of facilitation, of importance in face-to-face events, becomes even more critical when working online. It is also a more challenging task for facilitators, as they cannot rely on catching physical signals of participants' reactions during the event - or only in a very limited way. Keeping an eye on the whole group, including when the group is subdivided into smaller groups, is impossible in the virtual mode; so other means of 'taking the temperature' are needed.

One facet of facilitation that comes into sharp focus in an online environment is the need for teamwork between several facilitators, with clear delineation of responsibilities. At the very least there needs to be one process facilitator and one technical support facilitator. Large groups may also call for 'hotline facilitators' (e.g. focussing on chat entries) and/or - as with face-to-face events - small-group facilitators.

Some key competences

An earlier project led by partner Visionautik identified certain key facilitator competences for transformative facilitation (Biester & Mehlmann, 2020, vol. 2).

Table 1: Key facilitator competences (based on Biester and Mehlmann, 2020, vol 2)

Personal dimension	**Professional dimension**	**Context**
1. Self-knowledge I pursue a course of deepening self-knowledge and support my participants to do the same.	*2. Working with people* I create and maintain empathic relations and support my participants to do the same.	Fields Simple
3. Envisioning I craft visions of the society in which I dream of living, and support my participants to do the same.	*4. Riding complexity* I live with uncertainty, surfing the waves of complexity in pursuit of visions, and support my participants to do the same.	Complicated Complexity
5. Flow I understand that timing (kairos) is a vital aspect of change and know when to disrupt and when to go with the flow; and encourage my participants to do the same.	*6. Pedagogy* I learn all that I can about effective, learner-centred education and encourage my participants to do the same.	Education

There are facilitators kayaking white water, just trying to stay afloat. The more experienced know how to read the river. (7HR)

Careful preparation

Preparing for an online facilitation task arguably requires more time than preparing for a face-to-face event. It also requires creative anticipation of possible issues that can arise, e.g. technical problems with audio and video, participants not able to deal with the software used, inability to properly "read" what is happening in the virtual room (see below), etc.

Preparation of material to be used by participants in break-outs also requires more time, not least because expanding on explanations in response to questions can disrupt the flow of the learning process. (60HR, 48CH, 22DE)

Examples of preparations before and during workshop days: (33SE, 22DE, 60HR)

Host a meeting before the meeting in which participants can get to know and practice the technical platform and apps. This reduces the focus on tech matters during the workshop itself.

Explore mutual expectations - both facilitators' and clients'

Explore experience base of the facilitators

Decide on clear roles that are co-constructed in the first meeting and preferably described in a mutually agreed document(33SE)

Decide on workshop choreography

Prepare for how to handle surprises

Meet with a steering group after each day to evaluate and prepare the next day

"Clearer online makes it better offline." It is widely agreed that the careful preparation needed to be invested in online work in turn benefits offline preparation practices. (14CH, AprilCoP)

Clarity between the facilitating team members

In all but the smallest events there is a need for more than one facilitator. In addition to the normal offline desire to have co-facilitators available, e.g. to host breakout groups or to handle emerging 'edge emotions', there are the special exigencies of online work. Two roles can be critical to success:

A technical facilitator supporting both the course leaders and the participants

A hotline-facilitator keeping a constant eye on the chat, and on any other options suggested for communication with and between participants

Preparatory work making sure that the whole delivery team is clear about roles and responsibilities has proved essential, and effective. (48CH, 60HR)

Creating conditions for fruitful online relationships

Difference online and offline: offline offers more time for informal communication and presence before, during and after a workshop (33SE); this can be compensated by careful program design (see preceding paragraph) and choice of software (q.v.), if used skilfully by the facilitator.

Building a safe space through facilitation

The creation and holding of a safe space requires great care and respect for the learners. Facilitators need to be aware that there is a fine line that should not be crossed between being a coach/trainer/teacher and being a psychotherapist. This is perhaps particularly applicable when participants have limited freedom of choice due to the definition of the educational context, e.g. in higher education or the workplace.

Transformation starts within a "liminal space" where what was no longer is, and what will be is not yet clear. It is populated by "edge emotions" (Mälkki and Green, 2014) and facilitators should be able to "hold" the space where these emotions express themselves, maintaining it as a safe space for learners. In an online situation facilitators need to be particularly attentive to whatever signals indicate that a participant is ill at ease. Triggering transformation processes requires great care and implies remaining in the role of facilitator, which differs from the role of both a conventional teacher and of a psychotherapist. Facilitators must also be attentive to the fact that edge emotions may emerge in unexpected situations.

The question of how to create a 'safe enough' space for participants runs through many of the experiments and discussions. In face-to-face events it has long been acknowledged as a central prerequisite to transformative learning, including such elements as room decor and furnishings. (Biester & Mehlmann, 2020, Vol.1)

In general, it was noted that safe space is to some degree a joint responsibility. Many things come into play: trust, confidence level, time, number of people, assessment, etc.

A central question was therefore how to transfer this experience to the online environment.

The 'safe enough' space

'Safe enough' is an important marker. Each one of us has our own sphere of safety; and as long as we remain snugly within it, no transformative learning will take place. On the other hand if we are thrown too far out, there is a risk that fear will dominate and prevent learning. (Biester & Mehlmann, 2020, Vol 1) So for a transformative educator the challenge is always to seek 'the edge' that is possible in a safe enough space. The focus of the May CoP was 'edge emotions'.

There is a balance between giving people leeway, agency, and self direction over their learning experience, and a kind of shamanic role: a guide through the transformative process. The balance depends on the degree of transformation the facilitator is trying to induce, and their willingness to have a provocative role; a dimension of creating useful, deliberate trouble as opposed to the enabling role. Underneath the facilitator's playfulness there needs to be a serious intention. "Students can push back against things they cannot put in their CV. Do they buy into a counter agenda, the intentions and deeper purpose of the educator, and how?" (25US, May CoP)

Advice from the May CoP: At the beginning of a course, BE the teacher/trainer. Set the roles and the standard, so that learners know what is expected of them. Participants are then eager to take over, take initiatives and think of improvements. One element of safe space is to know what is expected of you.

The growing zone - or the panic zone?

As long as the speed of change matches the speed of our reaction or anticipation, everything is fine. Once the speed of change is much slower or faster than our change or our desires, we come to an edge which creates emotions.

The edge may create emotions like arousal and curiosity - leading individuals to welcome change or even transformation - or fear and panic - leading in the worst case to a "flight, fight, or freeze" reaction, with the autonomic nervous system (ANS) imposing refusal of change (Förster et al., 2019). According to the Polyvagal theory, developed by S. Porges, change and growth are possible only in a state of connection called the ventral vagal. In this state we can connect to self and others, feel resourced and resourceful, explore options and feel hope and compassion.

The Autonomic Nervous System is where our stories begin.

(Dana, 2020)

The ANS is constantly searching for and sending cues of safety and danger, inside our bodies, outside in the environment and between people. When we receive cues of safety we feel an autonomic welcome and move into connection (Dana, 2020). Many cues work in an online environment, which might be one of the most important reasons why safe enough space is possible to attain online. For examples of cues, see the section below on perceiving signals.

The role of emotions in the transformative learning process is essential, especially in the context of sustainable development; emotions are both a trigger of change and the guidance we need in the change process:

"it is particularly important to take [emotions] into account in at least two ways, because of the strong normative implications of sustainability. First, they serve as a "sensorium" to detect values and moral considerations of learners relevant to (non-) sustainability, exposing and making them accessible for reflection. As 'sources of wisdom' (Roeser, 2011, p. 198) emotions contribute to a clarification and reflection of the normative basis of sustainability-oriented social transformations. Second, and in addition to serving as indicators, emotions are also potential "levers" for sustainability-oriented TLT. Emotions make the values and norms underlying our thinking, feeling and acting become visible and accessible for critical reflection." (Bornemann et al., 2020)

Transformative learning means that there is a shift of mindset – a transformation of beliefs, attitudes and habits (Valamis, 2020). Habits and attitudes provide identity, direction, context, etc. Changing these things tends to be threatening. Discomfort cannot be removed completely: uncomfortable edge emotions have a role to play (Mälkki and Green, 2014) and disruption is increasingly necessary: "This unlocking, unfreezing, or loosening requires the disentanglement of construed meanings in order to create space for alternative ones that are more generative in creating more sustainable pathways. (Wals, 2020: 69).

We need hope in order to engage and get going, to create visions, to trigger a desire to get beyond, to empower people. Yet positivity in a world that needs hope can become a problem when it leads to denial of unpleasant facts. At the May CoP it was suggested, based i.a. on the work of Eva Illouz, Brene Brown and Susan David, that unrealistic, or 'toxic', positivity (Wright, 2014) works against resilience and sustainability, and thus against authentic transformation.

Topic-related expectations

The topic itself may be an important factor in the experience of safety. When participants sign up for a program or event focused on transformative learning and/or sustainable development, there is an implication that they WANT to believe there is a safe space out there for them in which they can discuss these crucially important topics.

The hypothesis - still awaiting experimentation - is that expectations can play an important role. Safe space is not only built and maintained by the facilitator or host; each participant also contributes. The expectation that a conference or other event will be exciting and rewarding contributes to the building of a safe space from the side of the participant; whereas nervousness, anxiety or apprehension could negate the efforts of the facilitator.

One experimenter reports that because expectations were automatically lowered

during an online phase of a course, the feeling of accomplishment became more frequent. "We won, every time [class]" (both students and teacher). (30NO)

Transparency and the invitational aspect

Be transparent about what you do. Describing your intentions and not being too mysterious about it can be the best bet. (May CoP)

As mentioned above, the safe container or learning environment is jointly built and maintained by the educator and participants by inviting the participants to agree on for example goals, confidentiality, being on time, etc.

For online environments, added dimensions include how to cater for physical comfort, i.a. allow for participants to stand up, or join a session while walking. Another aspect to consider is the culture established in the group concerning attendance and visibility. Is it clear how and when cameras are/ can be/should be switched off or on? Is it possible to agree how much of the person should be visible on camera? Is it clear how to communicate, e.g. to leave a message in the chat if leaving the room ahead of ime? (7HR, 14CH)

Participation in specific activities should be invitational and not forced - the participant can say no; and can 'stay behind' and talk about it more easily online than offline, where it becomes more obvious and potentially embarrassing.

On the other hand if it is too invitational and relaxed, the law of two feet can take over and might enforce the feeling of not really belonging, especially if the activity is challenging. Working in pairs is a good antidote. If you first share something in pairs, it becomes easier to speak in plenary too. (12SE, April CoP)

It helps to be transparent about the pedagogy/theory/process/method, especially in contexts where experiential learning precedes theory. Engaging participants in shaping the details of the event is another form of invitation, which can help overcome structural difficulties. (June CoP)

Both online and offline you can create an awareness of the hidden agenda; offline there is also an agenda hidden in the venue itself, which is not an issue online. A university may for instance have implicit and explicit agendas embedded in the classroom, for example historical, in a colonial setting. (7HR)

Individual learning in relation to peers

A facilitator moving from an in-person environment to online or hybrid events confronts new learning patterns in the participants. Not necessarily either better or worse, but different.

One observation: the absence of a real life group reduces fear. A sense of less interpersonal risk and a higher degree of anonymity allows the students to ask more questions, have instructions repeated, and have more intimate exchanges with each other. "Maybe what we often regret, having to do things online, can actually be something positive?" (CoP March).

This may not require 'total' anonymity but may for instance extend to such factors as the uniformity of appearance online: "I remember a small woman say: I feel more equal in an online setting. Everyone has a tile of the same size in the videoconference no matter if he/she is big or small and the tiles are distributed over the screen randomly, so not the highest in hierarchy or the loudest voice or 'alpha' person of the group is on top and people can meet with less prejudice." (65DE)

An observation that is equally applicable in all environments when there are big differences between participants: inviting the more advanced to tutor the ones less advanced can benefit both sides. "Sometimes we learn most by teaching" (CoP June; 31SI; Jarrett, 2018).

Another experience concerns the personal development of introvert HE students, who seemed to benefit from the online situation. "They came back to class blooming." The hypothesis is that it's an effect of a safer and peaceful space at home combined with more individual work. A reflection is "that they normally took other students (and others' feelings) too much into account. Now they could and were forced to focus on themselves." (NO30)

Participants' experience and inner work

In general, anchoring knowledge in personal experience and life, and reflecting upon it in a deep way, creates an opening for transformative processes to take place. (11SE, 23FR)

Willingness is important for transformation to happen. To work with the motives of taking a class or course, to really dig deep, can work in favour of willingness. As one experimenter put it: if you have clarity, you get noise. If you have clarity and agreement, you get a clean burn. (30NO, 7HR)

One experiment that was proposed by two people but not reported upon is to start any class/course with inner work, regardless of subject. The work consists of deep listening to oneself about the reasons for signing up for a course, and tracing them to one's identifications, values and will. This increased self awareness may be transformative in itself, and the hypothesis is that it generates motivation to engage deeper into the course (or possibly, to withdraw from it). (30NO, 13SE, 34UA)

Silence

If the participants are not too many, it helps if everyone speaks once at the start. It's easier to continue talking once you have used your voice. (April CoP)

At the same time, de-dramatize silence. Silence is taboo in many meetings. Silence is beautiful and breathing. It can be treated consciously as a topic. (April CoP, 33SE)

Here and now

Time is the element in which transformation happens. "Change is the work of heads, hands, and hearts over time" (Bussey, 2017). A transformative seed may take immediate root, or it may take months or years to germinate. (Ferrucci, 1982/2009).

Enabling participants to swim in this element may take the form of working with futures or with histories; but the key is always to enable participants to root their experience in the here-and-now.

One way to do this is through a solution focus. "Always meet people in their resources first!" and "Focus on preferred futures and on what works already, rather than on what doesn't work or is dreaded". This can for instance be done by deflecting questions and discussion about problems: "During the workshop we encouraged discussions about what works already and attempted to keep comments on past or expected problems short, for example by asking, 'What would you like to see happen instead?'" (22DE)

Another way is to work here and now on a meta level, i.e. by making it legitimate to talk about what is going on. Either facilitator or participant can for example feel comfortable saying things like 'I'm not sure what to do next because…', 'I feel under a lot of pressure at this moment…', 'When I hear you say that, I feel…' (Gordon, 2001), (33SE)

Perceiving signals

An experienced face-to-face facilitator is constantly picking up signals, not least from participants' body language, about the group's responses to what s/he is doing, and drawing conclusions about any need or opportunity for adjustments.

Body language can for example refer to how safe the participants feel, or to the balance between boredom on the one hand and too-numerous alternatives (e.g. over-stimulation, off-topic diversions) on the other, as it is easier to be distracted online than in a room (7HR). Or, whether or not participants have understood instructions. (31SI) Basically, these signals show how engaged in the process the participants feel able and willing to be, both individually and as a group.

What new signals do facilitators need to pay attention to, in an online environment? Some examples:

Frequent (or constant) shutting down of video

Response or lack of response to calls for simple input via chat

Absence from or passivity around such tools as online whiteboard

Lack of interaction in a break-out room

Teachers and facilitators have reported that speaking into a screen sometimes feels like addressing a void, devoid of signals, even when participants' cameras are turned on. As one of the contributors puts it: "The experience isn't chemical enough". (56CH) Among the consequences we note increased insecurities. (17SE) Students can also be encouraged to stand up and shake their bodies, with the facilitator showing this in front of her or his camera: this can work like a wake-up call as well as a call to be attentive to one another in the virtual room.

Facilitators can also take the initiative and encourage deliberate use of signals. "I found it very helpful to make a group agreement at the beginning of the workshop to give lots of visual signals (waving with your hands, thumbs up, heart shapes etc.) in order to compensate for the lack of sound or body-language feedback. It worked very well in all contexts and makes a huge difference for this feeling of speaking into the void" (65DE).

One practitioner "exaggerates" her body language to get across and compensate for the limited medium, and also limits powerpoints and instead uses more physical props and elements such as showing papers in the camera. (33SE)

Cues of safety

Eyes, ears, voice, face and head movements are involved when the autonomic nervous system is sending and looking for cues of safety and danger. Prosody, for example, is powerful. We listen to the sound before we listen to what is said, hence the saying It's not what you say, it's how you say it. The music of the voice, patterns of rhythm and sound, frequency, duration and intensity reveal to us the underlying intent and if perceived as safe, moves us into a state where we can receive the message.

Head movements can send important cues. A straight unmoving head is a cue of danger, while head nods and a slight tilt to the head broadcast cues of safety and a message of welcome. Smiles are important, but less so than perhaps believed. The use of chirurgical masks during the pandemic has made us experience that cues can be transmitted through the gaze alone. (Dana, 2020)

All of the above work in an online environment, provided that the technology is satisfactory. Sometimes the face is even more visible on a screen than in real life. On the other hand, direct eye contact is still not possible online.

Mobility and physical comfort

Mobility in the online setting can be both enhanced and decreased compared to physical meetings/learning contexts. On the one hand geography ceases to be a factor when getting together, and on the other, in a specific online setting, we can be more constricted by the software. One example is when the International Bateson Institute's Warm Data Labs were brought online. In offline labs, participants change groups/contexts at will, but online participants are channelled from context to context and sent to the rooms. (47CH)

An example of the opposite is when break-out groups are open ended and participants return to the main room at their own pace, or can move freely between rooms. This would be difficult to handle in a physical event because people 'drifting back' from break-out groups at unpredictable moments would tend to disrupt the plenary. (12SE)

Physical discomfort can become an issue online, and it is less easy for the facilitator to pick up on signals from restless participants that they need to move. Part of the solution is to plan frequent breaks in long sessions; one suggestion was a maximum of 75 minutes without a break of some kind.

When there is a break, the facilitator can offer or suggest some proximate physical activity, either on or off-camera - like a stretching exercise or impromptu dancing.

It is also possible to offer a more general mandate: for instance to suggest to participants that they are free to move around at any time, open a window, stand up and even walk, whenever they feel uncomfortable, with the rule that if they exit the group, they need to leave a message in the chat for everyone. (14CH)

This would be an interesting topic for further exploration (see below, What we still want to know.)

Hybrids - implications for facilitation

Hybrids can be difficult to manage. Are they worth it?

The level of engagement may differ greatly between the offline and online participant in a hybrid event. Online attendees can drop in and out, taking calls and other meetings in between. Facilitating safe space becomes more challenging. The online and offline participants form two groups with a degree of homogeneity within each group. (October CoP)

Is it an offline meeting with a few online participants, or an online meeting with a few offline participants? What do the two different alternatives entail?

What technical solutions would help bring together the two groups, as well as refine the possibilities of interaction between them, during the different parts of the meeting/course? Smartphones/multiple large screens, 360-cameras, Augmented Reality?

Some conclusions (15SE)

- Online-only have advantages compared to a hybrid.
- To prepare for a hybrid is to prepare for two meetings.
- Keep it simple. It's better to create a simple environment where participants can navigate with minimal friction, than something elaborate that has a higher risk of technical issues and frustration.
- Have different facilitators handling online and offline participants.
- When online and offline participants need to be attentive to one another, make sure that they are aware of the need to address both audiences at the same time.

Assessment and evaluation

Assessment and evaluation are used inconsistently (Baehr, 2007) in the literature and by practitioners, sometimes with overlaps. Rather than propose separate definitions, we use both terms here as approaches to assessing learning, with a double focus on process, often understood primarily as assessment (feedback on knowledge, skills, attitudes for the purpose of improving learning outcomes [Borden and Owens, 2001; Palomba and Banta, 1999]), and on outcomes (assessment of achievement of a performance or outcome, and in specific cases evaluation of its quality).

In learning processes, assessment and evaluation can either look into the achievement of certain specified learning objectives assigned to the process (often used as references for the marking system in HE or for certification in workplace education), or identify the additional learning the processes "produced" (in comparison with the learners' level at the beginning of the process, without consideration of assigned learning goals), or even focus on how the learning happened (in order to reproduce and improve the process). The book Rethinking Classroom Assessment with Purpose in Mind: Assessment for Learning, Assessment as Learning, Assessment of Learning (Earl and Katz, 2006) provides further food for thought about how to get away from the understanding that assessment consists solely of giving marks.

Why is assessing important?

In transformative learning, assessment is actually an essential part of the learning process: self-assessment implies self-reflexivity on the learning journey and can enhance learning for transformation (catalyst function), it helps empower the learner, and when shared, it increases learners' capacity to multiply learning for transformation.

Additionally, assessment can help improve learning and facilitation, for formal quality assurance processes, but also through self-reflection by the transformative learning facilitators and their own learning

Certify acquisition of skills (certification)

Contribute to ensuring that transformative learning is not being used to manipulate learners but rather to empower them to deal with value-oriented decision-making in an independent and critical manner.

Transformation and learning outcomes

At the very beginning of a TL process, it is important to make clear to attendees that learning outcomes are anticipated not only in the form of knowledge or skills acquisition but also in the form of new insights and (meaning) perspectives gained; and to make sure they are comfortable with this expectation.

Such insights and perspectives may be regarded as valid non-manipulative learning outcome ambitions. They are also a prerequisite - though no guarantee - for transformative learning, which in itself is not a 'learning outcome' that can be validated against a set of criteria. Indeed, transformative learning is an individual process very much linked to values, personal life history, and the emotional state of the learner. While it is a deeply personal process, it also depends a great deal on group interactions, especially in the context of sustainable development, where values need to be negotiated within a community. The assessment procedure should take all this into account.

As Mälkki and Green (2014) argue, assessment of transformative learning should also focus less on finding out whether „transformation" has happened or not, as this is extremely difficult to assess for various reasons. Instead, it should focus on how the process worked, which aspects triggered learning, how attendees felt, and whether their level of engagement in transformative action increased, including their use of self-assessment.

Thus, self-assessment is central in transformative learning as it is an integral part of the transformation journey. It encourages the learner to take a step back, to gain a critical distance towards his or her own insights and perspective, in order to understand whether and how they changed. Becoming conscious of the change process and able to make it explicit is a central phase of consolidating learning.

Being able to communicate about one's learning achievements is also a necessary condition for acknowledgement of these achievements by third parties (employers, education institution, etc.). It also contributes to the empowering effect of transformative learning: enhanced self-knowledge (through self-assessment) and one's sense of achievement strengthens self-esteem, a key element of empowerment.

Transformative learning facilitators should therefore put a strong emphasis on (self-) assessment and even on "assessing the assessment", in order to ensure coherence with the prior (or still ongoing) learning process, to verify whether the learners felt at ease during their self-reflection or observation, and to allow for improvement in future transformative learning activities.

Assessment can and should also take place at different stages of a transformative learning process, allowing for adaptation of the facilitation, if necessary. Critical intermediary feedback is not a cause of alarm, since transformative learning often leads learners temporarily outside of their comfort zone. It signals that learners need to be heard, reassured, comforted about what is happening, and made conscious that a learning journey is a process in a state of flux.

In principle, all four OnTL metrics mentioned below should be taken into account in an assessment. But it is likely that a course or event cannot cover all four, or at least not with the same intensity. See also CoP March.

Key elements

Intention

The starting point is to decide what to assess, for what purpose, and determine who is involved. And of course to focus on online specificities. Figure 5 maps these three elements that together comprise the intention of assessment and evaluation. The elements of the fourth column result from the decisions about what is specifically important and relevant to the online transformative learning event that is being planned (see below).

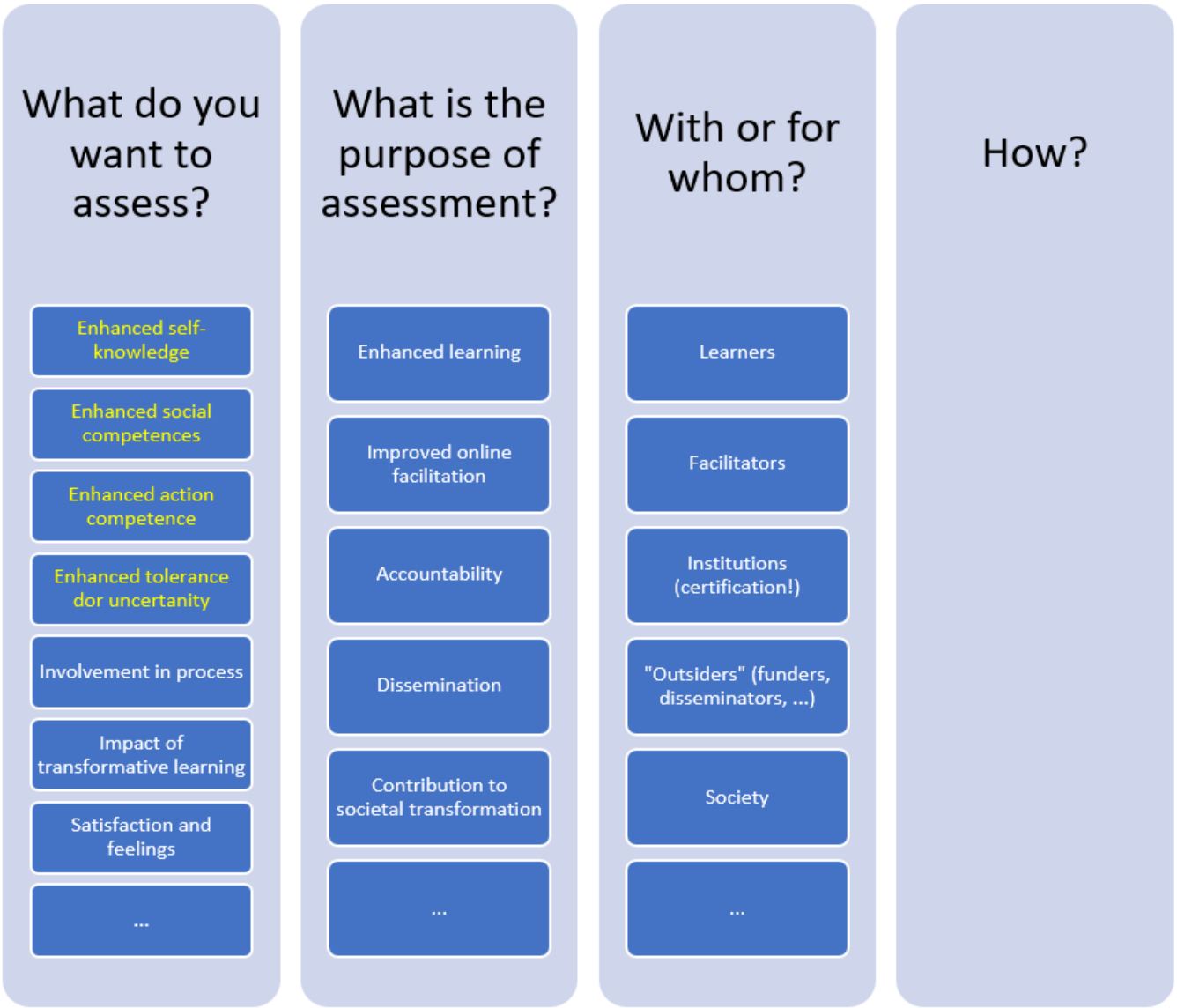

Figure 5: Key elements for assessment and evaluation processes: “What?”, “Why?” and “Who?” determining the “How?”; the four OnTL key metrics are in yellow.

All three columns are composed of very diverse elements, and the number of options one has of combining these different elements is infinite, showing the multidimensional nature of assessment and evaluation. Of course, further elements can be added (indicated by the boxes with three dots).

The coherence of a given combination with different elements from different columns depends also on the context, the available means, and the timeframe.

Designing a procedure

To organise an assessment, the elements need to be combined to yield a clear focus, purpose, and person or stakeholder involved. The assessment procedure can then be designed. The process can also be iterative. The choice of the method might change the type or number of stakeholders involved (3rd column in Figures 5 and 6); you might therefore want to determine the method rather on the basis of the object and the purpose of the assessment, and determine the „Who" only at the final stage, rather than the other way round. The main concern in deciding about an assessment method and procedure should be coherence between the elements chosen in the four columns.

The following example (Figure 6) provides two illustrations of the way the figure can clarify purpose and help decide what form of assessment is adequate (see the arrows):

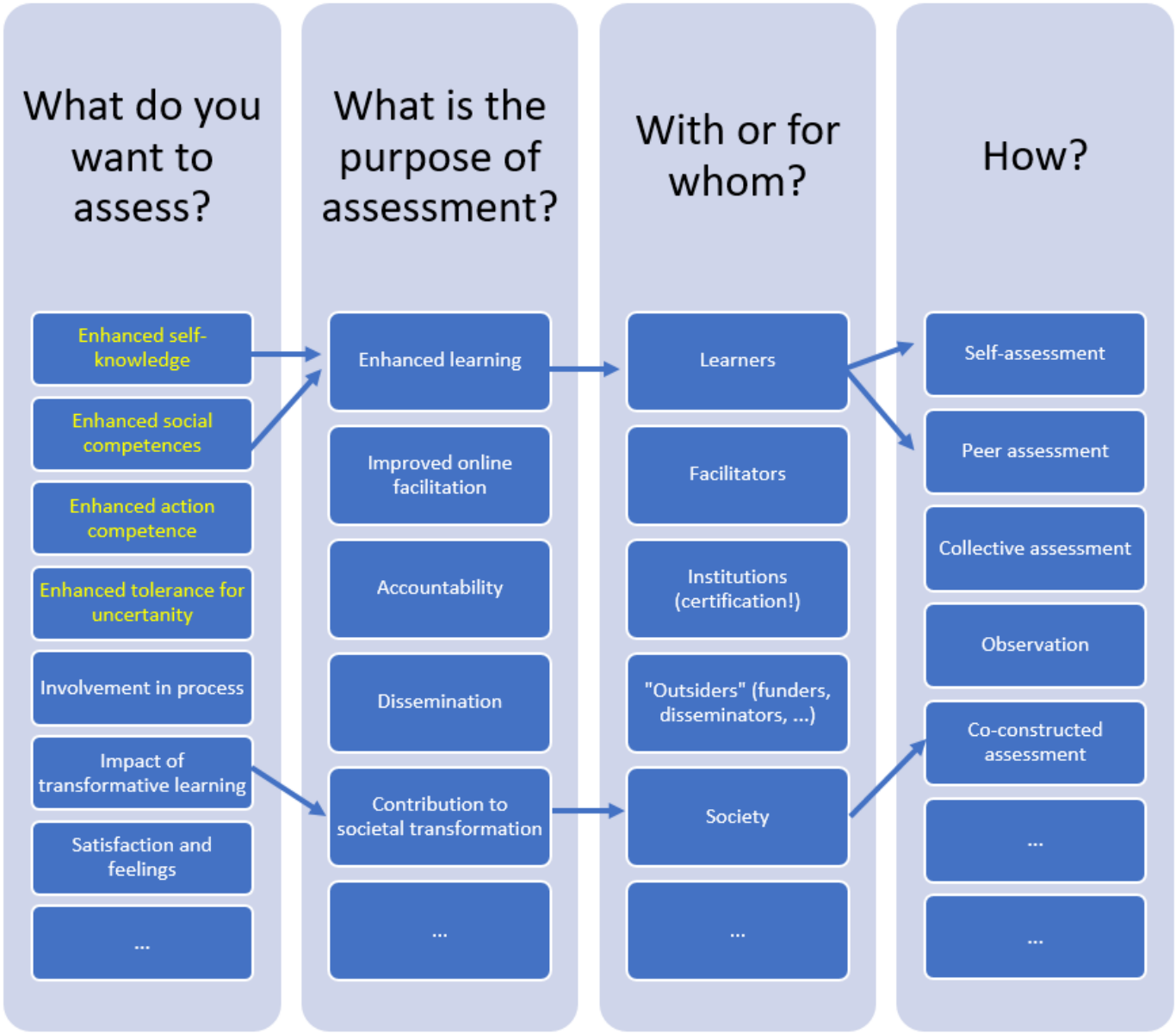

Figure 6: Two ways of designing the assessment procedure; the first was implemented in the experiment of online gendered autobiographies (23FR), the second is a hypothetical example that would take into account sustainable development as a collective goal of a community learning process aiming for changed behaviour.

Methods can be mixed or combined. The procedure can also be co-designed with the learners. An important purpose of assessment is trying to achieve high quality of the learning process - something that can be achieved either by the facilitators or by the facilitators along with the participants.

Assessment tools and processes do not necessarily need to be online, nor does an assessment process need to be conducted using online tools: asking participants to draw something on paper (and possibly to show it in front of the camera) can be an option.

Thinking about the 'how'

There are numerous ways of assessing and evaluating. Self-reflection was seen as a key element in the experiments that described an assessment process, and central to transformative learning. A self-reflecting exercise at the beginning of an event can strengthen other competences, e.g. "social competences". It might also serve as a form of "baseline" for a comparative final assessment.

Explicit evaluation/assessment

Form:

Questionnaires/forms after a completed course

Self assessment, self reflection

Shared reflections in closing ceremonies, peer reflection, peer assessment

Direct questions during the last meeting

Discussions, quizzes, mini conclusions of implemented practices every two weeks

Storytelling

Recorded reflections (video, audio) instead of written assignments

Comparative pre- and post-measuring

Content: Open questions, for example:

What was difficult?

What has gone well or in the right direction?

How has this contributed to your personal learning journey?

What have you taken away?

What has changed inside and outside?

What did you do differently? What changed because of your interaction with society? (2IN)

What changes do you intend to introduce (in your professional setting or in your private life) next week, in the next three months, in the medium term? (Ideally, asking this question would require a follow-up session to discuss the changes that occurred or did not occur.)

(March CoP, 2IN, 55US, 5NL, 8HR, 33SE)

Assessment by observations

Built into a program:

Facilitators sit-in and observe small group reflections in breakout rooms (55US)

Observations during check-ins, where participants are encouraged to brag, tell about 'sparkling moments', aha:s and oh no:s. (5NL, 33SE)

Observation by a facilitator of a shift in the learners. How they start speaking up and speaking out. They may start questioning, asking important questions and asking questions differently. (2IN)

Observations outside a program:

How participants interact differently with the community. The project is not only academic but visible in practice. (2IN)

External observations at a workplace before and after. Example: A line manager who is a designated performance coach, in charge of following up new changes and behaviours in the participants. (8HR)

A similar question can concern the family setting (as a sub-unit of the community)

Example: Asking spouses or other family members about changes they notice after a family member participated in gender training. (23FR)

Assessment as a transformative process

A teacher at Wageningen University participating in one experiment (5NL) has designed a new, more holistic way to assess her PhD students so that they see their path as a process instead of a checklist. The students report that some pressure is off them, and the professor "actually enjoys reading what her students write" because the students reflect in a deeper way, and they are more able to connect their work to the outer world, and with greater impact. This is obviously a good step towards enabling students to move from knowledge to action.

Students really appreciated the extended reflection and said it was new to them. The teacher says she invited them into a transformative process, which led to good results despite (or perhaps because of) some hesitations or friction.

Other participants in this experiment (5NL) report increased self confidence working online, being braver about how they work, a sense of legitimization of their work, personal life-altering changes, best program evaluations ever recorded from students, students saying they feel seen and heard, students taking charge of their own learning. This is leveraging how transformative learning is seen and treated at Wageningen, and currently the university is bringing people who work with transformative learning as guest speakers from all over the world.

In contrast, students asked to report about personal changes in a journal may find this problematic if what they want is to be taught and what they expect at the end of the course is a mark assessing clear and measurable learning objectives. (June CoP)

Key metrics: worthy of further research

Experimenters were offered the possibility of using the following metrics for assessing the quality of online transformative learning programs/events; these metrics were jointly developed during the March CoP meeting, based on previous work documented in Biester & Mehlmann (2020, vols. 1 and 2):

Enhanced self-knowledge

Enhanced social competence

Enhanced action competence

Enhanced openness to/tolerance for uncertainty

Only very few experimenters provided information about assessment of the quality of online transformative learning in their experiment, perhaps because the four metrics did not sound familiar enough, or were not appropriate for their experiment, or did not correspond to their understanding of transformative learning. One experimenter explicitly asked how to assess them and was provided with the following suggestion:

Try to ask yourself: "Do the participants of my training have enhanced self-knowledge, social competence, etc. after the workshop?". As you cannot measure that with a folding rule you will either have to ask your participants or take your best guess. If it is just 'yes' or 'no', that is rather easy. If you also ask 'how much', it is a lot trickier; we cannot offer you a unit for this. I guess the best way to go about it is to ask the participants themselves a question like this. "If yes, how did you notice? Please provide an example."

Given the importance and intricacies of assessment and evaluation in the context of transformative learning, it is obvious that this is an area where further experiments and research are needed. See the chapter on What we still want to know.

Limitations of assessment systems

Institutions have the power to influence what we assess and why, and how this affects the desired outcomes (e.g. transformative learning for sustainable development). Institutional limitations vary widely, and are often tacitly embodied in the culture. It is useful to make them explicit, even if they are unlikely to be significantly influenced within the life of one program or event.

There are also many open questions concerning the best ways to assess and evaluate specifically online transformative learning. See the chapter on What we still want to know.

Methods

Just as there is a sliding scale for program design regarding the transition from offline to an online context, there is scale for methods: sometimes there is no need to change, sometimes modifications are needed (e.g. using home surroundings/material found at home instead of what the facilitator provides), and sometimes the method is impossible to carry out online, even with heavy modifications. Methods involving the body are among the most challenging, but with creativity, many can be made to work well online, perhaps requiring prior preparation in the form of sending all participants something that they can do or taste during the session. (14CH, 13SE, 12SE)

There are many, many methods and tools designed for and used in a context of transformative learning. This chapter makes no claim to be exhaustive, nor does it aim to be a tutorial on the use of any particular method. Rather, it focuses on methods reported on by contributors, together with the outcome of our exchange on experience: their and our mutual conclusions as to usability, and advice for successful online use.

It should be noted that the choice of methods was found to be far less critical than the skills of the facilitator; choosing methods that have been mastered by the facilitator, whether offline or online, is more important than details of the potential of the methods in question.

Selected methods are documented in the 'Transformation database' maintained by project partner Visionautik (Goldammer and Goldammer, 2022).

Table 2. Methods referenced by contributors

	Transfer	Adapted	Online
Book sprint		x	
Bragging moments	x		
Brainstorming	x		
Break-out groups: google Slides			x
Dialogic Orientation Quadrant	x		
Fleck's Synergy Method		x	
Folk Tale Group Therapy		x	
Gendered autobiography exercise		x	
Genuine Contact		x	
LEGO online		x	
Online consensus			x
Online dinners			x
Online warm data lab		x	
Open Space Technology		x	
PechaKucha	x		
Peer assessment		x	
Peer coaching			
Peer reflection		x	
People Need People			
Positive gossipping	x		
Sociometrics			
Soft System Modelling		x	
Solution Focus approach and questioning	x		
Speed Peer Counselling		x	
Storytelling			
Talking stick		x	
Tell-Show-Recap-Do-Reflect			
Theory U		x	
Throw the ball	x		

Which methods?

The five categories below are used to highlight some of the applications of the methods reported upon…

Introducing people and programs

Group work

Collective creativity

Playful approaches

Other

Introducing people and programs

When introducing participants in a program or session, experimenters reported experience with specifically online solutions such as Pecha Kucha presentations (generally with fewer than the original 20 slides) and randomly generated online 'reflection cards' (Dalar International).

Several experimenters made good use of the chat box and of opinion-polling programs to elicit responses to specific questions. Some other reflections:

Different kinds of check ins and check outs depending on time zones. Also, find a common ground when participants come from different parts of the world. (65DE)

The common practice in physical venues of having participants interview and introduce each other can easily be reproduced online.

Ice breakers can be used productively by working with questions that have to do with the purpose of the meeting/course and drawing on personal experience. Use both the right and left brain. (15SE)

"Bring up hopes and fears at the beginning, it's better than expectations. People are able to be more present in the meeting, and if you invest in the beginning, decisions will go fast." (15SE)

Group work

Break-out groups are supported by all major conferencing software. In some ways the online version has advantages over the physical equivalent. For instance, some platforms can be programmed to allow participants to move in and out of groups and plenary at will - a practice encouraged i.a. by Open Source Technology (ref) but not always easy to handle in a physical venue.

When break-out groups are requested to document their discussions, they can be invited to fill in one or more slides in an online slide set, which means a) that each group can see the notes posted by others as they emerge, b) a full set of documentation is immediately available to the hosts; this is also an improvement over traditional physical equivalents, though the same method could of course be used with online rapporteurs at a face-to-face meeting - a potential example of retrofitting. One advantage is that the slides can be revisited at a later stage, for whatever purpose.

Collective creativity

Gathering opinions

For hosting a discussion, it seems that only minor adjustments are generally needed. Examples: Open Space Technology (OST), Fleck's Synergy Method, Theory U. They function well with flipcharts replaced by online editable documents, and the physical whiteboard replaced by an online whiteboard.

Activating all participants

To ensure active participation, it is recommended to use an approach that triggers the free will and the leadership of the participants. For example, pass a "talking stick" around during a meeting - a common approach in face-to-face meetings such as OST. Some methods used (source CoP April):

Put an icon of a stick or a microphone on a work board (Miro, Google presentation etc). Each takes the icon and drags it to themselves.

Participants can draw a circle on paper with the attendees marked around it, and take turns in the order in which they 'sit'.

Each participant can name the next person they would like to hear from, until all have been heard: 'Throw the Ball' method (TDb).

Many exercises exist to stimulate intellectual co-creativity, and they tend to transition easily into an online context. A simple example is brainstorming. Another is the 'book sprint' method which was pioneered in an online version in an earlier project by two of the partners, with highly satisfactory results (see the two volumes edited by Biester & Mehlmann, 2020).

Creative exercises designed to take participants beyond the purely intellectual have in many cases been successfully adapted for online use - in highly creative ways. For instance,

Physical activities such as Lego online, Online spa, Conference dinners. Example: sending the participants tea, and then sharing and/or repeating online, what you did offline (tea ceremony) (7HR)

See also the special case described in Annexe 2 under the heading A special case: artifacts.

Cultural activities such as Poetree, online collage

Inward-looking activities such as Deep Listening, guided visualisations, meditation

They can be integrated into program design, as in some examples described in that chapter under the heading 'Triggers'.

Defining desired change

Defining desired change encompasses a broad range of offline activities, some of which transition well into an online environment. They build on methodologies for foresight, or working with images of desired futures. Some examples: Three Horizons, Dragon Dreaming, Enspirited Envisioning, Causal Layered Analysis.

Generally such methodologies transition well. However to the extent that they rely on physical circumstances to spark creativity, they can be challenging to implement online.

One example of the latter is the World Café method, which proved time- and energy-consuming to use online until - in the hothouse environment engendered by the COVID-19 pandemic - methods were developed to mimic the physical aspects using online tools such as Miro and Zoom.

Once the broad vision or image of a desired future is clear, methods to co-creatively fill in the action-oriented details are generally easy to use online. They may for instance include such activities as stakeholder analysis, feasibility checks, risk analysis, planning and budgeting. One example from an interview: Life Plans (11SE).

Playful approaches

Many methods making use of a playful approach were documented, across the full range of contexts and age groups.

Play and gamification

The example from experiment 18IT shows a well-known physical activity, Lego Serious Play, which uses Lego pieces rather than words for communication, successfully transferred to an online environment.

"Participants can for instance introduce themselves through Lego. Our experience is that when people show their bricks or models to each other, in 90% of the cases they start talking about emotions, feelings and stories rather than facts. Even technical questions are answered with a Lego model. People find it powerful, emotional, and they don't want to stop."

The outcome (18IT) was described by the course managers as "an empowering methodology to enable students to become protagonists of their learning process and deepen the acquired knowledge with special regard to science."

Role play

Inviting participants to step into a different role can be liberating and potentially transformative.

It might be an apparently slight shift, for instance "Become your most powerful self" - or indeed, your most 'disempowered' self. It might be taking on the role of a different person, for instance that of your customer/client (in the workplace or a charitable organization) or that of a homeless person. It might be reviewing your own autobiography through a new lens, for instance in the case of a 'gendered autobiography' (23FR).

It might be taking on the role of an animal or plant. For instance, from the May CoP:

"A diverse audience had the task to create an urban area where the needs of the different stakeholders could fit. Some wanted parking lots, others trees etc. At the same time, they had to make sure that nature still had space. They were asked to use the needs of a hedgehog as a symbol signifying the criterion of 'nature's needs'. The hedgehog had to be able to move around, hide and do whatever a hedgehog does. It became possible to discuss tradeoffs between decisions that everyone wanted to make. It helped negotiations take place in an inclusive manner." While this example came from a face-to-face experiment, it could arguably also work in an online environment, e.g. using the image of a hedgehog on a Miro board.

It might be taking the role of an inanimate object. This was not included in any of the OnTL experiments but is known in business. For instance, in manufacturing, at a trouble-shooting meeting, an engineer might be invited to take on the role of the faulty machine part.

Closure

Not specifically mentioned in the sources but well-known in offline environments is the importance of closure: when one or more participants have been invited to play a role, there should also be a point, at the end of the exercise, when they are specifically invited to de-role.

Other

Storytelling: "Arguably THE central intervention of the whole workshop was that we invited each and every participant to share a personal story about a situation that had impressed them with considerable impact, and if possible to describe the values that were reflected in the situation and in the learning they took away from it." (22DE)

Link to the database with the tools:

Current: https://www.hostingtransformation.eu/methods-search/

new (launch 21.1.22): https://dev.hosting-transformation.org/toolbox/

Software and technology

With growing experience from online conferencing in different contexts all around the world there is an increasingly rich pool of learnings and good practises (e.g. Diethart et al., 2020, Cserti, 2021). Software and tools are more powerful and user-friendly than ever before and extremely dynamic in their development. This makes it difficult to provide up-to-date recommendations on any specific software. Therefore, this chapter aims to deliver rather general guidelines and considerations for virtual events and how they can be best set up to foster transformative learning.

Before deciding upon specific software (or a combination of multiple tools) it is helpful to answer a few questions, which typically cover the type of event including the larger context and setting, the participants (target group) and the available technology. In the following, we provide a set of questions to address for each of these issues.

Event

The term "event" can be perceived in a broader sense, comprising the larger context and setting in which the online activity takes place.

In what frame is the event embedded (conference, lecture, seminar, school, workplace continued education, individual development, etc.)?

What is the dominating character of the event (presentation, workshop, discussion, experience-based learning, etc.)?

What is the objective of the event?

What are the desired learning outcomes?

Is it a single event or recurring? Short term or long term duration?

Is it an online-only event or a hybrid event?

What is the level of interaction foreseen between the facilitator and the participants and among the participants?

Is there a specific method or didactical approach foreseen?

Is there any communication between the facilitator(s) and the participants before the event? Do participants receive instructions related to content, methodology or the chosen technology in advance?

Participants

Knowledge about the participants allows for better planning with regards to their needs and expectations. By analysing the target group carefully the event can be designed in a way that it meets both the objectives of the facilitator(s) and participants' expectations.

How many participants are in the event?

Do participants have experience in online settings and with specific tools?

What is their attitude towards working online?

Is there a large age gap between participants?

Where are participants located geographically? Are they in different time-zones?

Do all or most participants share a common culture, or do they come from widely different backgrounds?

What level of education do participants have? Are all at the same level?

What fields of expertise/professions are represented?

What relation do participants have to each other? Do they know each other? Are there different levels of hierarchy present (e.g. in-house workshops)?

Are participants voluntarily participating or is participation mandatory?

Which language will be used in the event? Are there any potential language barriers?

Technology

The above questions can help to narrow down the search for the most appropriate software. Selecting software is a process that starts with defining the needs of the event and the participants, and setting them in relation to availability of functions. In the following, we list typical functions of online conferencing software as well as other popular tools.

It should be noted that hardware is not usually a limiting factor except for hybrid settings. For the latter, the anticipated level of interaction between people at location and remote participants determines the necessary equipment. Sophisticated event formats may require additional computers, microphones, loudspeakers, a conference speakerphone, a 360° camera etc.

Functions

Video-conferencing tools (e.g. Zoom, Skype, Cisco Webex, Adobe Connect, Google Meet, BigBlueButton, Jitsi, GoToMeeting, BlueJeans, Blackboard, Microsoft Teams, Wonder, Gatherly, Whereby) may have some or many of the following functions:

- Option to use browser version or as downloaded app
- Mobile version for smartphone users
- Create meeting room with custom URL
- Access for public or selected users only
- Option to open/close meeting room
- Waiting room (upon entrance into meeting room)
- Welcome message/icebreaker question
- Customizable layout (positioning of video, chat etc.)
- Video (incl. virtual background, pinning, spotlight)
- Audio
- Subtitles
- Simultaneous interpretation
- Chat (public and private)
- Notes (editable by all participants)
- Attendee list
- Raise hand or express reactions (through emoticons)
- Screen sharing (incl. audio, video, drawing)
- File-sharing (incl. support of different file types)
- Whiteboard
- Polls (in real-time and prepared in advance)
- Breakout rooms (in real-time and prepared in advance)
- Announcements from host to breakout rooms
- Participant management (assign individual rights, exclusion etc.)
- Recording
- Integration of/linkage with other tools (e.g. whiteboards, polling, document sharing)
-

- Other tools reported on by experimenters and other contributors:
- Whiteboard (e.g. Miro, Mural, Flinga, Jamboard, Padlet)
- Polling (e.g. Mentimeter, Slido, Google forms, LimeSurvey)
- File storage and document sharing (e.g. Google Drive, Google Docs, Riseup Pad, Dropbox, Tresorit)
- Communication tools (e.g. Slack, Facebook)
- Course/teaching platforms (e.g. Moodle, Teachery, Inspiro, Kialo)
- Task/project management (e.g. Trello, Agantty, Asana)
- Multi-use conference platforms (e.g. Gather.Town, HyHyve, Branch, Meetyoo, Topia)

For a good overview of available software and functions we recommend to search the internet with appropriate keywords and consult websites that compare multiple tools.

It should be noted that for any purpose there might be software that offers the best solution to cover a specific function. However, single tools increasingly contain several functions making the parallel use of different tools obsolete and coming close to reaching an All-In-One solution.

Based on the above functions further questions may be considered to decide upon one specific software or a combination of tools.

- Is one software/platform enough to cover all demands or is a combination of tools necessary?
- What is/are the best tool(s) for the given objective (video-conferencing, whiteboard, polling etc.)?
- How can several tools be combined in the most effective way (e.g. direct integration in Zoom)?
- What licence of one concrete software product is needed (free, paid version etc.)? Is it affordable?
- Is there enough support staff available to host the event (additional team members for chat, technical support, etc.)?
- Does the software offer localised versions (translation of interface into local languages/settings)?
- Is the chosen software permitted in the given setting (data protection, country restrictions, corporate policy etc.)?
- Is simultaneous interpretation or translation necessary/possible?
- Do participants use mobile devices or desktop computers? Is their hardware capable of using the chosen tool(s)?
- Can any technical problems be expected due to location of people, bandwidth etc.?

Match with users

Does the software match data protection/ethical values of the participants?

Is it compatible with the present culture of participants (focus on writing, talking, drawing, interactivity, expressing opinions/disagreements etc.)?

Is it simple and user-friendly? Does the level of technical difficulty match the digital literacy of the participants?

Do participants already have experience with the chosen tool(s)?

Are the facilitator(s) acquainted with the chosen software?

Technology in practice

Taking into account the above guiding questions should enable an informed decision in relation to software. However, theory and practice do not always align as expected. Experience shows that the interplay between software and users is a sensitive matter. The reasons why a software product (or a chosen online setup altogether) is well accepted by one group of users and declined by another can be manifold. As a rule of thumb, digital literacy of facilitators and participants, complexity of software, and applied methodology should be well balanced.

In our experiments, specially designed learning and discussion environments (Slack, Teachery) have not worked satisfactorily. Simpler solutions such as Zoom gatherings, Google Drive folders, emailing information and material, have been found more successful. (5NL, 8HR, OnTL project team). The specific reasons given range from technical problems to 'not liking the tool', 'not understanding its added value' or 'perceiving the tool as an added task and burden rather than a resource'.

It seems that many would like to have multiple functions, but few want to learn to use 'yet another' platform which often involves creating a new account as well. As an alternative, experiments have been made with setting up dedicated groups, e.g. on Facebook or in WhatsApp, platforms with the advantage of already being familiar.

To address this issue, a general recommendation is to reduce the number of tools to a minimum and keep things simple - or introduce them thoroughly. In fact, the importance of the latter might be underestimated. It implies providing introduction material, tutorial videos and solid onboarding of participants preferably with the whole group at the same time. One experimenter recommends: "Introduce the programs or apps carefully in order to avoid frustration and make participants comfortable with the technology. You can plan a separate session in advance or make a thorough introduction at the beginning of the course." (33SE)

It is essential for the facilitator(s) to know how to handle the software and to anticipate what features will be used for what purposes, firstly as part of the input to the Program Design phase and later in order to make facilitation smoother: to be able to provide adequate and brief instructions to participants at the right time.

In addition, (positive) communication about the software highlighting its advantages for the given context can contribute to its acceptance. E.g. Slack might be better accepted if it is the single place of communication rather than one option among several.

Finally, even if the online setting requires technology, it is not necessarily the most important factor. "Facilitation is the first layer. Technology is the second or third layer." (8HR)

PART 3. MOVING ON

About our Community of Practice

The original plan was to invite each experimenter to answer in an online document a few questions about their intentions, and later about their actual experience. In practice, much of the documentation was done by project team members who interviewed the experimenters.

Following the success of the introductory events, the project team realized the power of interaction between experimenters (and others), and decided to introduce monthly events as a complement to documenting individual experiments: in other words, to set up an online forum as a Community of Practice.

At the final CoP event in November 2021, participants were clearly in favour of continuing to meet in this way. The partners have committed to hosting meetings for at least the first six months of 2022 and will examine possibilities to continue thereafter.

The attraction of the spoken word

Experiments in the project fell into the use of the meetings rather than the report documents. Indeed, facilitators reported repeatedly about failed attempts at online fora where writing and reading were the main means of communication.

Slack is a platform used in several experiments. In one instance, a CoP was formed successfully on this platform. The facilitator credits it to an initial effort and involvement that was of unsustainable proportions. In other experiments, even with much work and engagement from the facilitator, Slack never really worked as hoped. (HR8, 5NL, OnTL team)

This experience led to questioning the role of the written word in society. Is it possible that there is an ongoing civilizational shift from writing (and even reading long texts) to the audiovisual and colloquial? Such a shift can be discerned with the advent of almost universal access to digital information, possibly accelerated through the abrupt increase in online activities occasioned by the COVID-19 pandemic. For instance, we as citizens are increasingly being offered not 'All the news that's fit to print', as previously claimed, but 'All the news that's supported by audiovisual materials'.

If this is in fact a strong and ongoing trend, it has serious implications for the design and implementation of, for instance, educational programs - especially online. And indeed for the potential fate of this report.

Online fora: their challenges and life cycles

Potential benefits

Why might an online forum be of benefit?

To know where the participants of a program are and have access to what is happening to them between training days/ peer learning days, in order to cater for their needs during the next gathering. Conclusion: Not an important reason for a CoP.

Because the participants are generally "under-connected" with peers = they talk but there is no deep exchange.

To build a community of learners, especially in a community that teaches but forgets to be learners.

To create a self-sufficient learning community that can continue developing after the end of a program

(5NL, 8HR)

Forms

The simplest form, and in some ways the most effective for deep personal engagement, is to have an online community without a particular platform (e.g. Slack), that just meets and shares where they are, with no designated content. (59HR, next iteration of 5NL).

A forum can be combined with a repository, but that is not mandatory for participation in a CoP (13SE, OnTL project).

Participation in an online community can be made mandatory within a given program, by designating the task of building the community, e.g. on Slack, as a part of the program to which everyone is expected to contribute.

'Swarming'

Building on earlier experience, the partners considered the question of how to attract participants to take part in an ongoing program such as a Community of Practice - or indeed, in a single event. In other words, how to create a 'swarming' effect.

A hypothesis built on a few successful instances in the past was that the power of attraction is great when two elements are combined in the invitation:

A statement with visionary qualities;
one that appears to 'make the impossible possible'

A practical, down-to-earth focus

This hypothesis was tested when formulating

invitations to the OnTL CoP, and must be said

to have been highly successful. It would

certainly repay further investigation.

What we still want to know

Identified areas for further research and development.

Transformative learning as a general trajectory

Some questions of a general nature arise from the models of transformative learning presented in Figures 1 and 2 above:

How do the states achieved by an individual through repeated transformative learning processes, illustrated in Figure 1, relate to sustainable development? The emerging ‚Inner Development Goals' (IDGs) offer a rich field for further research and experimentation in the light of OnTL learnings.

The model in Figure 1 seems to offer the possibility of moving towards a broader understanding of transformative learning. What theories and models can shed new light on the potential directions of such broadening?

What are the ethical implications of a facilitator's competence? For instance, a facilitator may inadvertently trigger edge-emotions (Figure 2) which may lead to automatic defence reactions of a person's autonomous nervous system and to negative effects unless handled with care.

What other processes and emotions trigger transformative learning, and how can the safe space needed for transformation be held, in particular online?

A pedagogical shift

All the evidence points toward an ongoing shift in teaching philosophy: a shift in emphasis from teaching to enabling learning. This in turn points to a need and an opportunity for new approaches to and elements in the professional development of educators. Some preliminary conclusions are presented as guidelines in the report "Online Alchemy: how to boost online transformative learning". Much more remains to be 'mined' from the OnTL project.

One emerging thread crosses sectoral boundaries: the second example in Annexe 2 describes (5NL) a professional development program developed and delivered to HE educators by a private enterprise building on an NGO-developed program.

Another thread concerns content, as exemplified in the preceding section 'Transformative learning as a general trajectory', with all this implies of potential ethical dilemmas in requiring of educators what we are reluctant to require of participants, i.e. engagement on the path of personal transformation. We see this as a rich field for further exploration.

Efforts in this direction are also being made within the framework of Education for Sustainable Development (ESD). However, transformative learning should not be subsumed under ESD, nor should ESD be subsumed under transformative learning; further exploration is warranted as well in the relation between the two, especially now that the global debate about ESD clearly calls for transformative learning in its vision of how humanity can engage in transformation (UNESCO, 2021).

Ongoing learning and dialogue

A civilization shift?

Reading and writing vs audio-visual: a civilization shift taking place? There could be many useful avenues of enquiry, including for instance how to upgrade audio aspects in the face of the overwhelming nature of the visual.

Making friends with the technology

A survey of students in one experiment showed a wide divergence of responses:

„No exciting discoveries, but rather the impression that it is very difficult at this stage to generalise about advantages and inconveniences of online training settings. Different participants can experience remote self-reflection exercises quite differently. Feeling more or less at ease with ICT in general can potentially make a difference (a hypothesis supported by the relative youth of the five respondents who considered that the online format was preferable). And maybe we are all still in an imposed accelerated learning process regarding communicating in remote settings, taking time to overcome our original scepticism?" 23FR

Attracting and engaging participation

Following the observations reported under 'Swarming' above, a number of questions present themselves, from the behavioural to the technical. For instance

What determines who responds to an invitation and who doesn't?

Are there any discussion platforms (fora) that are low-threshold/high-function AND affordable?

An associated question is that of embodiment: how can online presence be designed to make the best use of body language and other senses? For instance, use of hand signals was mentioned in 65DE.

Assessment and evaluation of transformative learning

General questions

Assessment of transformative learning events requires far more reflection and research. What we need to grasp better is (a) what the role of assessment is in (online and face-to-face) transformative learning settings in general, (b) what the role of assessment is in specific educational contexts, and (c) how to implement assessment in each context so that it really serves the desired purpose.

First and foremost, however, one should ask: is it a valid objective to define transformative learning as a learning outcome? How does this influence assessment and evaluation?

Tentative conclusions:

Transformative learning can be a desirable outcome in many types of education...

...but does not become an explicit 'learning objective' except in programs specifically designed and announced for that purpose.

It should thus not be used in evaluation of the success of the educational event or the progress of participants…

...but could be evoked in self-assessment schemes for participants.

A further area of where more experimentation and research would be welcome are the four key OnTL metrics, which only very few experimenters tried to assess:

Enhanced self-knowledge

Enhanced social competence

Enhanced action competence

Enhanced openness to/tolerance for uncertainty

What do these metrics imply and how can they be usefully assessed, especially in online settings? Are they adequate or do they need to be reconsidered?

Assessment and evaluation questions emerging directly from the experiments

The following questions about assessment and evaluation of (online) transformative learning remain open or have not yet found satisfying answers:

Is it always necessary for facilitators/educators to assess learning or can individual self-assessment that is not shared (with the facilitator or the other learners) be sufficient?

How can assessment and evaluation be combined with the obligation to attribute marks in HE or certification settings, without compromising the transformative dimension?

In the case of online peer-assessment or collective assessment, how can we assure that the virtual space created is safe enough to enable every involved person to be constructive and sincere?

Is transformation triggered by (online) transformative learning always per se positive for the learner?

How do we deal with eco-anxiety concerning sustainable development when it surfaces in assessment and evaluation processes, especially in an online setting, where it may be harder to detect and more difficult to deliver an appropriate reaction (e.g. referral to professional psychological assistance)?

How do we assess behaviour change resulting from transformative learning without falling prey to prescriptive attitudes?

Role of expectations

Willingness, expectations, and motivation: are they different offline and online? Where is the balance of responsibility for the learning process between facilitator and participant?

Do the expectations of participants influence their openness to transformative learning?

If so, can participants be helped, through preparatory work, to set their expectations in ways that will ease the transformation process?

Arousing curiosity

From 18IT, using Lego as a basis for storytelling and role play:

"Preparations are important. Participants either receive (physical) materials in advance, or they get an email with instructions on how to prepare. If they don't have Lego Serious Play, they can go for other Lego or Duplo or just bring a box of random things. So the journey begins with the preparation, with collecting the things. They are already curious about what will happen when they come into the room."

Contriving a transition into the learning environment

"There is something missing if you don't physically go to a meeting. The way to the event is part of getting attuned, feeling one's expectations, raising anticipation and strengthening the purpose/ willingness to go to this event. Whereas if you join an online meeting you might have just before answered some emails and been involved in a totally different topic. The transition from one to another topic / meeting is missing then." A question to further explore might be how to find adequate substitutes for the journey to a workshop in order to host the transition (65DE).

Choice of strategy

When is it appropriate to use which strategy?

- Online
- Face-to-face
- Blended
- Hybrid
- Self-study

The whole question of whether a self-study program can enable transformative learning, and if so, under what circumstances, is still open to research.

Back to the challenges

All of the initially-formulated challenges could repay further experimentation and development, but in particular no. 6 was only tentatively addressed while a further two, nos. 3 and 8, were not part of the current round of experiments. The questions associated with Challenge 2 also beg for further exploration.

Challenge 2. What to do differently, if designing for online

This is essentially about 'thinking the unthinkable'. Can we step back from our own experience as facilitators of TL - sufficiently far back to see not what we do/have always done, but to see the human unfolding that enchants us each time we see it emerge?

From that perspective we could make the leap of imagination to a world where that unfolding is uniquely nourished and supported by and through programs designed specifically to take advantage of an online environment.

One example might be the question raised by an experimenter who wonders how AR (augmented reality) can be used. The question concerned using AR specifically to connect participants (15SE), which could be just another way of imitating online what otherwise takes place in a room. It could, however, have much wider implications; one suggestion was to develop an AR tool to simulate a conflict situation and ways of handling it (CoP November).

Challenge 3. Raising awareness of the potential

It was widely felt (initial webinars) that educators, not least in HE, are unaware of the potential for creating successful learning environments online, being perhaps often more aware of the risks to themselves as educators. The question arises: how may many more educators be enabled to undertake this particular step of transformative learning for themselves? More specifically:

How best to counter a culture that sees online work as a necessary evil rather than an opportunity?

How to enable practitioners to create their own experience of transformative learning through online support?

More generally, it is postulated that all new use of digital technologies (Rosenbaum, 2021), and indeed of all 'social action', including education (Merton, 1936) has unanticipated consequences. What are we failing to anticipate?

Another aspect of this question is raising awareness of the potential of transformative learning, whether online or offline. This is the overarching dilemma floating above and before the decision about which form it subsequently takes. The contributors in all sectors of the project expressed a struggle with bridging the difference between what they perceive people want and what they need. This is not related only to transformative learning, but to every learning setting: how to help the students see the value of what is learnt or taught. (7HR, 20DE, 14CH)

Challenge 6. Working with disadvantaged groups online

One experimenter proposed to work online with a disempowered general public (in Belarus) in order to foster hope and critical thinking, and raise action competence to deal with multiple societal crises. Finally, the project was taken in a different direction but the prior discussions revealed the potential of working online, not least in a situation where face-to-face meetings are forbidden or otherwise inaccessible - in itself a way of disempowering the population (Rosenbaum, 2021).

The topic will be further explored i.a. in another program in which several of the project partners are engaged, Hosting Empowerment.

Questions of self-perception and territoriality

In the chapter on facilitation, under the heading Mobility and physical comfort, we looked at some of the differences between online and offline situations. It would be interesting, and possibly fruitful, to explore how activations of and constrictions on our free will, expressed as physical autonomy and mobility, affect learning and transformative processes. (47CH, 12SE)

Experience with face-to-face courses in both higher education and the workplace seems to indicate that the physical space 'owned' by each participant is experienced as compelling: even when participants are invited to stand up and move around, and even in the face of physical difficulties such as back pain, participants failed to respond until a formal break was called. This should hypothetically be much easier to amend in an online situation since each participant 'owns' a much larger and more flexible territory.

A possibly related question concerns self-perception. Through frequent exposure to online platforms such as Zoom, many people have - for the first time in human history - been able to observe themselves in action as part of a group or community. It is unclear how this may in the long run influence the psyche, in particular in terms of self-knowledge and self perception. (CoP x)

Post-pandemic trends

The potential and risks of hybrid events

Are hybrid events the future? Some think not; that the effort involved in creating a successful hybrid event outweighs the benefits. If it takes twice as much effort, goes the rationale, then why not organize two separate events, and avoid the inherent difficulties of coordinating the online and offline groups?

Others point to the significant differences between different types of hybrids, ranging from 'most online, a few present physically' to 'most in the same physical location, a few online'. The latter could be seen as an extension of the well-established practice of inviting some keynote speakers and panellists to join a physical conference via a video link.

Experience with some international conferences with several hundred participants, of whom perhaps half online, has been reported as highly successful e.g. by partner COPERNICUS Alliance. The organizers also underline the need for extremely careful preparations, including pre-conference technical introduction sessions for speakers and workshop leaders; but find that the effort was rewarded with an additional richness of perspectives brought by far-flung participants who would have had no possibility to be physically present.

At the moment it seems highly likely that this practice will become increasingly popular. Or will it be overtaken by a reluctance to travel, for health or environmental reasons, leading gradually to fully online events? We heard at CoP in October: "Anything that can go digital, will."

Shifting roles for Higher Education?

In a world where higher education is undergoing many changes, the abrupt transition to online education seems to have accentuated some of the existing trends. For instance, the divides between

On the one hand, HE institutions enthusiastically embracing online education, from MOOCs to transition of existing programs to development of new initiatives; and on the other those who saw the pandemic-induced transition as a necessary evil and are retreating as fast as they can.

On the one hand, HEIs building on the assumption that sustainable development of necessity builds on personal transformation, and on the other those who see the role of HE as knowledge transfer and any focus on personal development as potentially threatening the personal integrity of the students.

On the one hand, HEIs focused on transferring knowledge/facts grounded in academic research and the scientific tradition, and on the other those building on the assumption that sustainable development challenges the context of scientific inquiry and calls for a radical re-imagination.

Our understanding [of the world] is progressing neither linearly nor spirally. Instead, it is unfurling, unfolding. Education in this context is continually contested and fractally ramifying sensemaking.

- Benjamin Taylor, speaking at Gilbfest 2021

The demands of sustainable development and the concomitant need for personal and collective transformative learning may, in other words, provoke a significant shift in the perceived and actual role of HEIs in society.

Balancing safety and challenge

We have multiple roles as TL practitioners. The one hand facilitates a safe space and the other needs to bring the participant closer to the growing edge where transformation can take place. How do we create a space for uncomfortable provocation in a consensual way? What is this dance between providing safe space, and poking and asking uncomfortable questions?

When we turn off the camera we can have a safer space to do certain things. What does this semi private space allow? Is the threshold lower for some things? What's the potential?

Can we ease people into certain experiences they otherwise wouldn't take on? The idea of continually having to ask for permission or to give people a sense of agency, how do we do that at the same time as exposing them to these collective processes, with a beginning and an end? We want them to have a certain willingness to try and to be uncomfortable. (CoP April, 25US)

Where are the limits of the online facilitation of TL?

Going back offline

A transition 'back' to offline working can be a retreat; or, it can be seen as an opportunity to combine the best of both worlds.

"Online learning is so much more delicate. We can then use it for face to face practice. As we learn good learning practices online, they can be transferred to the offline environment." (April CoP)

The pandemic-induced online experience has been a game changer for our educators. When going back offline, there is great potential for the offline teaching to be enhanced by the online learnings. This is reported to be easily incorporated in the workplace education sector (33SE) but less so in higher education.

ANNEXE 1. Summary of Experiments and Interviews

The project counts 22 cases, called experiments, carried out in 10 countries. They were unevenly distributed across the three sectors: two were carried out in the higher education sector, five in the workplace education sector and 15 in the non formal adult education sector.

Several cases explored more than one arena, totaling 31 areas of investigation. Six experiments were not reported back on, resulting in the input from 24 arenas as follows:

Program design 7
Facilitation 7
Method 4
Material 2
Community of Practice 2
Assessment/evaluation 1
Software 1

In addition to the experiments, a spontaneous series of interviews, or "Zoom-coffees" were carried out with educators from all three sectors. Because the interviews were not part of the project plan, the objectives of the interviews were not systematic. The purposes of the talks varied from providing more information about the project for a practitioner or helping to formulate an experiment, to following up on an interesting thread picked up from an informal conversation. Regardless of what sparked the meeting, without exception they all turned out to be highly informative and valuable as input to the project.

The major contributors (primarily experimenters and interviewees) are:

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ANNEXE 2.
Some case studies

Three different aspects of program design are documented here as examples of the scope of online transformative learning.

A single multinational, multilingual hybrid event

From the UNECE/OSCE project "Strengthening national and regional capacities and co-operation on Strategic Environmental Assessment (SEA) in Central Asia, including as a response to climate change."

This event was the last in a series of events in each country, where the initial events had proved less effective (48CH). Originally planned as an offline event with 25 participants, it was expanded to a hybrid version with 55 participants and a facilitation team of 9, plus interpreters, in six different countries.

The format: A four-hour workshop for five national teams (with number of participants varying from 3 to 20, intended to help them over a threshold from studies and plans to action. Four of the national teams gathered physically in one location, whereas the fifth met online. The workshop central team was in a sixth country.

Outline program:

Session 1

Presentations by introductory speakers

Each national team presents summary of current position

Workshop leader presents synthesis of major challenges/barriers to action

Session 2

Experts present outline action plans (common for all countries, highlighting specific national elements)

Group work in each country focussing on identification of key challenges and prioritized actions; one person from the central team is present online in each national group, supporting the local facilitator

Session 3

Plenary summary outlining next steps for each country and for the group of countries

The experiment: Fine-tuning program design and facilitation after disappointing earlier experiences.

The challenge: Moving from knowledge transfer to active participation and increased action competence.

Outcome: Clearly more satisfactory than previously. Much more active participation yielding realistic and clearly anchored action plans.

Learnings concerned the crucial importance of

- Detailed planning and allocation of responsibilities
- Careful consideration of timing, including breaks and how they are organized locally
- Differentiated approach to each country when it comes to elements of the action

plans and outcomes of the feasibility studies

- Establishing trust, safe space, and open communication between team members
- Enabling environment for communication between countries.
- Platform Zoom, use of simultaneous interpretation

A series of events delivered as one program

From the work of Neža Krek, Netherlands, concerning the program design of a course for educators at Wageningen University (5NL, nezakrek.com)

The program design:

4 separate training days, focusing on content

2 weeks after each training day, there is a peer coaching session (action oriented)

The participants bring their own workshop design and get feedback before trying them out for real in their online classrooms.

Then Mastermind sessions, ending with a celebration session to anchor and celebrate

On top of this, an online community on Slack

Resources and information about the program on Teachery

Modified program design for the next iteration of the course (after having tried the above):

4 training days (4 h) facilitating the participants' own transformation processes as well as training, meaning providing content. After each training day worksheets are sent out. They feed into these particular participants' habits of working with checklists. The worksheets contain questions that will take them deeper. The issues are brought to the implementation sessions.

4 Implementation days (1,5 h) between the training days, when we go deeper into matters that are important for the participants, as well as sharing aha- and "bragging moments"

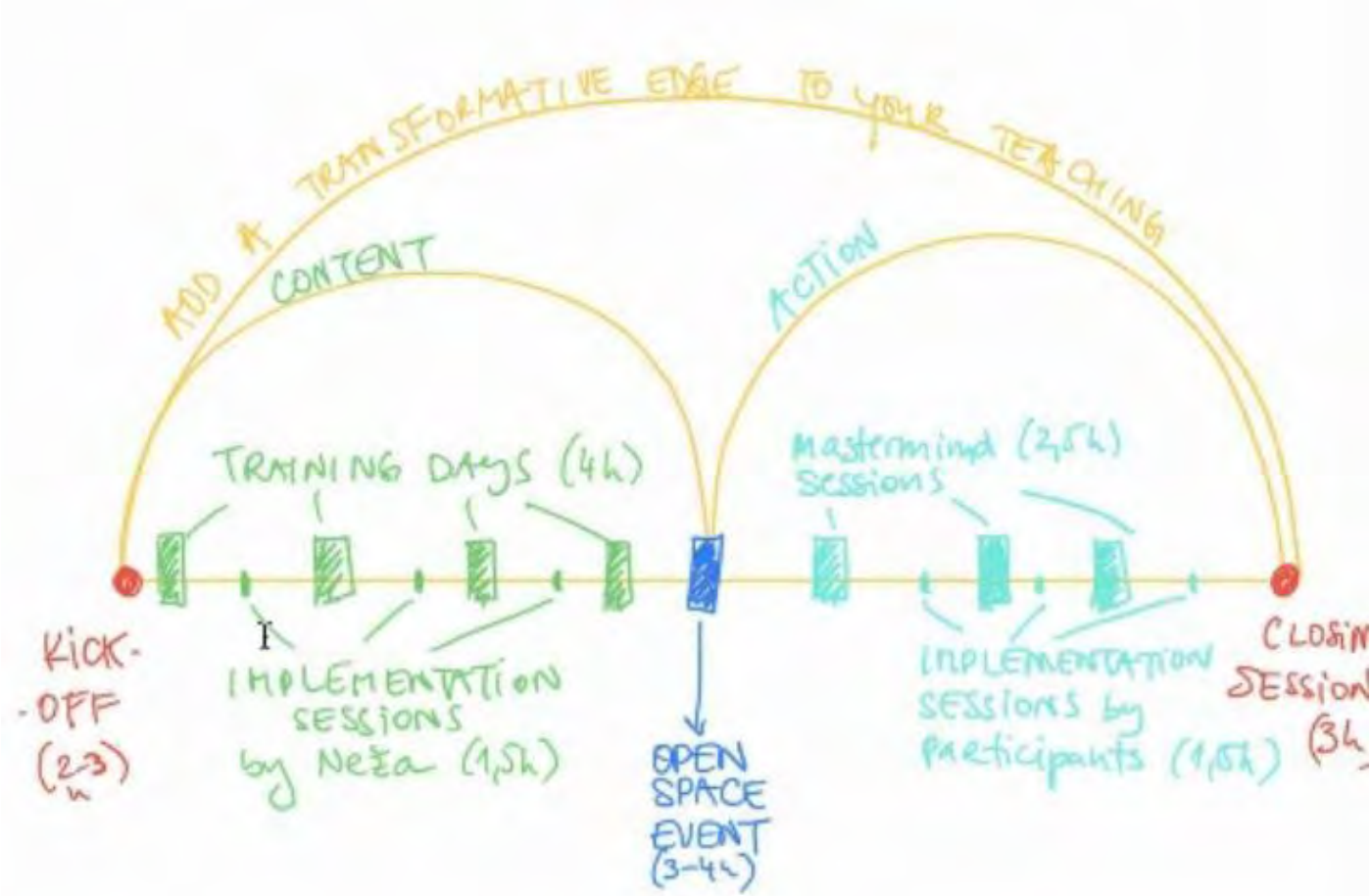
After the training and implementation days, halfway through the course: an Open Space event, where participants come up with topics they feel strongly about: e.g. assessment or resistance. During the event they create groups around the topics that then become implementation sessions by participants, facilitated by themselves. After the Open Space, four mastermind sessions follow. After each one there is an implementation session that stems from the Open Space event.

It ends with a closing session (celebration)

Instead of an online community, the time spent online together is increased, that is, the number of implementation and mastermind sessions.

Preparation of the participants and feedback: Before each session, participants are informed about what is going to happen. Each session is followed up by emails with links to resources and documentation.

No embedding into a learning environment (Teachery). Not many people visited it. Instead, Google Drive is used for just one folder with Google docs and simple lists with links and resources.



Proposed program flow

A special case: artifacts

Interview with Stuart Candy, USA, concerning the creation of physical artifacts 'from the future', (69US).

UNDP came to me with a challenge re their annual innovation event: how might experiential futures practice be brought to bear for the event's Opening Session?

Due to Covid everything was to be online. The kickoff was planned as a panel conversation about global development's futures, live in video chat, with the head of UNDP and invited speakers around the world.

I proposed to interview all the panelists in advance, one on one, then design and send an artifact from the future to each, to arrive at their homes by the week before the event. After more than a year on Zoom, thanks to the pandemic, my hope was to breathe some dimensionality into our talking-head squares.

Each artifact would draw inspiration from ideas about the future shared with me by the speaker in our pre-conversation, and would try to picture a far-reaching shift in relationships and power, manifested institutionally, affecting whatever we mean when we say 'development'.

How it went

The interviews went as planned, and the artifacts were designed and shipped in good time. You can see them here, as part of the blog from which this note is derived.

When the day of the panel itself arrived, I had the pleasure of moderating the conversation with Luciana Mermet, UNDP Resident Representative in Bolivia. The speakers didn't know yet what the others had received, so we had everyone use their future artifact as a portal through which to introduce themselves and their ideas to the conversation.

It's a minor miracle how it all came together. The future artifacts arrived in multiple locations around the world, our Internet connections held up, and almost 700 people joined in to listen, chat and ask questions. The 90-minute Opening Session is available to watch in its entirety here.

Assessment

This was an encouraging way for a new experiential futures format to add both a third dimension (physicality) and a fourth (direct engagement with time) to a 2D medium. I half-jokingly dubbed the format a ‚4D panel', and it would certainly work as a replicable structure.

The event design built upon the Ethnographic Experiential Futures toolkit, described here

ANNEXE 3. Who we are

The partners

Legacy17 (L17) is a not-for-profit cooperative association registered in Stockholm, with ca 30 global members/co-owners. Its focus is on ‚people processes' in support of sustainable development, at all levels. Members of the association are leading-edge practitioners in related fields, for instance education, leadership, stakeholder engagement, collaborative planning and design, lifestyle and behaviour change, project management, empowerment, coaching, facilitation. https://legacy17.org/

Legacy17 is built upon a strong commitment to empowerment, transformative learning, and co-creation through inclusive collaboration. The latter is particularly relevant to ‚communities of practice', CoP. Over the past two years experiments with a series of regular, monthly events has been shown to hold the potential to transform a group into a community, and has noticeably influenced many of us on the professional level, broadening our perspectives on sustainability and engaging deep human capacities in new ways.

The COPERNICUS Alliance (CA) is a European network of universities and colleges committed to transformative learning and change for sustainable development. It is registered in Germany and is one of the most influential Higher Education for Sustainable Development (HESD) networks in Europe. Working closely with members in more than a dozen countries and in partnership with strategic stakeholders at the European and global levels, the CA identifies challenges in higher education for sustainable development and spearheads development of processes, tools, and knowledge to address these challenges from a whole-institution perspective. The CA provides a platform for its members and organizes and supports events where its current and future members can share resources and co-develop innovative initiatives. https://www.copernicus-alliance.org/

The COPERNICUS Alliance is involved in fostering Education for Sustainable Development (ESD) in research, pedagogical practice, and policy. Its members have contributed to moving the ESD agenda from an initial understanding of education about sustainability to education for sustainability and now to education as sustainability. In this last, holistic understanding of ESD, transformative learning is key and requires a whole-university approach. In this vision of higher education, disciplinary and sectoral boundaries are acknowledged but at the same time overcome wherever they limit transformative progress, and the objectivity of science is not dissociated from a value orientation and emotions.

Isoropia is a private Croatian company providing support in personal, organizational and community transformations by coaching, training, facilitation, consulting, and participating in projects which meet the deepest desires of groups of people. The mission is to help people, organizations and communities to inquire into fundamental questions of their purpose and then support them in living authentically. The prime focus is on adult education with a focus on facilitating transformative learning of adults, online and offline. The principles which guide every action is the belief in the potential of all individuals and groups, and people's desire to live an authentic life; participatory processes and collaboration. https://www.isoropia.hr/en/home/

Isoropia became a member of the International Partnership for Transformative Learning in 2013, and since then has participated in various local, national and European projects that ignite and support people and communities' transformations towards authenticity and whole system engagement.

Visionautik Akademie is a German adult education institution that aims to foster social innovation towards a more humane, sustainable, enjoyable and healthier society for all. Its main approach is to facilitate and support visionary thinking as well as the implementation of visionary projects, social innovations and personal transformation. It was founded in 2008 and has since run many activities that empowered learners to actively shape their future.

Visionautik partners with organizations across Europe to give workshops, coaching and consultation that help its learners not only to shape visions towards a better society but also to take necessary steps for their realization. It also supports long term participation processes for socially disadvantaged areas and groups, empowering participants to create and implement ideas for a better future in their neighbourhood. https://www.hostingtransformation.eu/partner/visionautik-akademie-3/

Visionautik Academy helped initiate the Transformation Hosts International movement 10 years ago. The focus on online work over the last 2 years has taken this community of practice to a new level. Internationality is no longer a hurdle. We were surprised at how much even sitting in front of a screen can deeply move and connect us emotionally. We are now using the tailwind from this experience to make Transformation Hosts International more visible and effective. Let's host transformation - together.

The contributors

The partners extend heartfelt thanks to all the experimenters and other practitioners who volunteered their time and expertise to produce this rich compendium of experience.

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ANNEXE 4. Further reading

This section represents the results of the desk research as well as contributions from experimenters and Community of Practice participants.

To view the list, please see the Legacy17 web site. The items in the list can be filtered using any one of the following tags:

arena1 program design

arena2 facilitation

arena3 assessment & evaluation

arena4 methods & materials

arena5 software

self-knowledge

social competence

action competence

Higher Education

workplace

transformation
hosts international
publications