

# THE POTENTIAL OF 'DIDACTIC MIXING' IN LIFELONG LEARNING

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## ABSTRACT

In the expansion of Lifelong Learning (LLL) at Higher Education Institutes (HEIs), we suggest that our task, as teachers, is to develop democratic, experiential, emancipatory and imaginative initiatives. In line with this aim, this paper suggests an approach to lifelong learning in which students and practitioners learn *from* and *with* each other. Key to our argument is that this 'didactic mixing' occurs at three levels: 1) the *mixing of practitioners and students* from different backgrounds, 2) the *mixing of different ways of knowing*, in particular, combining scientific and professional expertise with experiential knowledge, and 3) the *mixing of different settings* both on and off campus. Drawing on our experiences, we present teacher reflections on two courses that we organized in parallel in the winter of 2022: i.) Techniques of Futuring, in which master's students and societal practitioners engaged with the contentious issue of the future of the rural Netherlands, and ii) the Coalition of Hope, in which master's students and societal practitioners reflected on their personal and emotional experiences in engaging with societal change for sustainable futures. In reflecting on our design choices, we conclude that mixing in participants, ways of knowing, and settings allows teachers to craft their courses to their pedagogical foundations by continuously asking *with whom, how, and where* and *why* one learns. Furthermore, we propose that no single 'mix' counts as unambiguous best practice, but rather hope that this paper inspires teachers and others in the LLL community to reflect and act upon the setup of the learning experience and explore the agency they could have in didactic mixing.

## INTRODUCTION

Under the umbrella of LLL, higher education institutes are expanding their programs, pedagogies, and institutional configurations to facilitate the education of professional learners. Notwithstanding the merits of these efforts, we care to stress, in line with

longstanding criticisms (e.g., Biesta, 2006), the importance of avoiding a too instrumental, labour-market-driven approach to LLL. Accordingly, we suggest that the task upon us as educators is to develop a rich tapestry of democratic, experiential, emancipatory and imaginative educational initiatives.

In this paper, we will share and reflect upon two courses that were driven by this task. Although there was significant interaction between the two courses and their teachers, the design of their didactic set-ups differed greatly. Hence, in support of educators who might share our ambition, we introduce the idea of 'didactic mixing,' which we realized was one of our key practices as teachers. We subdivide didactic mixing into three dimensions: (1) mixing of *participants*, for instance, in backgrounds and age groups, (2) mixing of *ways of knowing*, for instance, cognitive and experiential knowing and combining designer and expert knowledge, and (3) mixing of *settings*, making explicit readaptations of dramaturgies, reconfiguring, for instance, well-known settings like classrooms, theatres, and exhibitions.

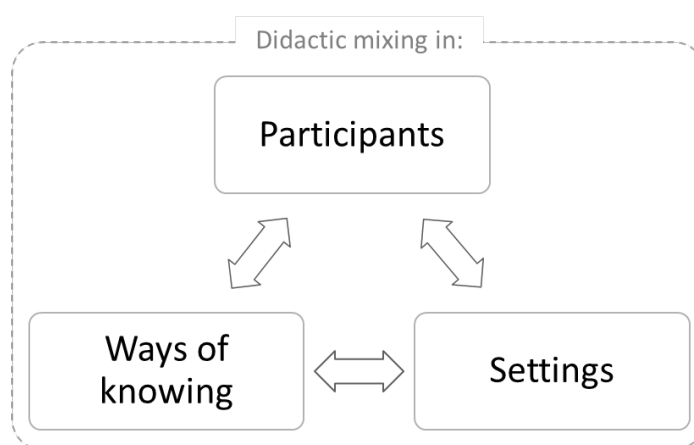


Figure 1: Schematic representation of Didactic Mixing: a process of mixing in participants, ways of knowing and settings

The three dimensions of didactic mixing are grounded in different literatures. To start, didactic mixing as a practice can lead to learning opportunities if a mix of participants, settings or ways of knowing creates a 'boundary' for the learner: a space or moment of sociocultural discontinuity in action or interaction for the learner, which can incite learning processes of reflection, identification, cooperation or transformation (Akkerman and Bakker, 2011). For example, a sociocultural discontinuity can arise when you invite a student into an unfamiliar space outside the university, or, when you bring them in touch with participants who work or think in very different ways. The mixing of participants, in particular, can lead to participant compositions of inter- or transdisciplinarity, which can be suitable in the emerging strand of transdisciplinary education that engages with wicked problems (e.g., Bernstein, 2015). Second, to intend to mix *various ways of knowing* is part of the same transdisciplinary strand, but can also be regarded as part of the search for a holistic learning theory (Taylor, 1998), one that welcomes – at the very least – affect into learning, but might also involve the search for 'whole-person-learning' (Yorks and Kasl, 2002). This concept of 'whole-person-learning' draws from, for instance, Heron's theory (1992) that emphasizes an interdependence of experiential, presentational, propositional and practical ways of knowing. Lastly, mixing in settings in education finds useful parallels with research that emphasizes the dramaturgical dimension of politics and education: what matters is not only what is being said, but also in what context (e.g., Hajer, 2009). For the purposes of the current study, this implies a need for careful attention to shaping the setting of education, ranging from an excursion to a traditional classroom setting to carefully connecting the sequence of staged events a learning journey is comprised of (Hajer and Pelzer, 2018; cf. Dewey, 1938).

The purpose of this paper is to illustrate our practice of didactic mixing, and to explore how this approach might offer help for other teachers to design education, both before and while teaching courses. Whereas this paper is written for an audience in the LLL community, it can also be useful for other teachers in, for instance, education for sustainable development. The remainder of this paper consists of a description of (i) our research approach, followed by (ii) a course description and teacher reflection on each course. We end the paper (iii) with a discussion of the two courses and a reflection on the potential future of 'didactic mixing' in LLL.

## RESEARCH APPROACH

### Research and empirical context

Both courses discussed in this paper were initiated by the Urban Futures Studio, a transdisciplinary research group at Utrecht University (the Netherlands), which focuses on enabling alternative sustainable and democratic futures. The first course, Techniques of Futuring (ToF), was developed in 2015 (Hoffman et al., 2021) and coined the idea of a 'mixed classroom' for a setup in which master's students and practitioners learn from and with one another. Each year, the course focuses on 'futuring' – the collective active engagement with the future (Hoffman et al., 2021) in light of a thorny issue in Dutch policymaking, which is identified in dialogue with national policymakers. The course tries to create an alternative dramaturgy for engaging with these issues in a generative and imaginative way (Hajer and Pelzer, 2018), which usually culminates in an immersive public event. To this end, it connects scientific and professional expertise with experiential and designerly ways of knowing. Over the years, the teachers have collaborated with theatre makers, designers and others to make this possible – for example, by creating and hosting a 'museum of the future' (Hoffman et al., 2021).

The mixed classroom course format was granted an educational innovation award that funded the Academy of Hope action research project, which explores novel pedagogical avenues for the universities' engagement with the planetary crisis. The second course, the Coalition of Hope (CoH), is a new course initiated by the Academy of Hope in 2022. The course builds on the lessons of ToF, but the teachers deliberately chose to start from a diverging pedagogical foundation, the results of which we will detail below.

### Action research and reflective practice

The two courses became a part of the work of the Academy of Hope research project, which is set up as action research (Herr & Anderson, 2005; Lewin, 1946). More specifically, our methods draw inspiration from Schön's work on reflective practice: we see our task as teachers as continuous 'conversations with the situation' (Schön, 1983, 1992). We regard the two courses in this paper as two parallel 'action' phases in our action research cycles, after and during which we gathered data and reflected. This informs our future steps and enhances our understanding of our educational practice.

We gathered the following data on our courses: (i) we analysed and collected participants' individual reflection assignments, group reflection sessions and the formal course evaluation forms; (ii) we collected our observations and insights on informal conversations during the courses, documented in the notes of the lead author; (iii) the teachers in the CoH and a student-assistant conducted autoethnographic journaling; (iv) the lead author conducted formal interviews with all teachers involved at the start of the courses, and recorded the teacher-reflection sessions of both courses.

Both during and after the courses, we held meetings to reflect on the courses, plan next steps, and develop abstractions. During one of the ex-post reflective sessions, we identified the three levels of didactic mixing that we used in designing the courses. To further explore this conception and to get a deeper understanding of a teacher's ability to work with didactic mixing, we chose to focus in this paper on the teacher's perspective. We do so by writing up joint teacher reflections on the didactic mixing that took place in each course.

## COURSE 1: TECHNIQUES OF FUTURING

### Course description

From November '22 to January '23, the participants of the ToF course explored how utopian thinking (e.g., Sargent, 1994; Levitas, 2013) may help overcome the political deadlocks around the future of the Dutch countryside. The participants included 16 master's students from different disciplines and 26 societal practitioners, including policymakers, activists, artists and farmers. Participants were selected to create a diverse group of backgrounds, and through their motivation letters we checked for their willingness to learn and general interest in the topic. For master's students, this is an elective course, and any student at the Utrecht University can apply. For practitioners, this course is open to anyone interested. Most practitioners were attracted by the topic of 'rural utopias,' and/or our creative approaches to futuring. Importantly, half of the practitioners were civil servants from Dutch governmental ministries, since the ToF course has a longstanding relationship with these ministries. The costs for their participation varied per sector and ability to pay.

In five 'mixed' meetings, students and practitioners brainstormed together and attended guest lectures. There, they learned about the political deadlock, imagining alternatives, and the power of dramaturgical interventions. In addition, the students engaged in fourteen separate sessions where they co-created a final event. This event welcomed around 100 visitors into an immersive experience staged in 2027 in the community centre of a fictional village in the rural Netherlands (see figure 2). Through this event, the students and the practitioners of the course explored how engagement with the future can be organized in an affective, imaginative, and engaging way. The participants quickly initiated a reunion after the event, which was staged as a visit to the ecological farm of one of the practitioners and was used to reflect on the experiences during the course.



Figure 2: Participants of the Techniques of Futuring course at their final event: 'Rural Utopias'.

## Teacher reflections

In this 7th edition of the ToF course, we tinkered with the didactic mixes. With the help of two theatre makers, we aimed to take the theatre aspect to a new level with respect to previous editions, working towards a comprehensive immersive theatrical experience. Furthermore, this year we tried to advance the level of co-creation of the final event between the teaching faculty and the participants. Through combining utopian thinking with participatory and immersive theatre, we tried to 're-relate' the expertise brought in by guest speakers, allowing for an experiential reflection on the issues the practitioners struggle with.

After the event brought the creative process to an end, a few things stood out for us. The final event was highly appreciated for its immersive and participatory dramaturgy, as well as its clearly co-creative character. Students indicated that they had appreciated the theatre workshops, because they allowed them to work with their body and their emotions. This, despite them feeling uneasy doing so at the start of the course. Because the theatre workshops included only the students, the practitioners were less introduced to theatre. This may explain why some practitioners participating in the final event felt too far out of their comfort zone.

Upon reflection, we realised that this year, the process was less successful in incorporating scientific expertise than it was in staging an engaging dramaturgy. The extensive work to prepare the event came at the cost of a deep engagement with the content of alternative images of a rural future. The guest lectures were intended to offer input for this content, and although these lectures were valuable, they were hosted in a plenary setting, which left insufficient space for participants to connect the lectures to their work on the final event. In other words, one of our biggest challenges for this course was to try to craft an appropriate balance between the role of expertise and the immersive and co-creative approach leading up to the final event.

This challenge relates to our reflection on the mixing of participants, with whom we intended to create a collective experience. Participants noted how easy and valuable it was to meet one another and repeatedly indicated a wish for more interaction. However, due to the limited time we estimated we could ask from the practitioners (policymakers and farmers, in particular), we only had five co-creative sessions with all participants present. This was a limiting factor to the creation of a collective experience in the group. Therefore, despite many notable contributions of practitioners who were able to make extra time, the shared experiment to create an immersive theatrical experience became mostly the master's students' project. Consequently, we noticed that the practitioners did not feel as immersed in the collective learning experience as the students. Our course design created a sense of collectively, but time constraints required a differentiation of roles and thus of learning opportunities.

Mixing also occurred at the level of settings. This involved the locations we visited. For instance, we hosted sessions outside of the university campus: in theatres, on farms, and in spaces in the city centres of Utrecht and The Hague. We also tinkered with the setting on a micro-level. Rather than in rows of tables, the participants were seated in half circles or world café tables, and we experimented with interview-style formats to substitute potentially long lectures. We noticed that the novelty of these settings worked to keep students and participants engaged. This novelty might also explain why the sessions didn't always feel like a university course anymore. For instance, practitioners regularly indicated they kept forgetting that this experience still counted as a course for the students, and that they would get graded for it. Despite these merits, we must also admit that constantly tinkering with the setting required a lot of time and energy from the teachers.

In hindsight, a full-blown theatrical production was perhaps too much to ask, both of ourselves and of our participants. We and most of the master's students indicated that we had never worked as hard on a course as we did on this one. Despite its intensity, the course created a sense of fulfilment and meaning. We experienced ourselves as part of a collective force with our students, learning and making change together. Furthermore, we found that diverse forms of 'mixing' in creating a space for different engagements with the future helped to foster reflection on positions, roles, relationships and the more ephemeral 'sense of possibility.'

Didactic mixing	Design choices	Values and risks
Mixing participants	<ul style="list-style-type: none"> <li>&gt; Transdisciplinary group of co-learners;</li> <li>&gt; a collective intervention: co-creation of a final event.</li> </ul>	<ul style="list-style-type: none"> <li>+ 'Out of bubble' effect;</li> <li>+ sense of collective learning and meaningful effort;</li> <li>- unequal time availabilities disrupt a sense of collectivity and differentiate the learning processes;</li> <li>- a collective intervention can take more time than reasonable of participants and teachers for a 'course'.</li> </ul>
Mixing ways of knowing	<ul style="list-style-type: none"> <li>&gt; Combining theatre-making with cognitive learning;</li> <li>&gt; theatre makers as co-teachers.</li> </ul>	<ul style="list-style-type: none"> <li>+ Enrichment of the learning;</li> <li>- the risk of detachment far beyond the comfort zone;</li> <li>- complex search for a balance in ways of knowing.</li> </ul>
Mixing settings	<ul style="list-style-type: none"> <li>&gt; Moving outside the university;</li> <li>&gt; setting half circles, world café, etc.</li> </ul>	<ul style="list-style-type: none"> <li>+ Attentive and active energy;</li> <li>+ enables learning outside of the university;</li> <li>- Requires a lot of work</li> </ul>

Table 1 Didactic mixing in the Techniques of Futuring course

## COURSE 2: COALITION OF HOPE

### Course description

The year 2022 also marked the first edition of the CoH. Compared to the ToF course, this was a more informally organized, co-creative educational experiment. We welcomed a group of six interdisciplinary master's students. These students all applied to join the CoH in the second year of their master's program, the goal being to write their theses around an overarching theme: 'the post-fossil good life.' As part of this experience, from November '22 to February '23 (parallel to ToF), the students connected with four societal practitioners of diverse backgrounds. These practitioners were personally interested in exploring the notion of the post-fossil good life. Participation was free for practitioners. While this experiment has different dimensions, including the journey of writing the master's thesis, it is this mixed part of the CoH experiment that we focus on here.

In total, we had four 3-hour sessions, a 2.5-day retreat, an evaluation session and a reunion. During those gatherings, we embarked on something we framed as an 'emergent futuring experiment.' This collective process was emergent in the sense that it was facilitated without a predefined outcome in mind and with ample space for co-creating sessions (on emergent teaching, see for instance Crowell and Reid-Marr, 2013). We collaboratively explored our ideas of what a future post-fossil good life might look like, what we experience when we engage with these objectives, and how this might inspire us to move forward. Finally, we

explored what our creative potential as a group might be. This process led us to create the 'tenfliction tree,' a format of interaction where people might learn to see and experience that at times, the quest for 'living well' – especially in a world in crisis – is one full of paradoxes, contradictions and tension — hence the name 'tenfliction.' For instance, the ecological crisis simultaneously asks us to radically slow down our growth-oriented lifestyles and to speed up our efforts to create pathways for urgently needed systemic change. The art of mindful and responsible future-making, as the CoH came to suggest, is to become aware of such tensions and embrace and play with them in ways that create energy, rather than to be paralyzed by their complexity. For more information, we refer to the blog post written on this experience (Coalition of Hope, 2023).



Figure 3 – Participants in the Coalition of Hope test their 'tenfliction tree' interactive format.

## Teacher reflections

In this phase of the CoH, we sought to connect master's students to professionals. Furthermore, in creating our mix of participants, we took care to select a group of people who might come to feel a sense of resonance with one another. To strive for such resonance, we informed our selection process and began our collective journey with an informal one-on-one walk between the potential participants and the main teacher, which emphasized getting to know each other, talking about commitments and interests regarding the question of the post-fossil good life, and creating a shared sense of what the CoH might become (which was, at first, rather vague!). This approach resulted in a small (six students, four practitioners) yet diverse group. Participants were involved in, amongst others: activism, regenerative farming, sustainable finance, teaching/facilitation and research.

We assumed that this approach might result in a small yet highly motivated group that was ready to engage deeply, be vulnerable and open, and embark on a journey together. We indeed experienced this to be the case. This we considered crucial, for the ways of knowing we wanted to foreground in the CoH emphasised personal experience, open dialogue, and co-creation. One example of these kind of interactions is that we started off the coalition with a visit to a 'museum of our collective wisdom,' exhibiting personal contributions of the participants in the form of texts on futures they dream of and recordings and artifacts of their inspirations. This was the opening move in the process of bringing personal life experiences into a creative, communal exploration. As the facilitators of this process, our core concern was to listen for differences, similarities, and tensions in the group and look for ways to

explicate and explore them. We hoped that after building on a collective consciousness of the coalition (meaning: a shared understanding and perspective on the topic), we'd have a fruitful departure point to then collectively formulate a corresponding creative potential of the group. That consciousness and potential revolved around our experiences of 'tenflections.'

Given the emergent and self-reflective way in which this focus came about, participants truly felt that this understanding of the world was 'our accomplishment,' and overall, group members reported the understanding of 'tenflections' as valuable and relevant for their lives. When we stayed in an ecovillage for a 3-day retreat, we distilled our collective consciousness and formulated our collective creative potential. At this point, the way of knowing and the setting of the CoH shifted. Rather than focusing on reflecting within the group, we started to make creative props for establishing reciprocal relationships with particular communities, aiming to contribute to those communities by manifesting the realisations we experienced together. We developed a conversation method through which ecovillage inhabitants explored and made sense of the tenflections in their community (see figure 3), which led to animated conversations and, as they told us afterward, was strongly appreciated. Furthermore, we designed and staged 'the tenflection tree' as a contribution to the final event of the ToF course.

The value we see in the CoH process, as alluded to in the above text and summarised in Table 2 below, does come with risks. The risk of 'the bubble' refers to when the emphasis on self-exploration and deep dialogue leads to a strong group identity but a simultaneous disconnect from wider society. It was not until we were far along in the process that we actually interacted with 'the wider world' and were able to articulate our contributions. We do not see an easy way to overcome this – it comes with an emphasis on group consciousness and emergence – and we feel this is something to be aware of when designing education with these intentions. The somewhat similar risk of navel-gazing – something we'd signal as a potential pitfall – refers to when we focus so strongly on our own experiences and thoughts that we fail to be transformed by other minds and knowledge. We noticed that we needed significant time to make sense of the rich experiences of all coalition members, yet, in the later stages of the coalition, we started engaging with other communities (the ecovillage and the visitors of the ToF event) to enrich our understanding. The risk of 'inactivity', lastly, refers to when the open character of the learning process and the emphasis on consciousness and purpose can drastically slow down or even prevent active collaboration with societal partners. After the CoH ended, multiple participants mentioned that it was when we created and hosted two evenings in the ecovillage that the CoH really came alive. Some experienced the sessions leading up to that point as somewhat too slow and repetitive. It seems the core challenge of this kind of didactic mix is to seek a fine balance between building a shared consciousness within the group and creatively engaging with society.

<b>Didactic mixing</b>	<b>Design choices</b>	<b>Values and risks:</b>
Mixing participants	> Mixing based on resonance.	+ Personal connection and commitment, group identity - the risk of 'the bubble'.
Mixing ways of knowing	> Fostering collective consciousness and creative potential.	+ The empowering nature of creating open spaces for sharing personal experiences, ideas, and emotions; - the risk of navel-gazing.
Mixing settings	> From intimate 'own spaces' to experimental participation in 'the spaces of others.'	+ Reciprocal and purpose-driven societal engagement; - the risk of 'inactivity'.

Table 2 Didactic mixing in the Coalition of Hope course



## DIDACTIC MIXING FOR THE FUTURE: AN INVITATION

This study started with the ambition to contribute to the design and facilitation of emancipatory, democratic, and imaginative educational initiatives, by illustrating and exploring our practice of 'didactic mixing' through reflecting on our teacher experiences in two courses. In this closing section, we would first like to discuss what didactic mixing entailed and yielded in our courses, to then share how we perceive didactic mixing as an active practice and articulate why we think it is valuable. Lastly, we would like to invite like-minded teachers to consider didactic mixing for their work.

Looking back on the teachers' reflections and the didactic mixes of these courses, we found that each of the three identified dimensions of didactic mixing had its own unique and valuable contribution to the quality of our educational processes. We learned that mixing participants allowed us to incite the formation of a new social fabric, in the form of 'a coalition' (CoH) and a 'creative collective' (ToF). In both cases, the newly formed ties enhanced a sense of connectedness beyond the participants' 'bubbles' and supported collective learning and action processes. The mixing of ways of knowing can be connected to another quality, namely that some students found this course to feel 'more real than others.' For instance, when ToF had finished, students indicated to us that the courses they pursued afterwards felt 'just bland' to them. Finally, through mixing in settings, we were able to encourage a fitting pace, energy, and direction of attention in the courses. These positive experiences were not easily achieved, however. In both courses, our biggest challenge was to find the right balance in the mixing, and it was difficult to ensure these efforts didn't cost teachers and participants too much time or energy.

When comparing the reflections and didactic mixes of the CoH and ToF courses, we also tried to pinpoint why these courses ended up being so different from one another. Overall, we found that the aim of the educational intervention, or in other words, the pedagogical foundation, largely drives the choices we made in the didactic mixes. For instance, the ToF course focused strongly on co-creating a final event to make a change in the world 'out there.' Correspondingly, its aim was to enable learning through active and direct engagement with a societal issue. The CoH course focused on exploring the group members' personal experiences and sought to co-create a fitting creative potential for the group. As such, it supported participants in finding their purpose and direction as contributors to a changing world. The resulting didactic mixes (see Table 1 and Table 2) reflect how these different and sometimes contrasting pedagogical convictions came to be expressed in the didactic mix. For instance, ToF facilitated a fast-paced energy to make a big event happen and sought an 'outward' focus with farm visits, guest lecturers, and theatre experiences. In contrast, the first phase of the CoH focused on slowing down to listen and tune in to the group carefully. Here, we preferred an 'inward' looking attention, set in a living room-like environment. Thus, our didactic mixes illuminated how our courses were taught by different teachers who have different approaches and ideas about learning and change-making.

## CONCLUSION

Our experiences lead us to conclude that the 'work' of didactic mixing is an active and reflective process throughout the design and facilitation of education, requiring ongoing 'tinkering.' Didactic mixing meant that we were continuously questioning *with whom, how,* and *where* one best learns. Furthermore, in dealing with these questions, we kept asking *why* one is learning in the broader societal context: with what purpose does this course take place? This conclusion also suggests limits to the capacity to plan and design the kind of innovative educational practices studied here. Of course, retrospectively we can try to articulate our aims, questions, and approaches. But we cannot claim that these were explicit

from the outset. They rather formed ‘hunches’ (cf. Swilling and Van Breda, 2019) we explored as the courses unfolded. Thus, didactic mixing is perhaps best seen as an attempt to articulate a process of manoeuvring, a process that requires the craft and artistry of the teacher (Biesta, 2022). This important role of teachers is not self-evident. The two experiences discussed in this paper suggest that such work of teachers can especially thrive if teachers have the resources, time, and trust to experiment with didactic mixing.

Furthermore, we can conclude that the practice of didactic mixing in the education of participants, ways of knowing, and settings opens up a breadth of design choices. To suit our pedagogical convictions, this breadth in design options led us to deviate from the routines of university-based education, such as the entrenched separation between LLL and initial education, or the idea that education is about mastering a dedicated corpus of scientific knowledge. Therefore, the practice of didactic mixing might enable teachers to consider more critically engaging with educational conventions, and, where necessary, deviate from them if they don't suit the desired learning goals. This opens up space to (re-)design learning and education to fit the emancipatory, democratic, experiential and imaginative processes our current societies need.

We see this paper as an invitation for other teachers to consider didactic mixing in their educational practice and would like to welcome others to share and document their experiences. The approach of this paper can be considered in line with what Gergen (2015) calls future forming research. As Gergen (*ibid*, p.294) wonders: ‘What if we [researchers] replaced the persistent rush to establish ‘what is the case?’ and begin to ask, ‘what kind of world could we build?’’. The two exemplars we discussed should therefore not be interpreted as ideal mixes from which we can derive generic lessons for lifelong learning practitioners, but rather as exemplars that might inspire teachers in other contexts. We hope to inspire teachers who share a commitment to a type of LLL that engages with the grand challenges of our time and sees its learners as citizens, rather than consumers.

## REFERENCES

- Akkerman, S.F. and Bakker, A. (2011) ‘*Boundary Crossing and Boundary Objects*’, *Review of Educational Research*, 81(2), pp. 132–169. Available at: <https://doi.org/10.3102/0034654311404435>
- Bernstein, J. (2015) ‘*Transdisciplinarity: A Review of Its Origins, Development, and Current Issues*’, *Journal of Research Practice*, 11.
- Biesta, G. (2006) ‘*What’s the Point of Lifelong Learning if Lifelong Learning Has No Point? On the Democratic Deficit of Policies for Lifelong Learning*’, *European Educational Research Journal*, 5(3–4), pp. 169–180. Available at: <https://doi.org/10.2304/eeerj.2006.5.3.169>
- van Breda, J. and Swilling, M. (2019) ‘*The guiding logics and principles for designing emergent transdisciplinary research processes: learning experiences and reflections from a transdisciplinary urban case study in Enkanini informal settlement, South Africa*’, *Sustainability Science*, 14(3), pp. 823–841. Available at: <https://doi.org/10.1007/s11625-018-0606-x>
- Coalition of Hope (2023) *Let’s become tension facilitators for the sake of utopia*, Academy of Hope. Available at: <https://academyofhope.sites.uu.nl/2023/03/14/lets-become-tension-facilitators-for-the-sake-of-utopia/> (Accessed: 22 June 2023).
- Crowell, S. and Reid-Marr, D. (2013) ‘*Emergent Teaching: A Path of Creativity, Significance, and Transformation*’. R&L Education.

Dewey, J. (1938) *'Experience and Education'*. Kappa Delta Pi.

Gergen, K.J. (2015) *'From Mirroring to World-Making: Research as Future Forming'*, *Journal for the Theory of Social Behaviour*, 45(3), pp. 287–310. Available at: <https://doi.org/10.1111/jtsb.12075>

Hajer, M. A. (2009). *'Authoritative governance: Policy making in the age of mediatization'*. Oxford University Press, USA.

Hajer, M.A. and Pelzer, P. (2018) *'2050—An Energetic Odyssey: Understanding "Techniques of Futuring" in the transition towards renewable energy'*, *Energy Research & Social Science*, 44, pp. 222–231. Available at: <https://doi.org/10.1016/j.erss.2018.01.013>

Heron, J. (1992) *'Feeling and personhood: Psychology in another key'*. Newbury Park, CA: Sage.

Herr, K. and Anderson, G. L., 2005. *'The Action Research Dissertation: A Guide for Students and Faculty'*. Thousand Oaks, CA: SAGE Publications, Inc. Available at: <https://doi.org/10.4135/9781452226644>

Hoffman, J. et al. (2021) *'A futuring approach to teaching wicked problems'*, *Journal of Geography in Higher Education*, 45(4), pp. 576–593. Available at: <https://doi.org/10.1080/03098265.2020.1869923>

Levitas, R. (2013) *'Utopia as Method'*. London: Palgrave Macmillan UK. Available at: <https://doi.org/10.1057/9781137314253>

Lewin, K. (1946) *'Action Research and Minority Problems'*, *Journal of Social Issues*, 2(4), pp. 34–46. Available at: <https://doi.org/10.1111/j.1540-4560.1946.tb02295.x>

Sargent, L.T. (1994) *'The Three Faces of Utopianism Revisited'*, *Utopian Studies*, 5(1), pp. 1–37.

Schön, D. A. (1983). *'The Reflective Practitioner: How Professionals Think In Action'*. New York, NY: Basic Books.

Schön, D. A. (1992). *'The theory of inquiry: Dewey's legacy to education'*. *Curriculum inquiry*, 22(2), pp. 119-139. Available at: <https://doi.org/10.2307/1180029>

Taylor, E. W. (1998) *'Theory and practice of transformative learning: A critical review'*. *Information Series No. 374*, ERIC Clearing House on Adult.

Yorks, L. and Kasl, E. (2002) *'Toward a Theory and Practice for Whole-Person Learning: Reconceptualizing Experience and the Role of Affect'*, *Adult Education Quarterly*, 52(3), pp. 176–192. Available at: <https://doi.org/10.1177/07417136020523002>

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