

Northumbria Research Link

Citation: Yee, Joyce, Rajmakers, Bas and Ichikawa, Fumiko (2019) Transformative Learning as Impact in Social Innovation. *Design and Culture*, 11 (1). pp. 109-132. ISSN 1754-7075

Published by: Taylor & Francis

URL: <https://doi.org/10.1080/17547075.2019.1567984>
<<https://doi.org/10.1080/17547075.2019.1567984>>

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/37516/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)



UniversityLibrary



Northumbria
University
NEWCASTLE

Transformative Learning as Impact in Social Innovation

Joyce Yee, Bas Raijmakers and Fumiko Ichikawa

Joyce Yee is an Associate Professor at Northumbria University's School of Design. She is the co-founder of the Design and Social Innovation in Asia-Pacific (DESIAP) network with Yoko Akama. Joyce's research focuses on the role, value and impact of design in organizational contexts.

joyce.yee@northumbria.ac.uk

Dr. Bas Raijmakers is co-founder and Creative Director of STBY in London and Amsterdam. Bas has a background in cultural studies, the internet industry, and interaction design. He is also a Reader in Strategic Creativity at Design Academy Eindhoven.

bas@stby.eu

Fumiko Ichikawa is the co-founder and Managing Director of Re:public in Japan. Together with national and regional governments, companies of all sizes, and educational institutes, her mission is to empower individuals and develop sustainable innovation platforms for the better future.

fumiko@re-public.jp

ABSTRACT Measurable impact is an often expected and required outcome of innovation programs, and yet is particularly challenging when trying to understand social impact. The overt focus on economic value often overshadows other, more impactful social outcomes, such as learning, that emerge as a result of the work. In this paper, we use transformative learning theory (TLT) to explore the types and ranges of transformative learning that take place in design and social innovation (D&SI). TLT is an adult learning theory in which critical reflection is used to challenge the learner's beliefs and assumptions and can be particularly useful in helping us understand the perspective shifts important for participants of D&SI initiatives. Our aim is to reorient the discussion on D&SI impact by focusing on transformative learning as a form of social value. Using examples of and reflections on projects sited in various cultural contexts (Japan, UK, Europe), this paper draws attention to the significance of transformative learning in contributing to social change and demonstrates the potential for addressing, framing, and communicating learning as one of the many important social impact that occurs in D&SI initiatives.

KEYWORDS: transformative learning, design and social innovation, social impact, social value

Introduction

One of my key highlights of the project is seeing how participants change throughout the program. Their ambition builds over time and they are full of confidence and wanting to try new things and seek the next opportunity. They are really motivated to find ways to improve their city, society and themselves.

Yuki Uchida (Re:public, Japan) speaking on the transformative change she observed in the Innovation Studio Fukuoka program. (Cited in Yee, Jefferies and Michlewski 2017, 192)

Personal, transformative changes occurring in participants as a result of their involvement in social innovation programs are often the most meaningful and powerful impact of social innovation—as demonstrated by the quote above. And yet, to many

social innovation practitioners that we spoke to, these changes are often ignored as outcomes when evaluating the program's impact.

Current measurement tools and evaluation approaches are grounded in conventional accounting practices and thus prioritize economic performance over social and environmental dimensions (Antadze and Westley 2012). Although the importance of the social dimension in innovation is becoming a more accepted idea (Cajaiba-Santana 2014), challenges remain in developing appropriate frameworks to evaluate its impact. Traditional evaluation methods stemming from conventional accounting practices are ill-equipped to capture social and personal impact (Nicholls 2009). They often aim to render definitive judgments of the projects' success or failure (Patton 2006) against a set of pre-determined goals that may or may not be relevant for all stakeholders. We posit that by focusing on learning and tracking transformative changes that occur in the participants involved in social innovation programs, we are able to reveal more meaningful indicators of social impact, such as learning from failure.

The authors often find that participants involved in social innovation projects or programs (who we call 'innovators') experience a "paradigmatic shift" (Kuhn, 1962) by having their frame of reference—assumptions and expectations that direct their tacit points of view and influence their thinking, beliefs and actions—challenged, reflected upon and acted on. To help us understand these perspective changes that occur in participants, we draw on the field of adult learning, specifically transformative learning theory (TLT). Transformative learning is "a deep, structural shift in 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" (Transformative Learning Centre 2016). It reflects a particular vision for adult education as well as a conceptual framework to understand how adults learn. It often describes learning that occurs when an adult engages in activities that cause or allow them to see a different worldview from their own (Mezirow 1978) and is largely understood as a means of adapting to the needs and demands of the broader, social-cultural context (Dirkx 1998). We recognize that TLT has been criticized for its overt emphasis on individual transformation and the lack of positionality and non-Western ways of learning (English and Irving 2012; Johnson-Bailey 2012; Mejiuni 2012; Ntseane 2012) and we are mindful of its limitations when using it to understand learning in our cases. We were particularly sensitive to instances arising in the cases that cannot be explained nor mapped onto existing theories and have used these examples to query and challenge notions of perspective transformation.

In the following sections, we explore the implications of focusing on the transformative learning aspect in social innovation by drawing on projects from the authors' practices: STBY, located in the UK and The Netherlands, and Re:public based in Japan. We use these examples to discuss the challenges of defining, determining and delivering impact in social innovation projects: in particular, the importance of acknowledging, evidencing, communicating, and enabling transformative change to happen and to be sustained. We do so by introducing the idea of social value and the importance of transformative learning when considering impact in social innovation. We also use our examples to challenge the existing understanding of transformative learning and diversify this understanding through examination in broader cultural and social contexts.

Social Value

Interest in social innovation has increased, particularly in Western Europe (Hillgren, Seravalli and Emilson 2011; Mulgan 2014), since the early 2000s. Although not a new idea, it attracted the attention of political and economic leaders due to the realization that existing structures and policies in their countries were ill-equipped to address pressing issues such as climate change and chronic diseases (Murray et al 2010). Eikenberry (2009) and Evans et al. (2005) attribute this increased interest to austerity measures applied by governments in these geographic regions following the 2008 global economic downturn. This then led to a trend for public bodies to adopt market-based approaches to service delivery in order to reduce public spending and responsibilities. Although the emergence of the term 'social innovation' has come out of bleak economic and social circumstance, it signifies a step change in policy thinking by bringing into focus the importance of social benefits alongside the traditional economic and environmental benefits. This change, as noted by Dayson (2017), is increasingly identified in policy discourses as 'social value.' Social value, when considered through a policy lens, refers to the wider financial and non-financial impacts of programs, organizations, and interventions, including the wellbeing of individuals and communities, social capital, and the environment.

Although what constitutes 'social value' has been hard to define, the focus on measuring social value has become more important since the UK's introduction of the Social Value Act in 2012.¹ This act requires the UK's public bodies to consider how the services they commission and procure take into account wider social, economic, and environmental benefits. Recognizing that social value is best considered using local context and needs, the Act is deliberately flexible in defining what the social benefits may be. For example, a local taxi business might be recognized for creating social value by offering lower advertising rates for local firms and by employing apprentices from the local area. Social value can also be created when a local council collects unwanted items and refurbishes them for low-income households as part of that Council's household waste collection service.

Understanding and Evaluating Social Value

The introduction of the Social Value Act in the UK indicates a recognition of the importance of social value, at least from a policy point of view. However, current evaluative models are still predominately based on a positivistic economic model of cause and effect, making it challenging to capture the range of multi-dimensional impacts that emerge in social innovation projects. These quantitatively-focused evaluation methods have often been criticized for their narrow focus on specific interventions rather than considering impact as a whole (McHugh et al. 2013).

The continuing dominance of quantitative measures is unsurprising, since social value is still poorly understood, recognized and communicated. Dayson's study (2017) suggests that social value remains an epistemological and methodological challenge for commissioners seeking to embed it in their decision-making. Epistemologically, there is a challenge in recognizing and incorporating multi-stakeholder perspectives in understanding social value. For example, studies cited by Dayson (2017) have shown that funders' conceptions of social value can tend towards narrow, positivistic, quantitative measures of change (Arvidson et al. 2013; Harlock

¹ Read a description and the guidance of the Act at <https://tinyurl.com/y8g4fanl>.

2014) with an emphasis on resource utilization and cost savings. Methodologically, there is continuing debate on how best to evidence multi-dimensional social value. It has been suggested that a blended value approach (Emerson 2003) which takes into account quantitative indicators of economic or behavioral change, while accounting for interpretive qualitative insights from different stakeholders in a service, might be the most appropriate approach. However, continuing challenges in adopting a blended approach has meant that current measurements of social impact (such as the Social Return on Investment and Balanced Scorecard) are still predominantly focused on quantifying financial benefits. DESIAP's review (Akama et al. 2019) of over thirty-two social impact frameworks has confirmed the bias towards quantitative measures, further evidenced by a report by NESTA (National Endowment for Science, Technology and the Arts) and the Young Foundation (2012) stating that metrics are dominated by hard financial measure. For example, of the 150 different metrics used in the non-profit (VCS) sector, only twenty-one focused on social impact. Furthermore, a Demos review in 2010 of thirty charities and social enterprises of different sizes and different sectors revealed a gap between the aspirations of policy makers for quantifiable measures of social value, and the ability of third sector organizations to measure and capture basic social outcomes. This clearly illustrates that there is still much work to be done to understand and agree on what social impact and value mean.

The lack of clarity and agreement on what constitute social value has also made it difficult to progress discussions of social value from an abstracted level of societal, economic, and environmental benefits to understanding impact from an individual's point of view. We are particularly interested in understanding the unit of transformation as learning at an individual level so that we could be better informed about a person's and group's ability to enact changes. Although frameworks such as Outcome Mapping (Earl, Carden and Smutylo 2001) and Theory of Change (Anderson 2005) do focus on the changes of participants' behavior over time, there is limited research and understanding on the role transformative learning plays in design and social innovation. Therefore, our paper attempts to bring into focus how learning takes place in D&SI projects and what impact it has on individual's capacity to deliver social change.

Transformative Learning Theory

Four Perspectives

Transformative learning has emerged from the field of Western adult education as a way to understand how adults learn. Its core idea is based on the fundamental change in perspective or frame of reference (King 2002). When someone undergoes such a change, she has, in essence, "transformed" her view of herself or of the world or of how she interacts with others and her environment. There are generally four different strands of thought within the research and theory on transformative learning, represented by four different theorists—Paolo Freire, Jack Mezirow, Laurent Daloz, and Robert Boyd—which will be introduced in the following sections and used as our analysis framework. While these four strands vary along dimensions such as psychological versus social, rational versus non-rational, and universal versus culture-specific, Taylor (2007) points out that all share emphasis on experience, critical reflection and dialogue in the learning process.

We use John Dirkx's (1998) overview and framing of these different perspectives. Alongside other scholars, such as Boyd, Dirkx was amongst a group of

key adult learning theorists to challenge Mezirow's emphasis on rational critical reflection. Dirkx's interpretations of the different perspectives is an important contribution to the adult learning field as it contrasted what was, at that time, Mezirow's dominant theory, which emphasized rationality alongside the spiritual, emotional, and political dimensions of learning. Although the field has since built on and expanded into these various perspectives, Dirkx's general overview can help us to begin unpacking what transformative learning is and how it can be applied to social innovation. These strands also provide ways of exploring the different aims and outcomes of the transformation.

Transformation as Consciousness-raising

Paulo Freire (1970) articulated a theory of transformative learning which he refers to as "consciousness-raising" and "emancipatory." Freire's work has been guided and driven by political liberation and freedom from oppression. His work has significantly influenced the area of study and critical perspectives in adult education (Collins 1991, Welton 1995). For Freire, being critically conscious is to have the "ability to analyze, pose questions and take action on the social, political, cultural and economic contexts that influence and shape their lives" (Dirkx 1998, 3). Although Freire's work emerged out of an effort to help foster critical consciousness amongst individual and groups while teaching them to read, his work is very much relevant to social innovation. Social innovation has a dimension of social justice, and in many instances, pursues self-determination, which is significant for enacting change in communities described as 'vulnerable' or 'disadvantaged.' Freire proposed using dialogue and problem-posing as a way to help learners develop their critical consciousness. The process, a cyclical oscillation between reflection and action, has influenced the development of Participatory Action Research, an oft-used methodology in social innovation practices. Of all the theorists considered here, Freire's work has perhaps the closest affinity to the aims of social innovation, and has been used to influence social innovation education (e.g. Rivers et al. 2015).

Transformation as Critical Reflection

Jack Mezirow's work on transformative learning is perhaps the most well-known in the field of adult education and its influence on subsequent scholars in the field is clear. Mezirow extended Freire's work on consciousness-raising and grounded it in cognitive and developmental psychology, influenced by Kuhn's (1962) paradigm and Habermas' (1971, 1984) domains of learning. Central to his theory is that we learn by making meaning from our experiences, through reflection, critical reflection, and critical self-reflection. He distinguishes this type of learning from our daily experiences by calling it "perspective transformation," reflecting changes in our worldview. Perspectives are composed of sets of beliefs, values and assumptions that we acquire through life experiences. They are the lens through which we view and understand the world. Perspectives, according to Mezirow, while useful, can sometimes be a limitation in that they may be flawed, biased, and can distort our ability to perceive and be open to new ideas. Mezirow suggests that through rational and critical self-reflection, we can come to identify, assess, and act to modify key assumptions. This focus on rational thought is perhaps less useful for our purpose as it overtly prioritizes Western traditions of thinking (King 2005), a key criticism of Mezirow's theory that we will come back to in later sections. Other scholars, such as Boyd and Myers (1988), have offered an

alternate approach to Mezirow's rational, cognitive, and analytical approach for a more intuitive, creative, and holistic view of transformative learning.

Mezirow (1991) describes in more detail the conditions required for transformative learning to take place and the various steps that an individual must go through for perspective transformation to occur. He names "disorienting dilemmas," critical reflection, and rational discourse as key to bringing about transformative learning. Disorienting dilemmas are a type of significant stimulus that leads a person to question their standpoint and eventually undergo a perspective transformation. The event could be as extreme as the death of a spouse, a life-threatening illness or divorce, or a less extreme event such as changing jobs, relocating, or starting a new professional development program. Mezirow suggest that disorientation brings in an element of critical discourse to reflect upon such events with others. The importance of being able to conduct critical discourse is to enable discussion with other people on personal and socially held beliefs and assumptions in a reflective manner. This corresponds with how learning might be supported in social innovation education by a praxis that is grounded in critical learning theory, transformative learning theory, and epistemological development (Rivers et al. 2015). While in Mezirow's theory the aim of these critical discourses is to highlight perceived inconsistencies in how we see the world, we take a more nuanced perspective of knowledge as situated, as suggested by Haraway (1988), in that our views are always partial and that it is more important to use this critical reflection to help us understand where our partial views come from.

Transformation as Growth

The developmental perspective is implicit in Mezirow's view of transformative learning and is often assumed as an expected outcome of the learning. However, this focus on personal growth is what makes Daloz's (1986) work unique in amongst other works in adult education, according to Dirkx (1998). Daloz focuses on using transformative learning to support personal growth and change. For Daloz, this aspect is the central framework for understanding transformative learning and draws on our inherent need to find and construct meaning in our life as a key motivator for adults to participate in new learning experiences. While Daloz's theory relies on constructivist views of knowledge and learning (similar to Mezirow and Freire), he moves away from Mezirow's focus on the rational and reflective acts to a more holistic and intuitive processes. He prioritizes personal change over the altering of social structures of inequality, which are central to Freire's social emancipatory view of transformation.

Daloz draws on formal education experiences and in particular the role of mentoring to support personal growth and change. He identifies three primary functions of mentors—to support, challenge, and provide vision (Daloz 1999, 206). A mentor's role is not just focused on the passing of knowledge but also on developing the skills required to facilitate interpersonal growth. His case studies are based on adults returning to complete undergraduate degrees, and he uses these examples to illustrate how their learning experiences "can both disrupt old patterns of meaning and encourage the construction and formation of new ways of seeing the self and world" (Dirkx 1998, 6). Daloz's view is interesting to note as he is one of a few scholars (including Kegan 1994; Merriam and Clark 1991 for example) to have explored transformative learning from a developmental perspective. This view offers insight into the personal development aspect of social innovation projects. Mentoring is also an oft-used model to develop a person's capability and thus her capacity to act.

Transformation as Individuation

Individuation involves discovery of new talents, a sense of empowerment and confidence, a deeper understanding of one's inner self, and a greater sense of self-responsibility. This perspective of transformative learning has been mainly developed by Robert Boyd (Boyd 1991; Boyd and Myers 1988). Like Mezirow and Daloz, Boyd is interested in understanding and facilitating personal development. However, unlike Mezirow, who emphasizes rational thought and discourse, Boyd is interested in the expressive or emotional-spiritual dimensions of learning and how it can be integrated more holistically and consciously into daily life (Dirkx 1998). Boyd is interested in the importance of consciousness in adult learning, similar to Freire, but as Boyd is influenced by the analytical psychology of Carl Jung, development, consciousness, and transformation holds different meaning for Boyd. This psychoanalytic view of transformative learning (Taylor 2000) is seen as a process of individuation, a lifelong journey to continually understand oneself through reflecting on the psychic structures (ego, shadow, persona, collective unconscious, and so on) that make up an individual's identity.

Research Methodology

In the following sections, we present personal reflections on the different types of transformative learning that took place in projects from two practices: STBY, located in the UK and The Netherlands, and Re:public based in Japan. Bas is co-founder of STBY and Fumiko co-founded Re:public. As co-authors, we have drawn on Bas and Fumiko's experiences to explore how transformative change occurs in social innovation projects due to their focus on supporting capacity building through a learning and reflective approach. All the authors have been part of a design and social innovation network in Asia-Pacific (DESIAP) that has enabled a deeper exploration of each practice's approaches. STBY and Re:public also offered different contexts in which transformative learning took place. Bas and Fumiko were asked to critically review and consider if the experience of learning that occurred in their projects relates to any of the four dimensions and if so, how. They were also asked to report examples and experiences that do not neatly fall into any of these descriptions and to discuss what that might tell us. Both practices were able to use the theories to help them identify the types of transformative learning that took place but also instances where their examples challenged existing notions suggested by TLT. In the case of STBY, a group reflection was conducted with the STBY team and facilitated by Bas, while Fumiko's personal reflection on Re:public's practices was facilitated by the first author (Joyce). These reflections were collated, analyzed against the four dimensions, and finally synthesized in the following sections.

STBY: Transformative Learnings through Integrated Training and Coaching in (Social) Innovation Projects

STBY is a design research studio based in London and Amsterdam that delivers service innovation.² Since its inception in 2003, STBY has worked with governments, businesses, and NGOs in Europe, the US, and Asia Pacific. They adopt a human-

² Learn more at www.stby.eu.

centered approach when working with clients and use a coaching model when supporting internal capacity building in client organizations. While they may not have explicitly set out to deliver transformative learning as defined by theorists, their work with participants often results in a transformative change (however small) in the participants' perspective.

The following examples are STBY's approach in helping their clients understand what innovation is and, in some cases, what it means to enable social innovation.

STBY delivered a three-month training program aimed at award winners of a social innovation challenge set by an association of NGOs. The program consisted of four training and coaching sessions, in addition to some coaching between sessions. Each winner was supported in developing their winning idea into a well-defined concept, implementation plan, and solid pitch for a social enterprise delivered to potential investors and partners. Although learning new skills can sometimes be seen as mechanistic, the act of skill acquisition or elaboration can lead people to see themselves and/or their work in new ways (Mezirow 2000). This type of transformative learning through critical reflection needs constant practice and support. STBY likens this to a fitness training experience. An initial training session usually entails an explanation, a trial of a particular exercise followed by an expectation that the person will carry out the exercise in their own time and on their own terms. However, it is widely acknowledged that the actual impact and real understanding of the exercise only comes through repetition, practice, and reflection. The first few practices might result in the first level of reflection. More critical reflection is usually supported by an expert or mentor who offers regular guidance for improvement. This is important since conversations with others through a critical discourse enable reflective discussions on personal and socially held beliefs and assumptions. This further supports the person's self-critical reflection on what has and hasn't worked, and will often lead to deeper transformative learning. In order to enable these different levels of critical reflection to take place, a long-term support model is often required. Although we recognize the importance of sustainability in supporting continued learning, the issue of long-term support is not really addressed in current TLT. In STBY's example, ample time is planned between sessions to enable the participants to work and reflect on the project using a design-driven approach supported by methods and tools delivered by STBY.

A second example involved two youth-oriented organizations: Biggafish and BANG. Biggafish is a social enterprise that provides performance and work opportunities for young creatives of ages between fourteen and seventeen through events, workshops, training, and development. BANG is a North London radio station for urban music that also develops radio talent among local youth. They commissioned STBY to conduct research for a new social enterprise venture aimed at identifying and growing creative talent among young people. Rather than drawing on STBY's extensive research capabilities and expertise to deliver the research, the project team agreed that a bigger impact could be achieved by building the organizations' research capacity through training and coaching. As a result, STBY trained a group of BANG and Biggafish's young people to conduct research interviews.

From a methodological point of view, it was better to have researchers who are part of the target group to interview potential future users of the service. As 'insiders' they were familiar with the culture and language of the participants and consequently elicited more in-depth stories from the target audience. STBY taught the young people

how to transfer their existing radio-interviewing and engagement skills to interviewing for research purposes. They were aiming to demonstrate how young people can channel their existing skills into a different domain and raise awareness of their creative potential, which could be seen as encouraging “transformation as individuation”(Boyd 1991; Boyd and Myers 1988). The young people discovered new talents and gave them a sense of empowerment and confidence. The young interviewers responded enthusiastically to their new role as researchers of their own communities, a role that offered them new status. One of the young people even applied to STBY to become a researcher after the project ended, which demonstrates the confidence that she gained in the process. Feedback from the young people and the managements of Biggafish and BANG confirmed this transformation. The organizations’ management teams saw enough potential in the approach to explore the possibility of extending the coaching model to other projects. (Due to unrelated organizational development, this idea was not taken forward.)

STBY recognizes "transformation as growth" (Daloz 1986) in the changes in motivation achieved when people are involved in projects with integrated training and coaching. In STBY’s experience, the most successful way to enable transformative learning is to offer bespoke guidance through coaching. STBY has taken this approach with NGOs, social enterprises, innovation professionals, and private organizations, including, for example, an insurance company. Clients and partners come to STBY with an issue they need addressing, others come with the request to be trained, or some require a mixture of the two. In all instances, collaboration is key and the relationships developed with clients and partners leads to critical dialogue, debate, and interactions that enable transformative learning to occur.

Common types of introductory training sessions aimed at professionals (from a half-day up to several days or a week) are available on the market and are often experienced as fun and inspiring. However, STBY has observed that such training in the form of master classes and boot camps do not offer the appropriate pedagogical model to support transformative learning, and the approach pursued by STBY differs in contrast. This is because many aspects of service innovation are in fact a honed craft, rather than a skill that can be learned quickly. It takes time and guidance to develop the skills, experience and knowledge to apply relevant tools and methods to projects. Participants often encounter difficulties and uncertainties when trying to apply what they have learned to their daily practices, often reaching a standstill and eventually slipping back into old routines. This may happen when participants need to customize tools or combine methods to address a specific context or objective. They often encounter uncertainties in projects, and need support to overcome them and achieve the intended aims. These challenges (either arising from internal or external factors), and the way an individual overcomes difficulties and achieves success, can be turned into important learning experiences when reflected upon with a coach. These moments could be interpreted as examples of transformation as growth, as well as consciousness-raising. These ups and downs can be seen as the ‘in-between’ phases of development, where existing structures are questioned and proven no longer relevant. This often relies on the individual’s ability to analyze, pose questions, and take action on the social, political, cultural, and economic contexts that influence and shape their lives. This then spurs the movement into a new development phase where new meaning structures are constructed. It takes experience and confidence to

recognize when and how to make these adaptations. STBY's approach aims to build this capacity.

Introductory master classes and boot camps, which are short and often lacking in real-world context, typically do not account for these 'in-between' phases. There is not enough time for participants to engage in deeper reflections and analysis in order to pose follow-up questions. Additionally, there is almost always no opportunity to act on social, political, cultural, or economic contexts since these sessions are not grounded in real-world context and structures. This does not devalue these kind of introductory training sessions. Instead it points to the need to follow up on them by applying new skills in a real project.

It's clear that transformative learning does occur in various guises in the examples shared by STBY. However, a fundamental challenge remains in the difficulty in tracking and evidencing the learning that takes place over time. Having formal start and end points to projects makes it difficult to track learning after the project ends, as post-project evaluations are not often budgeted in. Transformative learning by its very definition is understood as life-changing, and it does not often manifest overnight or in ways easily linked to a key event. So, the broader challenge for the design and social innovation community is how to recognize and account for this type of learning in the scope of current impact assessments.

Re:public: Enabling Change Agents

Re:public describes themselves as a Japanese 'think-and-do-tank'³ that has been involved in developing and running various social innovation initiatives for the public sector. Their primary focus is on sustainable development and running innovation initiatives at a citywide level, such as the Innovation Studio Fukuoka initiative, Innovators 100 Hiroshima, and make.fukui.

Re:public's work has a strong foundation in learning, and key to this approach is identifying who can become the catalyst of transformation, including youths and adults. One project that helped Re:public understand the value of this approach is i.club, a non-profit organization and after-school program supporting local high school students in discovering the heritage, industry, and expertise of their local regions, and imbuing them with pride and appreciation for their town. Re:public deliberately focuses on young people because it believes that a shift in a person's mindset early in life can result in a ripple effect later. For example, they noticed that the younger i.club participants were much more successful in affecting adults outside the program to be proactive in change. The program started a month after the Great East Japan Earthquake in March 2011, though it took a few attempts to get it going formally. Before the inception of Re:public, the co-founders Hiroshi Tamura and Fumiko Ichikawa, collaborated with i.club's principal Yu Ogawa and undertook fieldwork and numerous activities together.

The i.club project originally started in Kesenuma of Miyagi prefecture in response to the 2011 earthquake, but has since been run in other prefectures across Japan, such as Fukushima, Ibaraki, Shizuoka, and Mie. By training young people to conduct observations, home visits, and interviews, they learn to identify indigenous

³ Re:public uses the term 'think-and-do tank' as a play on the term 'think tanks' to highlight their action-oriented approach compared to other think tanks organizations traditionally focused on research and advocacy.

knowledge, traditions, and industry. Through the process of *understand – create – present*, they uncover hidden qualities of their hometown, create new ideas, prototype them, and present them back to the collective of local professionals, from fishermen and seafood factory owners, to shop and restaurant owners. This not only enriches the local economy; it also has the effect of reducing talent flight, a common trend of young people leaving their regional town for bigger cities to attend universities or find employment.

Although the new products and services created through the i.club project have clear economic impacts, the more powerful and sustainable impacts have come from instances where young people have decided to stay and work locally. For example, in Miyagi, the i.club program's theme was innovating new dry foods.⁴ The process involved arranging home and factory visits to enable young people to understand and experience different business models first-hand. This was then followed by workshops that supported idea generation and creation of prototypes. One prototype involved the students teaming up with a local manufacturer of bonito, a type of dried fish used as a flavor enhancer in Japanese dishes. This eventuated in the idea of creating a spicy seasoning oil out of semi-dried bonitos, and through successful marketing and retail partnerships, this product is now an additional income stream for the local manufacturer. The social impact of this is significant for this local manufacturer whose business was destroyed in the March 2011 earthquake but was able to re-build it again in partnership with i.club.

This was not the only impact. One of the students who worked on the project decided to stay on in Kesunnuma to work in a food processing company instead of moving away. Her experience through the i.club helped build confidence in her abilities and identified an area of work that she was interested in. Her learning experience reflects transformation as growth and transformation as individuation, since her learning was based on a discovery of new skills (research, and how to reframe questions, for example), a sense of empowerment (to pursue her own goals) and confidence (in being able to contribute positively to the business). Her new skills also demonstrate some aspects of transformation as consciousness-raising in that she demonstrated the ability to analyze, pose questions, and take action which resulted in her decision to stay in Kesunnuma. Her experience also reflects the close link between the two types of transformative learning: the changes in motivation (transformation as growth) achieved through the process also enabled a building of confidence, which is a sign of transformation as individuation. Re:public has seen similar transformations with other i.club participants as well as in other projects.

Re:public uses the term 'awakenings' to describe moments where a person's viewpoint on a specific subject changes due to new experiences. This links with transformation as critical reflection, as perspectives are transformed upon reflecting on changes in world views. These mindset shifts are often one of the key indicators Re:public uses to determine program success. Their current initiative, Innovators 100 Hiroshima, offers compelling examples of such awakenings. The program, started in 2015, takes one hundred innovators from companies based in Hiroshima and guides them through a series of workshops aimed at helping them identify, develop, and present new viable business ideas for their respective companies. The program emphasizes the need to look beyond the boundaries of a company to wider societal

⁴ For further details of the project, please refer to Ichikawa, Tamura and Akama's (2013) paper.

contexts. Companies are increasingly adopting this view since tackling key societal issues ensures they are investing in necessary products and services. It consists of a half-year program involving a series of workshops, culminating with a pitch presentation to the CEOs of the companies.

The Innovators 100 Hiroshima program is now in its third year, which has given Re:public sufficient time to reflect on what they feel have been the core impacts of the program. The aim of the program is to trigger the development of a new point of view in participants to illustrate how limited their existing approach is and, in doing so, help change their perspectives on developing business ideas. The real impact has been to enable these awakenings. These can be triggered by a key event or through a series of interventions and discussions. For example, in one field visit, participants met with the CEO of an industrial waste processing company. Industrial waste is significantly different from household waste; for example, fire stations in Japan have to replace their waste equipment every three years to meet government regulations. This means that quite pristine equipment often has to be scrapped, despite the good condition of the material. In response to this, the industrial waste processing company was upcycling the equipment into various furniture products. The company and their approach helped participants redefine the meaning of 'waste.' For most participants, this realization was particularly challenging, as it questioned their perceived understanding. It was particularly powerful for one participant, a CEO, who reassessed his assumptions regarding the relevance of social issues to commercial organizations, and ultimately changed his approach to his business.

A new perspective often became the intrinsic motivator for the innovators and helped them see beyond a specific solution. It was important in the Hiroshima 100 program since not all the final ideas presented in the past three years of the program were market viable. For example, two employees from a well-known soya sauce manufacturing company joined the program when they realized that their reduced salt soya sauce product—intended to reduce salt consumption—was having the reverse effect. Customers were actually using more soya sauce than normal since it was lacking taste. Their solution was a soya sauce cube which offers a visual indicator of the amount of salt contained in the sauce. Although they received support and funding to develop their idea, they were not able to deliver a market ready product. However, despite what could be called failure of delivery, the participants' persistence convinced their company that the identified problem needed attention. It resulted in an improved reduced salt soya sauce product that was consequently introduced successfully into market.

While the examples discussed demonstrate how transformative learning takes place within Re:public's social innovation practices, they caution to not emphasize transformative learning as solely an individual experience. This will be discussed further later. Re:public recognizes that change agents need far bigger networks to support and sustain their learning. Additionally, they acknowledge the importance of enabling relationships that cut across existing organizational hierarchies, as seen in the i.club example. This can be illustrated through the roles of mentors in the Hiroshima 100 project. Mentors have always been a key aspect of the innovation projects at Re:public. Their use of mentors relates to Daloz's (1999) view that mentors are there to challenge, support, and provide vision. However, Re:public extends the role of the mentors beyond these aspects, valuing them not only for their knowledge and experience, but for the network and influence they bring with them. Mentors provide a

diagonal relationship to the innovator in that they are outside of the innovator's company, but are peers to the companies' CEOs. They are supporters of the innovators and can often act as important influencers in helping the CEOs to adopt their ideas and recognize the value of individual innovators. In this way, mentors become another force for challenging the established hierarchy of the company.

Transformation as Social Impact

We have provided rich and varied examples to evidence where participants' transformative learning has been the most impactful outcome of a project. By doing so, we highlighted the importance of evaluating personal development and its impact on the participants' organizations and social networks when considering the impacts of social innovation.

Using existing transformative learning theory also enabled us to analyze different facets of learning, revealing important considerations that can contribute further to evolving theories of learning, transformation, and social impact. By combining TLT and other theories, the following section provides four thematic summaries of emerging understandings of the pluralities of designing social innovation practices.

Eco-system of Transformative Learning

Creating the space for learning to take place (Shapiro, 2009) between peers is important. It is also important to acknowledge the social nature of learning and that importance of actively encouraging well-organized co-operative learning (OECD, 2013). As seen in STBY's case study, collaboration is key and the relationships developed with clients and partners lead to critical dialogue, debate, and interactions that enable transformative learning to occur. Freire's pedagogic approach underpinned by problem-based learning, dialogue, and participation within a co-operative learning environment between teachers and students speaks to the approaches by STBY and Re:public.

Yet TLT tends to prioritize individual learning and transformation, with less focus on how transformative learning occurs in a broader ecosystem containing various actors, structures, and systems. We see the importance of understanding this ecosystem in the Innovators 100 Hiroshima project, which consisted of learning networks made up of mentors and carefully aligned groups who were guided through an innovation process. How can collaborative learning become an ongoing activity, one that helps new practices and skills spread across organizations and groups? There are some studies that have addressed learning in longer-term social and group contexts (e.g. Mejiuji, 2012; Leahy and Gilly, 2009), and Boyd's (1991) Matrix Model specifically looks at how personal transformations occur in group situations by focusing on the social system. Wenger's (1998) Community of Practice framework is widely used in many fields, including design, to understand how groups with shared concerns or passion come together. Understanding of more broadly situated, relational, and dynamic conditions as 'infrastructuring,' often discussed in relation to participatory design (e.g. Karasti 2014), is also increasingly recognized in social innovation (e.g. Hillgren, Seravalli and Emilson, 2011). How transformative learning occurs between the personal and interpersonal, the self and others, and in groups is an aspect we are interested in exploring in more detail in the next stage of our research.

Extending the Learning Environment

Building on the above, another significant insight gained from the case studies is the importance of creating a learning network beyond the life of a project, program, or training. Most TLTs are focused on explaining how and why changes in perspective take place rather than the conditions of sustaining continuous learning. Yet, studies identify the importance of a learning environment that support continuous learning through making connections and applying it in different contexts, described as 'horizontal connectedness' by OECD studies (2017, 2013). For example, one of the ways this horizontal connectedness can be promoted is through creating wider partnerships which may include families and communities, higher education, cultural institutions, media and businesses. Partners represent potentially fruitful sources of expertise and knowledge, helping combat isolation, and provide additional educational support, access to other resources, and alternative sites for learning.

As we learn from Re:public, it is important to create a chain of diagonal relationships between innovators and mentors to enable the passing of tacit knowledge between innovators with varying degrees of experiences, which is key to creating a sustainable pool of social innovators. "Training the trainer," a capacity building model that trains people to become coaches after gaining the confidence to apply knowledge and skills in their own work, is a useful model for extending the learning environment, as organizations often have limited funds to pay for ongoing external training. It also ensures that knowledge remains within the organization and helps to sustain transformation beyond the training timeframe.

Considering that many social innovators may not have access to formal training programs, what other types of learning contexts can they tap into that will enable them to unlock their learning potential? What types of informal learning takes place and how does it happen?

Long-Term Nature of Learning

The idea that transformative learning takes time to achieve is often implied rather than made explicit. When Mezirow (1991) proposed ten steps required to achieve transformation, he did not indicate a time frame in which these steps tend to occur. Pope (1996), in her study exploring the impact of higher education among ethnically diverse working-class women, found transformative learning to be a long-term, chaotic, and contextual process. While the examples from STBY and Re:public did not reveal the chaotic nature of this process, it was clear that it is a long-term process that needed to be carefully nurtured. Awareness of this led STBY to caution against relying on short introductory or master class training to deliver lasting learning. Re:public's innovation programs are almost always framed as long-term engagements, months and years, rather than days.

There is also the additional challenge of changes in perspectives that are harder to perceive and often do not manifest themselves immediately. However, when they do occur, they often have a lasting effect (Nerstrom 2017). The long-term nature of learning brings up the issue of how practitioners are able to plan and budget for post-project evaluation capable of capturing this learning. This remains a big challenge for D&SI practices as evaluation is often carried out by an external party and based on pre-determined criteria within a set period of time (Akama et al. 2019).

Contextual Significance of Transformative Learning

While TLT is a useful framework that enables us to generalize across contexts, the case studies also warn us that to abstract our learning as theory strips away the multi-faceted, complex nature of social innovation programs and the importance of considering each situation specifically. We see how training and coaching programs were designed to be bespoke in order to account for the context-dependent nature of significant personal change. Even in dedicated longer-term capacity building programs, the learning experience needs to be carefully designed to integrate with existing projects. These programs also need to be meaningful for the individual and the organization, leading to changes that result in real impact. Re:public is also always mindful of not replicating programs that worked in previous projects, for example, not repeating the same program they delivered in Fukuoka, a city in the south of Japan, with the Innovators 100 programme delivered in Hiroshima. Programs are based upon relationships that are not interchangeable; such relationships are based upon the particular positionalities, characteristics, and world views of individuals and groups, embedded within the specificity of place-based conditions. These situated dimensions and others, such as power and gender, are starting to be identified as significant to adult learning (Fewell 2002). This is taking place alongside an increased sensitivity to political dimensions in participatory design (Light 2015; Suchman 2002). We see these trends as signals of the “partial and incomplete” (Akama and Yee 2016) ways in which practitioners generally theorize transformation, learning, and social impact when designing for social innovation.

Conclusion

In this paper, we aimed to draw attention to the significance of transformative learning in contributing to social change through design and social innovation (D&SI). Our focus on personal transformations in D&SI helps highlight the importance of individual transformation in contributing to social change. We illustrated how the change in perspective of an individual or a group can often act as the catalyst for wider transformation in an organization or local community. In doing so, we have also demonstrated a potential for analyzing and evidencing a different framing, understanding, and narrative of ‘impact.’ However, the case study analysis does not go as far as to identify how and why transformative learning occurs. For example, in the case of the CEO of the waste company, we discussed the importance of perspective transformation as the key catalyst for subsequent changes, but were not able to explore fully what prepares learners to make significant decisions—what Taylor and Cranton (2012) refer to as a “desire to change.” This signals the significance of work yet to be done.

Studies in transformative learning in social innovation studies have been limited, mainly focused on developing educational frameworks for social innovation curriculum (e.g. Rivers et al. 2015) or used to support a wider theory of social learning in social innovation environments (Dumitru et al. 2017). While there are a number of scholars interested in expanding transformative learning theory from personal change to societal transformation (Gambrell 2016; Cranton and Taylor 2012; Johnson-Bailey and Alfred 2006), these studies do not consider the various cultural and societal conditions that enable transformative learning to take place. This is an additional limitation of TLT’s application to D&SI because we must consider the significance of context (Taylor 2007) and culture (Merriam and Ntseane 2008). This also signals the vigilance we must exercise when certain knowledge frameworks from one world view

are applied to another, and the work yet to do to draw upon and analyze the body of knowledge on transformative learning in the Global South.

The final and biggest challenge remains: we must find new ways to understand the impact resulting from transformative learning. We are confident that we can learn from other humanities-related disciplines better equipped to evaluate learning, but we are also mindful that D&SI practices have different needs that must be addressed in future work relating to impact assessment. The recognition that transformative learning is one of many forms of impact is an important first step in this reimagining and in the communication of impact to project funders. Sharing more examples of transformative learning in social innovation and advocating for a richer and longer-term narrative on impact will be crucial going forward. To do so, we need more examples of how transformative learning takes place in D&SI projects. We need appropriate theoretical frameworks to help us critically analyze the transformative learning that takes place. We need to find better ways at capturing, documenting and analyzing learning. Most importantly, we need to find more effective ways to communicate the impact of these transformations and why they are key to achieving social change in D&SI initiatives.

Acknowledgements

We would like to thank STBY, Re:public, and their collaborators for sharing examples of their design practice. We are also grateful to the reviewers and editors for their assistance in the paper.

References

Akama, Yoko, Joyce Yee, Cyril Tjajha and Regina Hill. 2019. *DESIAP KL: Impact and Evaluation in Design and Social Innovation*. DESIAP.

Anderson, Andrea A. 2005. *The Community Builder's Approach to Theory of Change: A Practical Guide to Theory and Development*. New York: The Aspen Institute Roundtable on Community Change.

Antadze, Nino and Frances R. Westley. 2012. "Impact Metrics for Social Innovation: Barriers or Bridges to Radical Change?" *Journal of Social Entrepreneurship* 3(2):133-150. DOI: 10.1080/19420676.2012.726005.

Arvidson, Marlin, Fergus Lyon, Stephen McKay and Domenico Moro. 2013. "Valuing The Social? The Nature And Controversies Of Measuring Social Return On Investment (SROI)." *Voluntary Sector Review* 4(1): 3–18.

Boyd, Robert. D. 1991. *Personal Transformations in Small Groups: A Jungian Perspective*. New York, NY: Routledge.

Boyd, Robert. D. and Gordon J. Myers. 1988. "Transformative Education." *International Journal of Lifelong Education* 7: 261–284.

Cajaiba-Santana, Giovany. 2014. "Social Innovation: Moving The Field Forward. A Conceptual Framework." *Technological Forecasting and Social Change* 82: 42–51.

Collins, Michael. 1991. *Adult Education as Vocation: A Critical Role for the Adult Educator*. London: Routledge.

Cranton, Patricia, and Edward W Taylor. 2012. "Transformative Learning Theory: Seeking A More Unified Theory." In *Handbook of Transformative Learning: Theory, Research and Practice*, edited by Edward W. Taylor and Patricia Cranton, 3-20. San Francisco, CA: Jossey-Bass.

Daloz, Laurent. 1986. *Effective Teaching and Mentoring: Realizing the Transformational Power of Adult Learning Experiences*. San Francisco: Jossey-Bass.

Daloz, Laurent. 1999. *Mentor: Guiding the Journey of Adult Learners* (2nd ed.). San Francisco: Jossey-Bass.

Dayson, Chris. 2017. "Evaluating Social Innovations and Their Contributions to Social Value: The Benefits of A 'blended Value' Approach." *Policy & Politics* 45(3): 95–411.

Dirk, John M. 1998. "Transformative Learning Theory in the Practice of Adult Education: An Overview." *PAACE Journal of Lifelong Learning* 7: 1–14.

Dumitru, Adina, Isabel Lemma-Blanco, Iris Kunze, Rene Kemp, Julia Wattmeter, Alex Haseltine, Ricardo García Mira, Linda Zuijderwijk and Stefana Cozan. 2017. "Social learning in social innovation initiatives: learning about systemic relations and strategies for transformative change" (TRANSIT Brief # 4) TRANSIT: EU SSH.2013.3.2-1 Grant agreement no: 613169.

Earl, Sarah, Fred Carden and Fred Smytylo. 2001. *Outcome Mapping: Building Learning and Reflection into Development Programs*. Ottawa: International Development Research Centre.

Eikenberry, Angela M. 2009. "Refusing the Market: A Democratic Discourse For Voluntary And Non-profit Organisations." *Non-Profit and Voluntary Sector Quarterly* 38(4): 582–586.

Emerson, Jed. 2003. "The Blended Value Proposition: Integrating Social and Financial Returns." *California Management Review* 45(4): 35–51.

Evans, Bryan, Richmond, Ted, Shields, John. 2005. "Structuring neoliberal governance: The nonprofit sector, emerging new modes of control and the marketization of service delivery." *Policy and Society* 24(1): 73–97.

Hillgren, Per Anders, Anna Seravalli and Anders Emilson. 2011. "Prototyping and Infrastructuring in Design for Social Innovation." *CoDesign* 7(3-4): 169–183.

English, Leona M. and Catherine J. Irving. 2012. "Women and Transformative Learning." In *Handbook of Transformative Learning: Theory, Research and Practice*, edited by Edward W. Taylor and Patricia Cranton, 245-260. San Francisco, CA: Jossey-Bass.

- Freire, Paulo. 1970. *Pedagogy of the Oppressed*. New York: Seabury Press.
- Gambrell, James A. 2016. "Beyond Personal Transformation: Engaging Students as Agents of Social Change." *Journal of Multicultural Affairs* 1(2): Article 2. Accessed May 2018. <https://scholarworks.sfasu.edu/jma/vol1/iss2/2>
- Habermas, Jurgen. 1971. *Knowledge and Human Interests*. Boston: Beacon Press.
- Habermas, Jurgen. 1984. *The Theory of Communicative Action. Vol. 1: Reason and the Realization of Society*. Boston: Beacon Press, 1981.
- Haraway, Donna. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14(3): 575-599.
- Harlock, Jenny, 2014. "From Outcomes-Based Commissioning to Social Value? Implications for performance managing the third sector." *Third Sector Research Centre (TSRC) Working Paper 123*, Birmingham: TSRC.
- Ichikawa, Fumiko, Hiroshi Tamura and Yoko Akama. 2013. "What research enables: Ethnography by high-school students catalysing transformation of a post-tsunami community." In *Ethnography Praxis in Industry Conference*, edited by David Himmelgreen & Satish Kedia, 225–238. Royal Institute of Great Britain, London: The American Anthropological Association.
- Light, Ann. 2015. "Troubling Futures: can participatory design research provide a constitutive anthropology for the 21st century?" *Interaction Design and Architecture(s) Journal* 26: 81-94.
- Johnson-Bailey, Juanita and Mary Alfred. 2006. "Transformational Teaching and The Practices Of Black Women Adult Educators." *New Directions for Adult and Continuing Education* 109: 49–58.
- Johnson-Bailey, Juanita. 2012. "Positionality And Transformative Learning: A Tale Of Inclusion And Exclusion." In *Handbook of transformative learning: Theory, Research and Practice*, edited by Edward W. Taylor and Patricia Cranton, 260-273. San Francisco, CA: Jossey-Bass.
- Karasti, Helena. 2014. "Infrastructuring in Participatory Design." *Participatory Design Conference Proceedings*, 141–150. Windhoek, Namibia: ACM Digital Library.
- Kegan, Robert. 1994. *In Over Our Heads: The Mental Demands of Modern Life*. Cambridge: Harvard University Press.
- King, Kathleen. P. 2002. "A Journey of Transformation: A Model of Educators' Learning Experiences in Educational Technology." In *Proceedings of the 43rd Annual Adult Education Research Conference*, edited by J. M. Pettit & R. P. Francis, 195–200. <http://www.adulterc.org/Proceedings/2002/papers/King.pdf>

King, Kathleen. P. 2005. *Bringing Transformative Learning to Life*. Malabar, FL: Krieger.

Kuhn, Thomas. 1962. *The Structure of Scientific Revolutions* (1st ed.). Chicago: University of Chicago Press.

Leahy, Martin J. and Sue M. Gilly. 2009. "Learning in the Space between Us." In *Innovations in Transformative Learning: Space, Culture & the Arts*, edited by Beth-Fisher Yoshida, Kathy Dee Geller & Steven A. Shapiro, 23–42. New York: Peter Lang.

Merriam, Sharan B. and M. Carolyn Clark. 1991. *Lifelines: Patterns of Work, Love and Learning in Adulthood*. New York: Basic Books.

Merriam, Sharan B. and Peggy G. Ntseane. 2008. "Transformational Learning in Botswana: How Culture Shapes the Process." *Adult Education Quarterly* 58:183–197.

McHugh, Neil, Stephen Sinclair, Roy J. Michael, Leslie Huckfield and Cam Donaldson. 2013. "Social Impact Bonds: A Wolf in Sheep's Clothing?" *Journal of Poverty and Social Justice* 21(3): 247–257.

Mejiuni, Olutoyin. 2012. "International and community-based transformative learning." In *Handbook of transformative learning: Theory, research and practice*, edited by Edward W Taylor & Patricia Cranton, 304–321. San Francisco: Jossey-Bass.

Mezirow, Jack. 1978. "Perspective Transformation." *Adult Education* 28:100–110.

Mezirow, Jack. 1991. *Transformative Dimensions of Adult Learning*. San Francisco, CA: Jossey-Bass.

Mezirow, Jack. 2000. "Learning to Think Like an Adult." In *Learning As Transformation: Critical Perspectives On A Theory In Progress* edited by Jack Mezirow et al, 3–33. San Francisco, CA: Jossey-Bass.

Mulgan, Geoff. 2014. "Design in Public and Social Innovation: What Works And What Could Work Better." *NESTA*. Accessed August 1 2017. https://www.nesta.org.uk/sites/default/files/design_in_public_and_social_innovation.pdf.

Murray, Robin, Caulier-Grice, Julie, and Mulgan, Geoff. 2010. "The Open Book of Social Innovation." London: Young Foundation, NESTA. Accessed August 1 2017. <https://youngfoundation.org/wp-content/uploads/2012/10/The-Open-Book-of-Social-Innovation.pdf>.

Nerstrom, Norma. 2017. "Transformative Learning: Moving Beyond Theory and Practice." *International Journal of Adult Vocational Education and Technology (IJAVET)* 8. Accessed November 23, 2018. DOI:10.4018/ijavet.2017010104.

Nicholls, Alex. 2009. "We do good things, don't we?": 'Blended Value Accounting' in Social Entrepreneurship." *Accounting, Organizations and Society* 34(6–7): 755–769.

Ntseane, Peggy G. (2012). "Transformative Learning: A Perspective from Africa." *In Handbook of Transformative Learning: Theory, Research and Practice*, edited by Edward W. Taylor & Patricia Cranton, 274-288. San Francisco: Jossey-Bass.

OECD. 2017. *The OECD Handbook for Innovative Learning Environments*. Paris: OECD Publishing. DOI:10.1787/9789264277274-en.

OECD. 2013. *Innovative Learning Environments*. Paris: OECD Publishing. DOI: 10.1787/9789264203488-en.

Patton, Michael Q. 2006. "Evaluation for the Way We Work." *The Nonprofit Quarterly* 13(1):28–33. Accessed August 1, 2018. <http://www.scribd.com/doc/8233067/Michael-Quinn-Patton-Developmental-Evaluation-2006>.

Pope, Susan M. 1996. *Wanting to be something more: Transformation in ethnically diverse working class women through the process of education* (Unpublished doctoral dissertation). Los Angeles: Fielding Institute.

Rivers, Bethany Alden, Alejandro Armellini, Rachel Maxwell, Sue Allen and Chris Durkin. 2015. "Social innovation education: towards a framework for learning design." *Higher Education, Skills and Work-Based Learning* 5(4): 383–400. Accessed August 1, 2018. DOI:10.1108/HESWBL-04-2015-0026.

Suchman, Lucy. 2002. "Located accountabilities in technology production." *Scandinavian Journal of Information Systems* 12:91-105.

Shapiro, Steven A. 2009. "Creating Space for Transformative Learning" in *Innovations in Transformative Learning: Space, Culture, & the Arts*, edited by Beth Fisher-Yoshida, Kathy Dee Geller, Steven A. Schapiro, 112-114. New York: Peter Lang Publishing.

Taylor, Edward. W. 2000. "Analyzing Research on Transformational Learning Theory" in *Learning as Transformation* by Jack Mezirow & Associates, 285-328. San Francisco: Jossey-Bass.

Taylor, Edward. W. 2007. "An update of transformative learning theory: A critical review of the empirical research (1999–2005)." *International Journal of Lifelong Education* 26(2): 173-191.

The Young Foundation. 2012. *Social Innovation Overview: A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe"* (TEPSIE), European Commission – 7th Framework Programme, Brussels: European Commission, DG Research.

Transformative Learning Centre. 2016. "The Transformative Learning Centre." Accessed August 2017. https://www.oise.utoronto.ca/tlcca/About_The_TLC.html.

Welton, Michael. R. (ed.). 1995. *In Defense of the Lifeworld*. Albany: SUNY Press

Wenger, Etienne. 1998. *Communities of Practice: Learning, Meaning, and Identity*. Cambridge, UK: Cambridge University Press.

Yee, Joyce, Emma Jefferies and Kamil Michlewski. 2017. *Transformations: 7 Roles to Drive Change By Design*. Amsterdam: BIS.