

# Positioning Service Design as Transformational Approach in Education for Sustainable Development (ESD)

*Ksenija Kuzmina, Tracy Bhamra*

*k.kuzmina@lboro.ac.uk*

*Loughborough Design School, Loughborough University, Loughborough, UK*

## Abstract

Through the review of literature, as part of a PhD research undertaken at Loughborough University, a relationship between Service Design and Education for Sustainable Development (ESD) has been identified. It positions Service Design and its participatory design methodology as an integral change agent within this context. A lack of literature defining such theoretical positioning means that service designers do not have a defined space to operate within nor do they have a view of a broad impact that their action can have. This paper presents findings from the literature review that positions Service Design as a transformative change approach in the context of ESD.

**KEYWORDS:** transformative change process, education for sustainable development

## Introduction

In recent years, service designers have been expanding from working on the periphery of service organisations to working on the deeper level, where they help to develop alternative service concepts and models outside and within organisations (Cottam & Leadbeater, 2004). Using participatory approaches at the deeper level service designers are able to engage with ‘transformational change’ helping services to develop and implement new concepts and service visions (Sangiorgi, 2011).

One of the areas in the public sector that is currently undergoing a shift but has seen minimum engagement from service designers is education. In the last decade education has been experiencing change towards sustainable development, as indicated by UN Decade of Education for Sustainable Development (2005-2014). The vision for change has been set out globally and presupposes transformational shift in thinking, values, teaching and learning processes. However, change in the system has been very slow and incomplete.

During the research a literature review has been conducted in an iterative manner to closely examine how such a vision has been implemented in England, in particular within the primary education sector. Findings from general, secondary and primary sources suggest the mismatch between the depth at which change needs to happen and the processes by which such change is currently being realised. In particular they highlight an existing need for a participatory, outside in approach that will encourage a transformational change at an organisational level. A literature review on Service Design has been also undertaken to develop a better understanding of the area as a new approach to ESD.

This paper presents these findings. In particular it defines a shift in education towards ESD as an opportunity for using Service Design approach at the transformational level. In doing so it outlines the new problem space and identifies service designers as agents of transformational change.

## Service Design and Transformational Change

The influence of Service Design within service development has been expanding, from improving service offering at the periphery of the organisations to re-defining models of public services from within the organisation as a response to the increasing complex issues of economic, social and environmental nature (Mulgan & Albury, 2003). Junginger & Sangiorgi (2009) developed an 'orienting framework' to show that the level that service designers work within an organisation correlates with the intended depth of change in the service. If the change does not question the assumptions of the organisation then service designers are likely to work on the periphery of it (ibid). However, if a new concept requires organisational transformation, then service designers will work with the fundamental assumptions of the members of an organisation at the transformational change level. The transformational level is the deepest level of change and it is usually embedded in social systems where the aim is to achieve a vision of change, which is of value to all participants of the system and therefore is realisable (Pedersen & Buur, 2000).

Working at different levels, results in service designers using a variety of Service Design methods (Junginger & Sangiorgi, 2009). At the transformational level, Service Design process can be highly participatory. It also draws on User-Centred Design (UCD) and Human-Centred Design (HCD), co-design and participatory design methods and tools to involve stakeholders in the design process of inquiry and action (Steen, 2011).

Service designers therefore have a capability to be transformational change agents within organisations. This usually takes place when service designers work on issues of public sector and wellbeing (Sangiorgi, 2011). For example, cases can be found within the areas of local governments, local communities and healthcare (Cottam & Leadbeater, 2004).

## ESD as new vision for Education

In the context of unsustainable development the need to reorient formal education towards ESD prevails on an international level (Mulà & Tilbury, 2011). The vision is driven by ecological systemic thinking and focuses on new values, ways of knowing, teaching and learning. Theory suggests that the change in how we know will change society to interact with the world in a more sustainable way. In particular, how people know needs to be

extended to include knowing by intuition or through experience and participation (Heron and Reason, 1997). The new type of knowing requires new educational methodology that considers the 'whole person'. This means engaging the learner with one's context and environment where the learner is involved in discourses and practices that are real-life and attending to the complex environmental, social and economic issues (Vare & Scott, 2007).

## ESD as new vision for English Education

While ESD has been defined on a global scale, each country defines what ESD means within its own context. In England, within the context of the primary education, some common characteristics of ESD have been emerging:

- » ESD is unique to an educational institution and needs to happen across the whole institution (Reed, 2009). Change occurs across all elements of organisation (culture, ethos, leadership, and curriculum);
- » Pupils, staff and the organisation value sustainability and express this value in an active engagement in the ongoing development process (Sterling, 2011);
- » Leadership is set between personal authority and distributed leadership (including pupils, staff and community) (Reed, 2009).

Therefore the new vision of ESD in primary education institutions in the UK may be summarised as: *the change in the pedagogy integrated with deep change in organisation*. Change in pedagogy means change in how the user, pupil, is being engaged in a learning process. This shift needs to be integrated with the change in a whole organisation (including students and other school stakeholders) that occurs on a transformational level attending to individuals' and organisational values and vision for sustainable future.

## Implementing new vision in English primary education system

The relationship between the outcome and the process of change suggests that identifying what the change might be clarifies the particular of the change process (Van de Ven & Poole, 1995). The change process towards ESD should seek to support all of the elements of the abovementioned ESD vision. This means the change process needs to be participatory, user and human-centred, focusing on changing individuals as well as organisations. A closer look at the change processes undertaken by the government and NGOs up to date suggests that they do not fully facilitate change as defined by ESD vision, which may explain the slow and incomplete shift towards ESD.

## ESD and Change Processes in English Educational System

To better understand change in the English primary education system it should be recognised that change within social systems may happen in different ways: rational – empirical, power-coercive and normative re-educative (Kennedy, 1987). The first two strategies occur in one-direction, either those in power forcing others to change or the information is provided to the people who need to act on it based on rational decision making. Change in the third strategy is discovered, developed and adopted collaboratively with participation from all those affected by change, making a decision on its degree and manner (ibid.). Main strategies for this change are collaborative problem solving, redesign

and restructuring of the social system, and personal growth and development of system members.

The review of strategies in England applied to create a shift in primary education towards ESD reveals the first two strategies to be given priority. The English government focused on power-coercive strategies as it developed a Sustainable Development Action Plan for the schools to follow (SDC, 2005) and updated formal curricula to include sustainable development as one of cross-curriculum dimension (ibid). The motivation for schools to comply with such top-down change strategy would come from the interest of each school to be recognised as an effective educational service provider or take a chance of being deemed a 'poor' service provider and therefore run a risk of being closed down. Yet, the government did not use sanctions to implement this change, and therefore schools felt no urgency and lack of organisational motivation to undergo a shift.

The rational empirical approach based on 'best practice' applied by NGO's has seen some success (Wals, 2009). Yet it has also been demonstrated that most change is carried out by few individuals within a school, rather than the whole school and is limited to NGO's fixed value rather than developed based on the needs of the individual school (ibid). Normative re-educative strategy was found to have least evidence in literature yet its description with a focus on participatory processes suggest that it is the type of strategy that would most likely lead to the development of the abovementioned characteristics of ESD in English educational institutions.

In recent years there is some work is beginning to take shape that may be said to be in accordance with this strategy. This research identified three tools, 'Pathways' (WWF-UK, 2011), Sustainable School Self-evaluation (S3) (DCSF, 2006), and Leading for the Future (LfF) (Blair, 2011) developed by WWF-UK for this purpose. These are participatory action research tools that seek to help schools and individuals to engage in normative re-educative change process towards ESD. 'Pathways' and S3 are practical guides to sustainable development, aim to help schools to "plan, monitor and evaluate [their] action" (WWF-UK, 2011: 5). Whereas LfF focuses on stimulating deep reflection about self and values in school leaders outside of the usual environment in 'hosted spaces' (Blair, 2011).

Although there is no known evaluation of these tools being used, close examination undertaken during this research shows that there are limitations within their individual designs in relation to the intended change as defined above. A review of the tools shows that no tool considers all the necessary elements for ESD change to take place within a school. Only one tool (ex. Pathways) considers the holistic *process of collaborative problem solving*, whereas the other two (S3 and LfF) focus on one or two stages within it. None of the tools support the change process *where norms and values of both individuals and organisation* are considered together focusing either on one (ex. LfF) or the other (ex. Pathways). In addition, these tools do not support participation or the voice of all school stakeholders, favouring change process to be led by some individuals rather than the whole school. As noted in *Pathways* tools "your pupils will probably not be involved in the *Pathways* activities" (WWF-UK, 2011, p. 5). These tools, whilst developed directly at service providers, do not allow them explicitly define student's voice, relying on the change process to incorporate students' voice implicitly. It may be suggested that engaging with these tools may lead to the change process that is incomplete or continues to stay on the 'periphery'.

Lastly, these tools also presuppose that schools will initiate and drive change towards ESD voluntarily. However, recent research by Snell and Brooks-Wilson (2012) concluded that

schools that have taken limited action towards ESD up to date will not be inclined to initiate change on their own due to diverted interest from the government. At the same time, it has also been recognised that in the face of the sustainability crisis, the need to create such change is urgent and therefore requires processes of facilitation and enabling (Tilbury, 2011). The absence of tools and practices that will facilitate normative re-educative change process from the outside-in, as this paper suggests, may be an opportunity for Service Design.

## Discussion

The review outlined above considered current strategies and tools used to help schools to move towards ESD and concluded that an alternative approach, which has characteristics of normative re-educative change but is also facilitated from the outside-in, is needed. Service Design is an outside-in approach that enables change, and its tools and methods support the participatory and collaborative strategies that are integral to normative re-educative approach.

The problem space identified in this paper presents an opportunity for Service Design as a novel approach to ESD. As noted above, service designers have been working in defining new models and configurations of public services such as contributing to the shift in NHS from 'provider-centred' to 'patient-centred'. ESD vision requires a change in educational service from current state to a more collaborative, participatory and value driven model that aims to fundamentally change user experience. This vision is transformational and therefore aligns with the type of problems that Service Design has experience working with.

In addition, Sangiorgi (2011) has brought attention to the topic of Service Design and transformational change in what the author calls 'transformative design'. In this space service designers work with principles such as 're-distributing power' and creating 'active citizens' (ibid). These principles closely relate to the end goal of ESD such as distributed leadership and participation of students and staff with regards to sustainability issues. This correlation between principles and outcomes further shows the appropriateness of the Service Design approach in this problem space. ESD vision needs a supportive change strategy, and this paper presents Service Design as an alternative approach to the abovementioned normative re-educative tools.

## Conclusion

This paper positions Service Design as transformational change approach in the context of ESD. Unlike some of the tools reviewed in the previous section, Service Design supports a holistic, collaborative problem solving process of inquiry and action and the tools and methods that are fundamental to Service Design are based on principles of user-centeredness, human-centeredness and systemic thinking. This means Service Design is a process that can support a shift in values, vision, and participation at the level of a whole organisation which includes participation and voice of the main user. This potentially closes the gap in a change process as defined in the previous sections.

However, for service designers to engage with the change process an understanding of system's elements it seeks to design or redesign is needed (Steen et. al, 2011). This gap in

knowledge has been identified due to lack of literature within Service Design on the subject, which is one of the areas where future work of this research seeks to contribute.

## References

- Blair, F. (2011). *Leading for the Future*. Retrieved 3.09.2013 from [http://www.academia.edu/1475159/Leading\\_for\\_the\\_future](http://www.academia.edu/1475159/Leading_for_the_future)
- Cottam, H & Leadbeater C. (2004). *HEALTH: Co-creating Services*. London: Design Council.
- DCSF (2006). *S3: Sustainable School Self-Evaluation*. Retrieved 3.09.2013 from [http://www.haringey.gov.uk/s3\\_self-evaluation.pdf](http://www.haringey.gov.uk/s3_self-evaluation.pdf)
- Heron, J. & Reason, P. (1997). A Participatory Inquiry Paradigm. *Qualitative Inquiry*, 3(3), 274-294.
- Junginger, S. & Sangiorgi, D. (2009). *Service Design and organisational change: bridging the gap between rigour and relevance*. Paper presented at IASDR09 conference, Seoul, South Korea.
- Kennedy, C. (1987). Innovating for a change: teacher development and innovation. *ELT Journal*, 41(3), 163-70.
- Mulà, I. & Tilbury, D. (2011). (Eds.) *National Journeys towards Education for Sustainable Development*, Paris: UNESCO.
- Pedersen, J. & Buur, J. (2000). Games and moves: towards innovative co-design with users. *Proceedings of CoDesigning Conference*. London: Springer.
- Reed, J. (2009). *Education for Sustainable Development: A comparison between two eco-schools, one in England and the other in South Africa*. Ph.D. Thesis. Manchester Metropolitan University, UK.
- Sangiorgi, D. (2011). Transformative Services and Transformation Design, *International Journal of Design*, 5(2), 29-40.
- Steen, M., Manschot M., De Konling, N. (2011). Benefits of co-design in Service Design projects, *International Journal of Design*. 5(2), 53-60.
- Sterling, S. (2011). Learning for resilience, or the resilient learner?: towards a necessary reconciliation in a paradigm of sustainable education. In Krasny, M. Lundholm, C. & Plummer, R. (Eds.) *Resilience in Social-Ecological Systems: The Role of Learning and Education* (pp. 511-528), London: Routledge
- Sustainable Development Commission (2005). *Areas of SDC contribution to the Department for Education and Skills*. Retrieved 07.07.2013 from <http://www.sd-commission.org.uk/data/files/publications/050610Areas%20of%20SDC%20Contribution%20to%20the%20Department%20for.pdf>
- Tilbury, D. (2011). *Education for Sustainable Development: An Expert Review of Processes and Learning*. In UNESCO DESD Publication. Retrieved 3.09.2013 from <http://insight.glos.ac.uk/sustainability/iris/Documents/Expert%20Review%20of%20processes%20and%20learning%20for%20ESD.pdf>
- Van de Ven, A.H & Poole, M.S., (1995). Explaining development and change in organizations. *Academy of Management Review*, 20(3), 510-540.
- Vare, P. & Scott, W. (2007). Learning for a change: exploring the relationship between education and sustainable development. *Journal of Education for Sustainable Development*, 1(2), 191-198.
- Wals, A. (Ed.) (2009). *Review of Contexts and Structures for Education for Sustainable Development 2009 (DESD, 2005-2014)*, Paris: UNESCO. Retrieved 2.10.2013 from <http://unesdoc.unesco.org/images/0018/001849/184944e.pdf>
- WWF-UK (2011). *Pathways: to education for sustainable development*. Retrieved 5.08.2013 from [http://assets.wwf.org.uk/downloads/pathways\\_2011.pdf](http://assets.wwf.org.uk/downloads/pathways_2011.pdf)