# Faculty of Education



# Research in Action

Measuring What's Valuable or Valuing What's Measurable: Monitoring and Evaluation in Education for Sustainable Development and Global Citizenship

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Measuring What's Valuable or Valuing What's Measurable: Monitoring and Evaluation in Education for Sustainable Development and Global Citizenship

Special Issue | June 2017

## Editor

**Associate Professor Philip Bamber**

# Contents

# Research Summaries

# Reviews and Events

# Call for Papers

# Editorial

## Research in Action

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# Editorial

# Measuring What's Valuable or Valuing What's Measurable?

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For author biography see the end of the editorial.

Success in education is increasingly conveyed and understood numerically. Here in England, Progress 8 measures the value added between Key Stage 2 and Key Stage 4, and teachers' annual appraisals involve analysis of pupil performance in standardised assessments. We instinctively relay educational achievements in our own personal and professional lives in terms of quantifiable measures: the grading from an institutional inspection; the number of students who pass a certain threshold; the mark awarded to a piece of coursework. Such 'learning metrics' are so embedded in how we understand educational success that we have become immune to the absurdities they enact: the provision of Free School Meals has recently been justified using evidence that shows that such meals improve outcomes in literacy and numeracy, rather than simply that they feed children who are hungry.

Assessment is potentially a constructive and powerful tool, but we must first carefully consider its function and purpose. Well-chosen indicators from national, and even international, surveys can be compelling drivers for change. However, we must learn to anticipate the unintended consequences of deploying particular measures: the laser-sharp focus on outcomes in numeracy and literacy that seek to 'level the playing field' has led to the narrowing of curricula, particularly in schools 'catching up' in the core areas. Attempts to make educational phenomena and processes explicit can easily become overdetermined by metrics that become perverse ends in themselves. Indeed, Hannah Arendt called upon educators not to predict the needs of the future and so inhibit what cannot be foreseen. From this alternative view, 'not looking' for learning becomes a strength. Educators should instead prepare their students 'in advance for the task of renewing a common world' (1977: 177): 'Our hope always hangs on the new which every generation brings; but precisely because we can base our hope only on this, we destroy everything if we so try to control the new that we, the old, can dictate how it will look'(Arendt, 1977: 192).

Our preoccupation with easily-measured short-term outcomes, rather than longer-term changes in behaviour, values, attitudes and practices presents a threat to education in general and, arguably, to Education for Sustainable Development and Global Citizenship (ESD/GC), in particular. There are outcomes from education, such as values and attitudes that are less straightforward to understand and describe than exam results and league table positions. Attempts to separate the outcomes from the processes of education can be unhelpful, reminding us that the educational journey is as important as the destination. Indeed, 'measurable outcomes may be the least significant results of learning' (McNeil, 1986: xviii).

This Special Issue, 'Measuring What's Valuable or Valuing What's Measurable?' investigates how much we really value, as educators, that which we can easily measure. Drawing upon the particular context of ESD/GC in teacher education, it explores the role of values in teacher education and the ways in which these too can be monitored and evaluated.

International efforts to improve education have recently moved beyond 'values-neutral' goals such as universal 'access to education'. The 2015 World Education Forum concluded that 'quality education' is characterised by 'the skills, values and attitudes that enable citizens to lead healthy and fulfilled lives, make informed decisions, and respond to local and global challenges' (UNESCO, 2015). The subsequent Sustainable Development Goals (SDGs) clearly demand collaboration among educators internationally to better understand how education as a public good can more effectively nurture peace, tolerance, sustainable livelihoods and human fulfilment for all. Of particular concern to this Special Issue, SDG 4.7 and the associated indicators of success (UNESCO, 2016: 287) seek to mainstream ESD/GC renewing attention on the role of teacher education.

Some object to the idea that the educator's role is to mould certain kinds of people according to the values and attitudes of the educator. Nevertheless, education in general, and ESD/GC in particular, is deeply value-laden and, whether consciously or unconsciously, values underpin practice. While educators may wish to avoid being accused of dogmatism or bias, 'the sobering reality is that all teachers are indoctrinators for a doctrine' is a 'teaching' and to 'indoctrinate' is to lead others into that 'teaching'' (Pike, 2011: 184). It is therefore particularly important for teachers to acknowledge the values that inform their teaching.

A recent call for developing a research-based approach to teacher education for ESD/GC highlighted how little is known about teachers' values within ESD/GC (Scheunpflug, 2011). This is particularly surprising since teachers' having 'the value base to be able to interpret the impact of the global society on the learner' (Bourn, 2015) has been identified as an established strength of global education practice. Given that values and attitudes play a significant role in translating aspirations into practice, they must become a focus for research and evaluation in this field.

This Special Issue makes an important contribution in this respect. It is also particularly timely as the 2018 Programme for International Student Assessment (PISA) will include measurement of global competence: an assessment of 15 year olds' awareness of the interconnected global world we live and work in and their ability to deal effectively with the resulting demands. PISA assesses students in formal education of a particular age and its findings are further qualified by the usual concerns about international testing methodologies. The introduction of an international measure in 'global competence' may seduce ESD/GC advocates who wish to raise the profile of the field. Once established, attention and resources worldwide will be directed towards improving performance in such measures. Nevertheless, the complexity of approaches to global issues and the associated values required of young people ensure such global metrics over-simplify. We must therefore pursue alternative methods of evaluation and indicators of success. A particular challenge is to develop evaluations of ESD/GC interventions that are consistent with the values of ESD/GC itself. For instance, the monitoring process should involve multiple stakeholder participation. This is an area where 'there is only recent and limited experience of assessing progress through ESD indicators' (Tilbury, 2007: 253).

This Special Issue comprises papers presented at the ninth annual Teacher Education for Equity and Sustainability Network (TEESNet) conference at Liverpool Hope University in 2016. TEESNet, hosted by Liverpool World Centre in collaboration with Liverpool Hope University, aims to share research and practice to develop new understanding of ESD/GC within teacher education across the sector in the UK and beyond. The conference, titled 'Measuring What's Valuable or Valuing What's Measurable?', explored opportunities and challenges in monitoring and evaluating education that support people in leading fulfilling lives in a fast-changing, globalised world. It built upon the successful 2015 conference (see Bamber and Bullivant, 2016) which included a plenary discussion of DEEEP's report on 'Monitoring Education for Global Citizenship' (Fricke and Gathercole, 2015) and provided a forum to debate the introduction of PISA's assessment of global competency. In considering how we can measure what is of value, the 2016 TEESNet conference also provided an opportunity to explore the values and beliefs underpinning education policy and practice for ESD/GCED at the local, national, regional and international levels.

TEESNet promotes a cross-sector community of practice, and we were delighted that delegates at the 2016 conference included teacher educators in universities and schools, educators in NGOs, researchers, policy makers, classroom practitioners and those engaged in informal educational settings. The desire for TEESnet to connect research, policy and practice was reflected in the keynote presentations and workshops. Professor Annette Scheunpflug from the University of Bamberg in Germany explored perspectives from theory and research. She argued that our starting point must be to interrogate the

function and purpose of measuring 'competencies'. Arguing that global learning is fundamentally concerned with nurturing values, she called for closer attention to the less immediate outcomes of education.

Michael Stevenson, Senior Advisor for PISA at the Organisation for Economic Co-operation and Development (OECD) shared progress in developing the new approach to assessing young people's understanding of global issues and attitudes towards cultural diversity, to be included in the 2018 PISA. This was followed by a lively question and answer session about the complexity of constructing this new international measure of 'global competence'. Stevenson acknowledged that the trial sample questions did misleadingly foreground notions of 'inter-cultural competence'. It will be interesting to see whether this indicator of 'Global Competence' will retain this title when the survey is finalised in the coming months.

These keynote presentations were complemented by workshops carefully selected to provide opportunities to relate the discussion of research and policy to practice. Alia Al Zougbi from the Humanities Education Centre, Tower Hamlets, London provided an overview of alternative methodologies for tracking change using data from teachers and their pupils across the UK and Europe. Alia drew upon her experience of devising and delivering the 'How Do We Know It's Working?' toolkit (RISC, 2016), which provides practical classroom tools for measuring attitudinal change. Vikki Pendry from the Curriculum Foundation led an interactive workshop for those interested in curriculum design and reform. This explored the characteristics of a quality curriculum based on effective, creative learning that is fit for the 21st Century.

This Special Issue includes articles from the paper sessions that also took place at the conference. Zoi Nikiforidou et al. examine value formation early in life as the foundation for a healthier, more equitable and sustainable world. Drawing upon evidence from cross-cultural ESD projects in Kenya and England, they review the Environmental Rating Scale for ERS-SDECas a research / self-assessment tool for practitioners. The authors, all members of the World Organisation for Early Childhood (OMEP), highlight ways in which the scale provides a shared language for rating and celebrating ESD work in early childhood settings. The example of contrasting value placed upon elephant conservation in Kenya and England justifies concerns about Western-centric metrics being adopted on an international scale. While highlighting the strength of assessment tools to provide a shared language for discussion, they conclude with a note of caution regarding their use within a culture of managerialism.

The formative potential of assessment tools to guide discussion is reiterated by Angela Daly from Liverpool John Moores University and Julie Brown from the NGO, Practical Action. Their paper reports upon monitoring and evaluation

in a three-year EU-funded project, 'Technology Challenging Poverty', on global learning in Science, Technology, Engineering and Mathematics curriculum. Working with partners from across the UK, Cyprus, Italy and Poland they identify the importance of 'spaces for learning', both planned and serendipitous, within monitoring and evaluation processes. In the context of an NGO sector experiencing significant pressure to demonstrate effectiveness, efficiency and impact within time-bound activity, they highlight the importance of capturing unexpected outcomes and argue for a more central role for participatory learning spaces throughout such a project. This may incorporate, for example, mixed evaluation methods, participatory action research and public engagement. Such an approach may indeed serve to cultivate a more meaningful relationship between monitoring and evaluation, research, policy and practice.

Alison Huntley and Adam Ranson from Leeds Development Education Centre report on an EU-funded project, 'World Class Teaching', which included partners from the UK, Poland, Austria and Slovakia. Their paper is based upon a critical practitioner enquiry that developed critical reflection tools for students and teachers to explore their values and attitudes. They reiterate the importance of questioning what we wish to achieve when teaching ESD/GC. Challenging a reluctance among educators to influence attitudes and values, they call for further professional development for practitioners to better understand the attitudes and emotions that must underpin ESD/GC.

For Katie Carr, Cumbria Development Education Centre, and Leander Bindewald, University of Cumbria, reflection and thinking that is 'critical' must focus on understanding power relations, domination and resistance. Drawing upon a diverse range of sources, including the novella 'The Little Prince', they introduce critical discourse analysis as a methodology to challenge our preoccupation with quantitative measures within education. They argue that critical thinking and dialogic learning must underpin ESD/GC research and practice in order to resist and subvert the dominant discourse. Pedagogies such as Philosophy for Children (see book review in this Special Issue) and Open Spaces for Dialogue and Enquiry present opportunities for practitioners to realise these goals.

The papers from Stephen Scoffham, Canterbury Christ Church University, and Alison Clark, independent consultant, focus on the role of value formation among teachers and teacher educators. Clark highlights the complexity of the process whereby particular values are explored and lived out in educational settings. Her case study of a school whose ethos is underpinned by the five core values of respect, co-operation, compassion, honorable purpose and stewardship illustrates the importance of 'acting out' these values in the governance, systems and relationships of school life. While asserting that the curriculum must move from the cognitive to the affective, she concludes that educators need the time and space to reflect upon and identify the values that are meaningful to them.

This is the starting point for Stephen Scoffham's work, which investigates how teacher educators in a university setting foreground values and deeply held principles in their everyday work. Through a participatory process, the five themes of community, respect, knowledge, evidence and innovation emerged as being particularly useful and relevant to different aspects of teacher education in that university, including work in ESD/GC. Scoffham echoes Clark in concluding that values provide an essential moral compass for ESD/GC that must be continually re-assessed and re-affirmed.

## BIOGRAPHY

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# References

Arendt, H. (1977) *Between Past and Future*. New York: Penguin.

Bamber, P and Bullivant, A. (eds) (2016) F*rom Curriculum Makers to World Shapers:Building Capacities of Educators for a Just and Sustainable World Teacher Education for Equity and Sustainability Network 2015 Conference Proceedings*. Liverpool, Liverpool Hope University Press.

Bourn, D. (2015) *The Theory and Practice of Development Education*. Abingdon, Routledge.

Fricke, H.J and Gathercole, C. (2015) *Monitoring Education for Global Citizenship.* Brussels: DEEEP. Available at: http://library.deeep.org/record/1021/files/DEEEP-GUIDE-2015-004.pdf Accessed 8th May 2017

McNeil, L. (1986) *Contradictions of control: School structure and school knowledge*. New York: Routledge & Kegan.

Pike, M.A. (2011) Ethics and citizenship education. In J. Arthur (ed.), *Debates in Citizenship Education*. London: Routledge, 181-193.

Reading International Solidarity Centre (2016) *How Do We Know It's Working*? *A toolkit for measuring attitudinal change*. Reading:. RISC. Available at: http://toolkit.risc.org.uk/ Accessed 8th May 2017

Scheunpflug, A. (2011) Global education and cross-cultural learning: A challenge for a research-based approach to international teacher education, *International Journal of Development Education and Global Learning*, 3 (3): 29-44.

Tilbury, D. (2007) Monitoring and Evaluation during the UN Decade of Education for Sustainable Development. *Journal of Education for Sustainable Development* 1:2 (2007): 239–254.

United National Educational, Scientific and Cultural Organisation (2015) Incheon Declaration. Paris: UNESCO. Available at: https://en.unesco.org/world-education-forum-2015/incheon-declaration Accessed 8th May 2017

United National Educational, Scientific and Cultural Organisation (2016) Global Education Monitoring Report: Education for people and planet. Available at: http://en.unesco.org/gem-report/ Accessed 8th May 2017

# What we are Researching
## Research in Action

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# Rating education for sustainable development in the early years: A necessity or a challenge?

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## INTRODUCTION

In recent years there has been increasing interest in addressing Education for Sustainability (ESD) and Global Citizenship (GC) in the early years of education. Policy-makers, researchers and educationalists agree that the sooner children gain knowledge and develop values relating to ecology, economy and society the more prepared they are as citizens of today working towards a sustainable future. As such, in educational contexts there has been an attempt to embed ESD in a more explicit way. The aim of this paper is to contribute to the debate about the role and necessity of measuring ESD/GC in early childhood. In 2013 OMEP proposed the Environmental Rating Scale for Sustainable Development in Early Childhood (ERS-SDEC) as an instrument used for research or for curriculum assessment and development purposes by being implemented in multiple contexts; in one classroom, across classrooms or even across a whole local authority. Examples of cross-cultural ESD projects in England and Kenya are presented. Two entirely different settings, Cranborne Pre-school in Dorset and Ng'ondu in Kenya, used the ERS-SDEC scale as a means to integrate ESD into their educational practices. The first project named 'Matarajio' (Swahili for hope/expectations) highlighted two important Sustainable Development goals; Goal 5 'Achieve gender equality and empower all women and girls' and Goal 15 'Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss'. The second project, the W.A.S.H. UNICEF project related to goal 6: 'Ensure access to water and sanitation for all'. Findings and discussion show how children and staff engaged in experiential learning for ESD by unpicking and considering diverse aspects of the same themes and sustainable development goals. The implications and future learning on monitoring and evaluating ESD in early childhood are assessed.

# ESD/GC IN EARLY YEARS

ESD provides a vision of education that seeks to balance human and economic well-being with socio-cultural traditions and respect for the environment. As a matter of fact, according to UNESCO (2014) 'there is now a growing international recognition of ESD as an integral element of quality education and a key enabler for sustainable development' (9). ESD covers the three interdependent pillars of sustainability: environmental and ecological concerns, social and cultural implications and economic aspects (Brundtland, 1987) and over the last decade there has been increased interest in exploring why and how ESD could be enhanced more explicitly from early childhood (e.g. Pramling Samuelsson, 2011; Davis and Elliott, 2014; Davis, 2015). Setting values, attitudes and awareness from early in life sets the foundation of citizens who learn to care about a healthier, more equitable, more sustainable world. Indeed, investing in early childhood and building a sustainable society are strongly interconnected.

Early childhood education for sustainability has, traditionally, been related to environmental education. However, it is more than that, as it covers principles and practices related to ecology, economy and equity. ESD offers opportunities for transformative learning *in, about* and *for* the environment (Davis, 2009). This later aspect, underlined by Davis, indicates a strong sense of enabling children to become active agents in addressing sustainability issues. From this perspective, ESD should be about encouraging children to solve problems, to think and act, to be empowered in familiarising themselves, appreciating and making decisions, if necessary, on sustainability matters (Siraj-Blatchford et al, 2010). ESD has a humanistic approach. It encompasses an understanding of people, culture and diversity in 'ways of being, relating, behaving, believing, and acting differently' (Pressoir, 2008: 60).

However, ESD has various iterations and meanings and there is no one way to define or apply ESD in educational contexts. ESD might be interpreted or prioritised in different ways amongst diverse regional, national and international cultural contexts. Davis and Elliot (2014) state that ESD is a 'co-evolution of social and biophysical systems played out in responsive and responsible relationships. The challenge is to translate these ideas into early childhood educational praxis' (13). As such, there are barriers and fragmentation (UNESCO, 2009: 65) in implementing ESD in early childhood and attention is directed in harmonising these tensions by underlining the value of ESD.

One such attempt can be found in the initiative to develop rating scales or measurements of ESD in Early Childhood settings. The benefits of setting ESD/DG goals or indicators can allow for opportunities to ensure equity and parity in children's learning experiences; to see what is effective (what works) and what is not; to share good practice and perhaps apply it to different contexts; to make more explicit how aspects of ESD/GC can be embedded in the curriculum; to set benchmarks, which leaders, stakeholders, parents, learners and teachers can understand (Shaeffer, 2013) and, as such, to promote common understanding. Having a rating scale sets some common ground in exploring ESD among diverse Early Childhood settings.

▶ **Key Point**

The benefits of ESD/GC indicators include to:
- see what is effective and what is not
- ensure equity in learning experiences
- share good practice across different contexts
- set benchmarks
- promote common understanding

Specifically, OMEP developed in 2013 the ERS-SDEC (Environmental Rating Scale for Sustainable Development in Early Childhood). This scale is based on the same rating procedures as previous rating scales, namely: Early Childhood Environment Rating Scale - Revised (ECERS-R) (Harms, Clifford and Cryer, 1998) and - Extension (ECERS-E) (Sylva, Siraj-Blatchford, and Taggart, 2003). It has a user handbook and has been translated into nine languages. It can be used as a research tool but also as a self-assessment tool for practitioners (http://www. worldomep.org/wp-content/uploads/2013/12/ERS-SDEC_English.pdf).

▶ **Key Point**

The ERS-SDEC can support practitioners to audit their ESD curriculum and set curriculum development priorities.

Based on observations and data collection from other sources (e.g. interviews with staff-children-parents, documents-records-displays) it covers aspects related to i. Social and Cultural Sustainability (Global Social Justice), ii. Economic Sustainability (Equality) and iii. Environmental Sustainability. The ERS-SDEC scale measures from 1 to 7 with 1 = inadequate, 3 = minimal 5 = good and 7 = excellent and it applies to contexts and settings that host children aged 2 ½ - 7 yrs. It may be applied by individual or groups of practitioners to audit their education for sustainable development curriculum, and to help practitioners and preschool centre managers in setting curriculum development priorities. For example, under Social and Cultural Sustainability indicator 2, at an inadequate level (=1) would be: '1.2 No policy statement exists regarding the importance and value of social and cultural diversity in the setting', whereas the same indicator at an excellent level (=7) would be: '7.2 Children explore and investigate unfamiliar social and cultural contexts'.

In this direction, the aim of this paper is to draw upon projects on ESD in UK and Kenya over three years. The purpose is to explore how similar thematic projects with the same sustainable development goals are applied in diverse socio-cultural contexts. Sustainable development goals 5, 15 and 6 and the broader framework of ERS-SDEC, are used cross-culturally in providing insights on measuring ESD.

## APPLICATION OF ESD IN TWO DIFFERENT CONTEXTS: CRANBORNE PRE-SCHOOL IN DORSET AND NG'ONDU IN KENYA.

Cranborne PreSchool in Dorset UK and N'gondu pre-school in Kenya were part of a partnership that was developed as a World OMEP pilot project in 2012. The UK/Kenya OMEP partnership has been promoting ESDprojects that empower the pre-school child through a play-based approach, between the two countries. Two overarching projects are presented in relation to the UN Sustainable Development Goals (5, 15, 6) and environmental practices framing the ERS-SDEC. Precisely, the Matarijio project highlighted the work and life of a famous Nobel Peace Prize winner Wangari Maathai who founded the Green Belt Movement (UN Sustainable Development Goals 5, 15) and the UNICEF W.A.S.H project emphasised aspects of the water cycle (UN Sustainable Development Goals 6). Both projects took place in the preschools in Dorset and Kenya and tackled aspects of the three core pillars of economic, cultural/social and environmental and the ERS-SDEC.

### Goal 5: Achieve gender equality and empower all women and girls (Matarijio project)

The children at both Cranborne and N'gondu learnt about gender equality and empowerment through socio-dramatic play by the promotion of positive female role models. The UK children dressed up as Doctors, Firefighters and Scientists and played in a set-up 'hospital' and this was replicated (using the same clothes) in Kenya. The children watched each other on videos and looked at photographs which helped them associate themselves with children from another part of the world, enabling them to become aware of children in another social/cultural context. These were repeated in the UK with other children in order to continue the learning cycle through the EYFS. These activities are judged to link to the ERS-SDEC indicators for Social and Cultural Sustainability (Global Social Justice): 7.1 The children share their ideas and knowledge of their own and others' cultures in group sharing times and are able to speak openly about diversity; 7.2 - Children explore and investigate unfamiliar social and cultural contexts; and 5.3 - Children participate in activities that cross stereotypical gender, racial, ethnic and tribal boundaries (e.g. providing diverse opportunities and materials for dramatic and social play) (OMEP, 2013a: 1).

## Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss (Matarijio project)

Continuing to highlight the work of Wangari Mathaai, who had a vision of planting a billion trees around the world, environmental awareness and consciousness were aroused in the children through a session called 'Doing the Best we Can' which was coined from the famous video from the movie 'Dirt' https://www.youtube.com/watch?v=-btl654R_pY. The session was a way to share with the children the implicit message that to make their world a better place for themselves and each other every little thing they can do helps towards these goals. A woodland session was devised to introduce them to wood and natural products from woodlands as a way to interact and connect to products that were not necessarily separate from themselves. These sessions brought across the message of worldwide deforestation in a sensitive and appropriate way for the age of the children disregarding the often cited messages about children being too young for complex global topics. This part of the project is considered to match the ERS-SDEC indicators for Environmental Sustainability 3.2 - Children's attention is explicitly drawn to the need to care for the environment of the setting and in the local community and 5.2 - The children are encouraged to identify a range of environmental protection issues and to suggest their own ideas for solving them; and also indicator 5.4 under Economic Sustainability (Equality) - The children's attention is specifically drawn to economic issues of concern to the local and international community (OMEP, 2013a; 2 and 3).

## Goal 6: Ensure access to water and sanitation for all (UNICEF W.A.S.H project)

During 2015 and 2016 many sessions between UK partner preschools and Kenya preschools were devised in order to emphasise the 'rights respecting' work supporting the UNICEF W.A.S.H in schools programme http://www.unicef.org/wash/schools/ which was developed into World OMEP initiative W.A.S.H from the Start http://www.worldomep.org/en/wash-from-the-start/. At the start of 2015 Cranborne preschool planned activities for their children to understand hygiene and the importance of hand washing. This was done in conjunction with World Water Day. A session was done by Cranborne called 'Is it safe to drink' where the children and their parents collected as many samples of water as they could find. They collected sea, toilet, tap, spring, river and puddle. They were asked to bring them in bottles and asked if just by looking at them they could  tell if they were 'safe to drink'. They made an association with the fact that toilet water looked exactly the same as tap water and that unsafe water was not always visible. They experimented with dissolving different products in the water such as soil, flour, salt and sugar to see what happened. Could they tell what was in the water? The children were read stories such as 'The Drop Goes Plop' by Sam Goodwin about the journey of a water drop through the pipes

and reservoirs before it reached our taps. They learned about the interaction of water resources and the hydrological cycle as a social construction and as part of human management within the context of global awareness. To further highlight this a 'Tippy Tap' was built in the playgrounds which the children loved.

These Tippy Taps were brought in by sessions in 2016 in further projects by OMEP Kenya president Lilian Okal in her school Mount Kenya Academy and their UK partner Townsend Montessori. They highlighted the impact of water poverty in Kenya and the issues surrounding the lack of infrastructure. Differences of services and facilities for children between Kenya and the UK were highlighted. For example, as reported by Pramling-Samuelsson, and Siraj-Blatchford. (2013), in Kenya 122.000 under 5 year olds die each year and these deaths are caused mostly by lack of water, sanitation and hygiene. Seventy-five percent of children are unable to wash their hands with soap or ash after visiting the latrine and before eating. Moreover, for children in the UK it is hard to imagine that water is a scarce resource around the world which is made scarcer by the lack of adequate infrastructure through the complexities of equitable, political, social and economic discourse and the difficulties of landlocked countries' access to water through transboundary and local governance issues.

These messages become embedded but at the same time can be devised in such a way as to meet appropriate age related curriculum goals and national targets. These activities connect to the ERS-SDEC rating Environmental Sustainability indicators 3.2 and 5.2. (see above) and also 7.2 - The children are encouraged to provide a variety of actions, including narrative accounts, to represent their efforts to solve environmental issues. They also link to Economic Sustainability indicators: 5.1 - The children are encouraged to suggest ways in which costs can be reduced by conserving and/or recycling materials and resources such as paper, water and electricity in the setting, at home and beyond; 5.4 (see above); and 7.2 - The children are encouraged to provide a variety of actions, including narrative accounts, to represent their efforts to solve environmental issues; and indicate how the scales can be applied in diverse socio-cultural settings (OMEP, 2013a: 2 and 3).

## DISCUSSION, THOUGHTS AND REFLECTIONS

As the projects undertaken in England and Kenya show, the ERS-SDEC can be applied to evaluate provision for ESD. Where the activities above have been rated using a descriptor beginning with 3 (e.g. 3.2 for Environmental Sustainability) that represents a 'minimal' level and would apply to 'the most common current preschool practice in environmental education around the world' (OMEP, 2013b: 1). Descriptors beginning with 5 (e.g. 5.3 for Social and Cultural Sustainability; 5.2 for Environmental Sustainability; 5.4 for Economic Sustainability) identify practices that can be considered 'good' examples of ESD in early childhood

education. Finally, the items beginning with 7 (i.e. 7.1. and 7.2 for Social and Cultural Sustainability; 7.2 for Environmental Sustainability; 7.2 for Economic Sustainability) demonstrate 'excellence' where ESD has been taken the furthest, in terms of understandings and actions. In the light of this, some advantages and challenges of the measurement of ESD in Early Childhood Education and Care (ECEC) in general and of the ERS-SDEC tool are discussed, briefly, in conclusion.

Undoubtedly, a commitment to achieving the UN Sustainable Development Goals across the globe brings a greater need for recording progress, including provision for ESD in ECEC (Pramling Samuelsson, 2011; Davis, 2015). A tool such as the ERS-SDEC has potential for use in monitoring and auditing ESD activities and the scales may provide a shared language (Shaeffer, 2013) for rating and celebrating ESD work in early childhood settings. This benefit of the scale can be seen in the bringing together of early years practitioners, in this case from England and from Kenya, and providing some common ground for the discussion and promotion of ESD. This has to be approached with caution, though, as it cannot be assumed that understandings are the same across diverse contexts. In the work with Kenya, the educator from the UK noticed that there were differences and tensions between intrinsic and instrumental values, particularly in relation to economic aspects of ESD. For example, when the educator in Kenya was talking to the children about the importance of elephant conservation, a priority was the attraction of elephants for tourists on safari holidays rather than for the sake of the survival and the increase of the elephant population itself. Whilst this anthropocentric view of the environment is unsurprising in a context where living standards for local communities may be dependent upon tourism it is at odds with the respect for ecology and for animal rights and freedoms that are likely to be part of ESD in a minority setting. The ERS-SDEC items are therefore just a starting point for dialogue and learning for the promotion of ESD in two contrasting places.

> ▶ **Key Point**
>
> The ERS-SDEC brought together early years practitioners from England and Kenya to provide common ground for the discussion and promotion of ESD.

In producing the ERS-SDEC, the aim was to provide a tool with similar benefits to the Early Childhood Environment Rating Scale but to minimise the complexities (Siraj-Blatchford, 2016). The three page ERS-SDEC tool, with up to five elements for each of three aspects of sustainability, is designed to be user friendly, especially for those people who are already familiar with ECERS (OMEP, 2013a, 2013b). As with ECERS, the tool can be valuable for professional development as a means of drawing practitioners' attention to areas of practice and providing a basis for discussion and reflection that may lead to advances in provision. Where ECERS and similar tools have been used in this positive way, ERS-SDEC may be similarly well-accepted and used. In some places, however, this should be approached with caution as ECERS may have negative connotations due to its use for surveillance

within a culture of managerialism. In the latter case, work is often carried to increase scores on the scales with a consequent loss of commitment to the values that underpin the tool itself.

In England, where 'sustainability' and 'sustainable development' are not yet part of the everyday vocabulary of practitioners, the ERS-SDEC can provide a useful means of defining these topics and can offer insights into the areas that might be covered by ESD. Whilst this is beneficial, a ready-made scale presented by external experts that is perceived as something to be understood and learned may diminish practitioners' confidence to develop their own understandings of, and commitments to, ESD. In conclusion, therefore, we argue that the ERS-SDEC may assist in the task of defining and applying ESD in ECEC but that work must continue to support practitioners to develop their own critical awareness of the potential and scope of ESD in differing regional, national and international cultural contexts.

## BIOGRAPHIES:

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# REFERENCES

Brundtland, G. (ed.) (1987) *Our Common Future: The World Commission on Environment and Development*. Oxford: Oxford University Press.

Davis, J. (2009) Revealing the research 'hole' of early childhood education for sustainability: A preliminary survey of the literature. *Environmental Education Research*, 15(2), 227–241.

Davis, J.M. and Elliott, S. (2014) *Research in Early Childhood Sustainability: International perspectives and provocations*. London: Routledge.

Davis, J.M. (ed.) (2015) *Young Children and the Environment: Early education for sustainability*. (2nd edn.) Melbourne: Cambridge University Press.

Harms, T., Clifford, M., & Cryer, D. (1998) *Early Childhood Environment Rating Scale, Revised Edition (ECERS-R)*. Vermont: Teachers College Press.

OMEP (World Organization for Early Childhood) (2013a) *Environmental Rating Scale for Sustainable Development in Early Childhood*. Available at: http://www.worldomep.org/en/esd-scale-for-teachers/ Accessed January 11th 2017.

OMEP (World Organization for Early Childhood) (2013b) Guidance for the use of the OMEP Environmental Rating Scale for Sustainable Development in Early Childhood (ERS-SDEC). Available at http://www.worldomep.org/wp-content/uploads/2013/12/Guidance-Final.pdf Accessed October 11th 2016

Pramling Samuelsson, I (2011) Why We Should Begin Early with ESD: The Role of Early Childhood Education. *International Journal of Early Childhood*, 43 (2): 103-118

Pramling-Samuelsson, I., and Siraj-Blatchford, J. (2013) Education for Sustainable Development in Early Childhood Care and Education: a UNESCO background paper (unpublished report), pp 17-18

Pressoir, E. (2008) Preconditions for young children's learning and practice for sustainable development. In Pramling-Samuellson, I. & Kaga, Y (Eds.), *The contribution of early childhood education to a sustainable society* (57-62). Paris: UNESCO

Shaeffer, S. (2013) Early Childhood Development in the Post-2015 Development Agenda. *NORRAG NEWS* 49, pp. 77-79

Siraj-Blatchford, J., Park, E., and Mogharreban, C. (Eds.) (2016) *International Research on Education for Sustainable Development in Early Childhood.* Switzerland: Springer International Publishing.

Siraj-Blatchford, J., Smith, K.C. & Pramling Samuelsson, I. (2010) *Education for Sustainable Development in the Early Years*. Gothenburg: World Organization for Early Childhood Education.

Sylva, K., Siraj-Blatchford, I., & Taggart, B. (2003) *Assessing quality in the early years: Early Childhood Environment Rating Scale-Extension* (ECERS-E): *Four curricular subscales*. Stoke-on Trent: Trentham Books

UNESCO. (2009) *Review of Contexts and Structures for ESD* (by Wals, A.E.J.) Paris: UNESCO

UNESCO (2015) *UNESCO Roadmap for Implementing the Global Action Programme on Education for Sustainable Development*. Paris: UNESCO Available at: file:///C:/Users/nikifoz/Downloads/UNESCO%20Roadmap%20 GAP%20on%20ESD.pdf Accessed 19th May 2017.

UNICEF, (2009) World Health Organisation (WHO) Diarrhoea: Why children are still dying and what can be done [online]. Available at http://apps.who.int/ iris/bitstream/10665/44174/1/9789241598415_eng.pdf  Accessed 19th May 2017.

# Results, results, results: Seeking spaces for learning in a European global learning and stem project

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## INTRODUCTION

There is a growing interest in the monitoring and evaluation of Education for Sustainable Development and Global Citizenship (ESD/GC). Development education practitioners highlight tensions between the demands of monitoring and evaluation for reporting purposes and opportunities for learning about practice within funded global learning education projects (Bond, 2012; Fricke, Gathercole with Skinner, 2015). This paper presents a post-project reflection on the monitoring, evaluation and learning (MEL) processes of a three year European Commission (EC) funded project involving non-State actors in formal education systems on development education and global learning in Science, Technology, Engineering and Mathematics (STEM) curricula. The Make the Link project focused on development of engaging materials and teacher training. The authors provide an overview of what was involved in developing a monitoring and evaluation framework that aimed to capture progress against results as defined by the project's EC logical framework, as well as learning about experiences of global learning and STEM from partners across four country contexts. This reflection contributes to discussion on the theme: How can ESD/GC monitoring, evaluation and research engage meaningfully with practice and vice-versa?

## THE PROJECT

The Technology Challenging Poverty: Make the Link project focused on embedding global learning in European STEM curricula through the development of engaging STEM materials and teacher training. Practical Action was the lead organisation for the project and worked alongside six project partners: Engineers Without Borders (UK); Tomorrow's Engineers (UK); Sheffield Hallam University's Centre for Science Education – CSE (UK); Centre for the Advancement of Research and Development in Educational Technology - CARDET (Cyprus), Oxfam Italia (Italy) and Fundacja Centrum Edukacji Obywatelskiej - Centre for Citizenship Education CEO (Poland).

The aims of the Technology Challenging Poverty: Make the Link Project were to:

- Raise awareness and understanding among young people of development issues, the interdependent world and their own roles, responsibilities and lifestyles in relation to a globalised society

- Integrate development issues and global learning methodologies into the science and technology curricula in policy and practice in four EU countries (UK, Poland, Italy and Cyprus)

The main activity to achieve these aims was to develop teaching resources linked to STEM curricula focussed on the age group 9 to 14 years. Teaching resources were provided as free on-line resources, hosted on individual partner websites in the four participating countries. A curriculum mapping processes ensured that educational materials were relevant and reflected the different curricula of each of the countries involved. Resources include the following:

- 'Beat the Flood' is a STEM challenge where pupils use their science skills to design, build and test a model of a flood-proof house. Pupils examined global contexts where flooding had occurred in Bangladesh, Italy and England and considered consequences for families and their needs in developing future flood proof homes. (http://practicalaction.org/beattheflood)

- 'Plastics Challenge' is a new STEM challenge that focuses on reuse and recycling of plastics. The resources were developed and field tested by a secondary teacher and her group of Year 10 'Plastic Chemists' before being made available. (http://practicalaction.org/plastics-challenge)

- Make the Link resources are a comprehensive set of materials made up of four units of work, each with six lessons. Materials include PowerPoint slides, notes for teachers and pupil task worksheets. Topics covered include water, climate change, energy and food reflecting key themes in STEM curricula. Developed with the Centre for Science Learning videos were provided by Practical Action on authentic global contexts on topics discussed. (http://practicalaction.org/make-the-link )

- Power for the World is an activity where pupils learn about inequalities of energy access and then design, make and test a wind turbine. These resources were developed and used in UK classrooms by Engineers Without Borders (UK) and further developed in Oxfam Italia in continuing professional development workshops with primary teachers. (http://www.ewb-uk.org/our-initiatives/inspiring-change-in-engineering-education/outreach-programme/power-for-everyone-everywhere )

# METHODOLOGY

Before the 'Make the Link' project began the authors attended a BOND workshop to consider approaches to monitoring evaluation and learning (MEL) in practice, and in the context of the upcoming EC funded project. BOND is a UK based Non-Governmental Organisation (NGO) that supports development organisations on a range of topics including MEL and programme design (see www.bond.org.uk). In particular we discussed how to integrate a results-based logical framework with a range of mixed methods to track progress against results as well as to gather evidence of good practice. Methodological challenges arose in planning how best to monitor progress, how to evaluate impact and how to identify opportunities for project learning as part of the external evaluation of the project. We wanted to avoid dualist thinking around qualitative versus quantitative data and to move to a point of identifying what it was that we wanted to know to inform and develop practice and what we wanted to know to ensure accountability and reporting to funders.

Research from the NGO sector identifies several challenges in reporting requirements that are useful for ESD/GC practitioners to consider when designing monitoring and evaluation processes for projects. The European Commission reporting frameworks utilise four key themes to measure success and to define results: relevance, efficiency, effectiveness and sustainability. These themes suggest there is a connection between valuing results as outputs and results as an ongoing learning process during and beyond the project. The NGO research highlights how similar themes contain potential challenges for practice. The effectiveness agenda, by which NGOs are required to demonstrate their effectiveness, efficiency and impact, requires good monitoring and evaluation systems to capture change within the constraints of a time bound project or programme (Bond, 2012). The Improve It Framework (Bond, 2008) supports NGOs by providing a resource that links domains of change measured over time with appropriate data collection tools to assess and communicate outcomes of project activities. The accessibility agenda, whereby NGOs need to be answerable for good use of public funds, suggests that monitoring and evaluation is part of accountability as well as of good project management (O'Donnell, 2016). Many monitoring and evaluation reports remain on the shelf, whereas results made public in accessible and useful ways facilitate greater accountability and promote wider learning about the work of development organisations in the public domain. This is linked to a further challenge of 'lost learning' though limited dissemination of evaluation findings (Cooke, 2015). ESD/GC practitioners in particular may be highly reflective and able to capture useful knowledge in innovative MEL approaches. However, there may be insufficient

> ▶ **Key Point**
>
> For many development organisations, time and financial constraints ensure dissemination and public engagement with research may not be a priority.

funds for in-depth research and evaluation beyond results-based and financial reporting. For many development organisations there are rarely time and financial resources for sharing learning beyond reporting to funders (Cooke, 2015). Therefore, seeking broader opportunities for dissemination and developing skills in public engagement with research may not be a priority. Finally short project timeframes may militate against the capture of longer term impact and change over time, with particular difficulties in attributing effects and impacts within the complexities of social development programmes (Fricke and Skinner, 2015).

## FINDINGS

A MEL framework for 'Make the Link' was designed to mirror and build on the EC logical framework of the project which listed intended activities and anticipated results (Daly and Brown, 2013). The results outlined in the project's EC logical framework were ambitious as noted below.

> **Result1:** A set of teaching resources complementing the Science and Technology curricula accessed by 13,000 teachers

> **Result 2:** 1,600 teachers inspired and empowered to integrate development education into their teaching through training

> **Result 3:** 200 key influencers in education actively engaged in encouraging teachers to integrate project materials into their teaching

The MEL framework provided evidence that 'Make the Link' exceeded its ambitious results and objectives. Methods used and a reflection on findings are outlined below.

### Webstats

Use of webstats was incorporated into the project monitoring design. Google Analytics captured downloads of 'Make the Link' educational resources across partner websites and differentiated between the countries where materials were accessed from. Information was input into a shared data set by each partner. The project had significant reach with 18,200 teachers downloading quality materials that combine global learning methodologies with development contexts for STEM learning. An unexpected finding was that a small number of teachers from other EU countries not involved in the project have accessed on-line materials, indicating their suitability for teachers more widely. In addition 1368 teachers engaged in training. Six months after training 93% of teachers said they were likely to incorporate global learning in their planning. Incorporating webstats as a monitoring tool provides longer term evidence that resources are relevant and dissemination is continuing post-project.

## Case studies of impacts on teachers and students

Three-monthly partner reports provided detailed information on activities, numbers of teachers and students reached, qualitative reflections on progress against objectives, short case studies of practice including photographs of educational activity, teacher and student reflections, and findings from teacher questionnaires following any training delivered. A mid-term review of the project used a case study approach to analyse outcomes and effects resulting from the project's implementation and strategies (EC, 2005). A final review brought partners together for a participatory evaluation workshop (Chambers, 2002). The project had positive impacts on teachers and their students. It is estimated 1,026,000 students aged 7-19 engaged in the project through teachers' access to materials. Feedback from students was not easy to obtain; however, valuable feedback was received via engaged teachers from students through small scale observations and focus groups. Rich qualitative evidence of students' understanding of the relevance of STEM in tackling global issues and their interest in global debates on development issues was found. Students expressed their feelings of empathy, attentiveness to inclusive design, and, an unexpected outcome, their interest in STEM careers, as noted by these students:

> I've learnt that bamboo isn't very absorbent – so we have used it to make our house. You never know when the weather will change. The climate is changing due to global warming. A flood proof house would help because if there was extreme weather, this would stand it. I have built my house so that all people can use it. It has a ramp so anyone in a wheelchair can get up to safety if the water comes over. (Primary students)

> Today has been amazing. I really want to do this when I am older (Secondary student)

Teachers and students were involved from the outset in developing quality resources. A youth panel worked with teachers to design and test materials and to identify global STEM contexts that they thought would be engaging for students. Practical Action's authentic materials from real world development contexts were used to augment and connect global issues to STEM content as explained by one of the partners:

> It really works in our schools and it helps to have high quality videos, scenarios and resources from development. We have gone on to develop our own materials based on real stories from across the globe. (Partner)

## Engagement in dissemination activities

A 'key influencer log' was compiled detailing engagement with global learning practitioners, teachers and STEM stakeholders. The project engaged with over 300 key influencers at local, national and European levels through innovative use of social media, writing material for over thirty-five education materials and dissemination at networks and conferences. The extent to which teachers were peer influencers was an unexpected finding. Teachers created a multiplier effect by sharing resources via locally organised 'Teach Meets', social media groups, and involvement in subject associations and networks. A teacher with a lead role in supporting newly qualified teachers commented on the importance of engaging with new materials and continuing to learn as a mentor:

> It's given me a context to talk about an experiment with different fuels. As a teacher who is trying to inspire others it has certainly changed my approach. (Secondary teacher)

## Reporting to and hearing from the EC

The EC funding strand required annual and final narrative and financial reports. These contained selections of qualitative and quantitative data provided by partners and case studies of good practice, recommendations and actions arising from the mid-term and final review. In addition, a Results Only Monitoring (ROM) visit was carried out on selected projects by the EC. The ROM Visit for Make the Link was held between 13 Sept and 5 Oct 2015 and EC auditors met with partners and stakeholders across the project. The ROM report was received by the lead partner on 3 January 2016 and comprised a five-page report using a traffic light system to evaluate the project. Make the Link achieved 'green' for good/very good in each of the themes of relevance, efficiency, effectiveness and sustainability. As the project ended on 31 January 2016 the report came too late to consider comments and many of the recommendations had already been made in the mid-term review. The EC also held a post-project lead partners' meeting in March 2016 to reflect on experiences arising out of the funded projects under the EC action 'Non-State Actors and Local Authorities in Development: Global Learning in formal education system 2013-2015'.

## DISCUSSION

This reflection has enabled us to identify spaces for learning in the project's MEL processes that helps address the challenges for development education organisations in demonstrating effectiveness, accountability, accessibility and sustainability. We offer some suggestions based on our experiences for development education project evaluation.

Firstly we suggest collaboration of partners in the development of MEL as an initial and ongoing part of the project. The overall management of the project was supported by a robust but flexible MEL framework and methods. Internal and external technical expertise were drawn upon including: technical support on social media, webstats and project management from Practical Action; external

▶ **Key Point**

Collaboration of partners in the development of a monitoring and evaluation framework should be an initial and ongoing priority.

monitoring and evaluation workshops provided by BOND; and expertise of a researcher with experience of qualitative, quantitative and participatory research methods. This enabled collection of data in a variety of ways and demonstrated efficiency and effectiveness in MEL processes (Bond, 2012; EC, 2005).

Opportunities for partners to reflect on MEL included face-to-face kick-off and mid-project meetings intended to support the production of monitoring tools and dissemination plans to ensure deadlines and reporting expectations were realistic, achievable and meaningful. Recommendations from the mid-term review helped partners to feel more connected: themed Skype calls were introduced in the second year to share aspects of interesting learning such as teachers as influencers, e-learning modules, and working with networks of teachers. Limited funds meant thinking creatively about the final review (Cooke, 2015). It comprised a participatory evaluation workshop and a seminar in Liverpool where ideas and achievements were shared locally with other global education stakeholders. Partners defined aspects of MEL to take forward to new areas of their individual and collective work. In two subsequent projects, a research strand is integral to the project plan demonstrating how longer term learning can integrated into practice (Fricke and Skinner, 2015).

Secondly we suggest developing a meaningful team approach to support collective project learning. Partners contributed to the achievements of the 'Make the Link' project and benefited from the rich experiences from working in a 'European team'. The participatory methods in the midterm and final reviews included workshops and Skype seminars, and co-development of case studies supported this sense of connectedness (Daly and Rogers, 2016). These spaces for joint project evaluation revealed areas of highly reflective learning among partners that enabled thoughtful yet critical perspectives on the role of development organisations, the contested nature of development contexts in STEM resources, and the diversity and relevance of global learning in training educators across European countries. The relevance of making the link between STEM, global learning methodologies and a concern with ESD/GC was captured by one of the partners:

> That's part of the tension, to bring the rich context of global development and global issues, and at the same time cover the science required in a conceptually sensible way. (Partner)

Thirdly we suggest being open to opportunities to build capacity in MEL and sharing findings as the project progresses. All partners grew in confidence in engaging with the wider ESD/GC practitioner and research community. The blend of traditional reporting and use of findings to communicate with a variety of interested groups enabled partners to demonstrate the value of global learning and development education to wider public audiences (O'Donnell, 2016). This included attending and winning an award at the European Scientix conference (Scientix, 2014), delivering an academic research paper at the European Science Education Research Conference (Daly and Brown, 2015), publishing in the Association of Science Education publications, Primary Science and Education in Science (Seeley 2013; Cox 2014) and discussing our reflections on MEL processes with ESD/GC educators at the TEESNet conference (Daly and Brown, 2016).

Finally, we would be braver about asking for support and feedback from EC funders. This may promote adequately resourced MEL, research and dissemination work. Learning about the project and learning about MEL processes has not been lost (Cooke, 2015). Based on our experience, we value the link between research and monitoring and evaluation practice for deeper learning about global learning and STEM. We have sought to design into future programmes adequate resources for a more central role for project learning that includes mixed evaluation methods, research including more participatory action research and public engagement with findings.

## CONCLUSION

In conclusion, the project achieved its intended results regarding involving non-state actors in development in providing resources for STEM curricula in the UK, Poland, Cyprus and Italy. We also learned a great deal by focussing on good monitoring and evaluation systems from the start and throughout the life of the project. We conclude that monitoring, evaluation *and* learning is important to all stakeholders, but each must consider what 'useful knowledge' is for their purposes. By combining the requirements of the EC logical framework with our own MEL framework of mixed methods we were able to make a connection between results and outcomes for teachers and students, and were able to capture rich data and unexpected outcomes. Spaces for learning were both planned for and serendipitous. As the project developed, we became confident to take advantage of opportunities that were not in the overall project plan to engage in wider opportunities to sharing learning. This points to a more central role for participatory learning spaces as integral element of future global learning projects. This methodological reflection has informed our future developments in approaches to researching what is valuable in global learning and STEM practice.

# BIOGRAPHIES

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# REFERENCES

Bond (2008) *'Improve It' Framework*. London: Bond

Bond (2012) *Assessing Effectiveness in education: Thematic paper for consultation*. London: Bond

Chambers, R. (2002) *Participatory Workshops: A sourcebook of 21 ideas and activities*. London: Earthscan

Cooke, M. (2015) *Making Evaluations Work Harder for International Development.* London: CSLP/Bond

Cox, J. (2014) Beat the Flood. Redmoor Academy and Practical Action engaging students in STEM. *Education in Science*. Number 255. Available at: http://www.ase.org.uk/journals/education-in-science/2014/02/255/ Accessed November 4th 2016

Daly, A. (2015) *Technology Challenging Poverty, Make the Link: Mid-term review of the EC funded Project 'Non-State Actors and Local Authorities in Development: Global Learning in the formal education systems in UK, Poland, Cyprus and Italy 2013-2016*. Angela Daly, LJMU/Practical Action

Daly, A. and Brown, J. (2013) *Make the Link Monitoring, Evaluation and Learning Framework*. Angela Daly Research/Practical Action

Daly, A. and Brown. J. (2015) *Global Learning meets Science and Technology: Teaching technology justice in European classrooms*. In e-proceedings of the European Science Education Research Conference 2015 'Science Education Research: engaging learners for a sustainable future' Part 8: 1143-1450. Helsinki 31st August – 4th September 2015 Available at: http://www.esera. org/publications/esera-conference-proceedings/science-education-research-esera-2015/ Accessed November 23rd 2016

Daly, A. and Rogers, L. (2016) *Technology Challenging Poverty, Make the Link: Final review of the EC funded Project 'Non-State Actors and Local Authorities in Development: Global Learning in the formal education systems in UK, Poland, Cyprus and Italy 2013-2016*. Angela Daly, LJMU/Practical Action

European Commission (2005) *Europe Aid Evaluation Guidelines* [online] Available at: http://ec.europa.eu/europeaid/evaluation/methodology/tools/ too_cas_des_lis_en.htm#illustrative Accessed November 23rd 2016

Fricke, H-J. and Gathercole, C, with Skiner A. (2015) *Monitoring Education for Global Citizenship: A contribution to Debate*. DEEP/Concord

O'Donnell, M. (2016) *Publishing results to IATI: Will it improve learning and accountability? A discussion paper*. London: Bond

Practical Action (2013) *Global Learning in the Science National Curricula* [online] Available at: http://practicalaction.org/globallearninginscience Accessed December 10th 2016

Seeley, C. (2014) Using science and much more to 'Beat the Flood'. *Primary Science*. Number 132. Available at: http://www.ase.org.uk/journals/primary-science/2014/03/132/ Accessed December 10th 2016

Scientix (2014) *3rd round of the Scientix Resource Awards announced*. Make the Link. See http://www.scientix.eu/news/news-all/news-detail?articleId=274674 Accessed December 10th 206

# Critical reflective practice in the context of GC/ESD with reference to assessing impact in global learning

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## INTRODUCTION

Using some of the tools and processes developed through the World Class Teaching project 2012-2015, this paper explores a critical practitioner enquiry approach for using critical reflection in the context of GC/ESD as a means to measure change and impact on learning for both the teacher and the student. Bright (in Moon 1999) defines reflective practice as: 'an active, dynamic, action-based and ethical set of skills, placed in real time and dealing with real, complex and difficult situations.' (58)

By reflecting on teaching practice and the learning that is happening, teachers can explore theories and ideas and apply them to their own experiences in a more structured way. As an approach this can help them explore their own beliefs and assumptions, and maybe find solutions to questions, or problems, or generate more questions. As a skill, we need to work it, to develop it, to be able to apply it more effectively.

The approach and tools developed in the World Class Teaching and Global Dimension in Social Sciences projects (e.g. Leeds DEC, 2015) were used to provide a framework for assessing and exploring not just what we think, but what has changed in our thinking and ideas, and ultimately, if this change in thinking has changed our behaviour and what we do.

> ▶ **Key Point**
>
> Reflective practice is not casual thinking. It requires a conscious effort to think about events and develop insights into them.

Reflective practice is widely considered an important activity for professional development and the majority of teachers believe that they do it. Some key features of reflection:

- Reflection results in learning-through changing ideas and your understanding of the situation;

- Reflection is an active process of learning and is more than thinking or thoughtful action;

- Reflection involves problematizing teaching by recognising that practice is not without dilemmas and issues;

- Reflection is not a linear process-but a cyclical one where reflection leads to the development of new ideas which are then used to plan the next stages of learning;

- Reflection encourages looking at ideas from different perspectives, which helps you to understand the issue and scrutinise your own values, assumptions and perspective.

When the term 'critical reflection' is used, it refers to 'a combination of the analytical, questioning (or critical thinking) and reflective approaches. It is this conversation that would characterise a critically reflective conversation.' (Open University, n.d p. 22).

## THE PROJECT

To support the process of professional development, Reflection Tools were developed to accompany each topic area. These were used by teachers, when thinking about curriculum development and planning; with their students, both before and after the topic has been taught; and also by student teachers and NQTs to help them plan and think through their practice.

To link this in to assessing impact in relation to Global Learning, project teachers first decided on the 'Global Learning Big Ideas' for the theme or topic, out of which came the 'learning outcomes'.

In the following example, teachers tackled the topic of the Trans-Atlantic African Enslavement Trade (TAET). Full details of this, including the Reflection Tool, are available on www.globalschools.org.uk/history.

The 'Big Ideas' for this topic were identified as:
1. The TAET was a new form of slavery and an important economic process;
2. The TAET depopulated Africa and slowed its development. Views of Africa today are affected by perceptions of the slave trade;
3. Slavery was justified on both moral and pragmatic grounds;
4. The TAET enriched Europe and contributed to the Industrial Revolution;
5. Resistance of slaves helped bring about its abolition;
6. The legacy of the TAET is here today in Africa, Europe and the Americas;
7. Slavery did not end with the abolition of the trade. Although illegal, slavery is widespread in the world today, including in Europe.

Some examples of the intended learning outcomes are:

- Students can explain that the TAET was a new form of slavery, an important economic process, that it depopulated Africa which in turn slowed its development while it enriched Europe;

- Students can explain the legacy of the TAET for the present day;

- Students demonstrate how slavery was justified at the time, and that this was challenged by 'enlightened activists' then;

- Students can identify a contemporary injustice and explain how it is justified.

## RESULTS

The results, based on responses to the Reflection Tool for this topic, used by students before and after the topic was taught, indicated a range of responses in relation to their knowledge, and their attitudes towards Africans. Results from one school (approx. 90 students) showed that a large number thought Africa became richer as a result of the trade, and over two-thirds of them had an image of enslaved Africans as being passive and powerless to help themselves. More than one third of them thought that trade had not affected the development of Africa. The majority of students thought that slavery was at its worst during this era.

Teachers involved in this project reflected on these findings as follows (their thoughts noted in italics).

- Deliberate - *we decided on this approach with the teachers in advance*

- Purposeful - *we specifically wanted to look at impact in relation to GC/ESD and to investigate quality of learning in GC/ESD*

- Structured - *we had a plan and developed Reflection Tools to support Learning Outcomes*

- About linking theory and practice - *ideas and reflection were closely linked to professional development for teachers, building capacity, confidence and competence in the area of GC/ED*

- To do with learning - *both students and their teachers were observed during some lessons*

- About change and development - *becoming a more 'reflective teacher'*

> ▶ **Key Point**
>
> Reflective Practice is:
>
> - Deliberate
> - Purposeful
> - Structured
> - About linking theory and practice
> - To do with learning
> - About change and development
>
> (Moon, 2005.)

Other comments included:

> The students clearly seem to perceive trade as being at its worst during this time period. We have looked at modern slavery, but the depth of lessons on trans-Atlantic slavery have forced this perception.

> More than half the students thought that Africans were enslaved because Europeans were more sophisticated. A significant number changed their mind about this by the end of the scheme of work, but not all of them.

> Students had a very limited picture of what Africa was like during this period, but where I factored in teaching to address this, there were clear changes in student knowledge and a shift in some attitudes.

The teachers of this particular cohort of students reflected on the findings with fellow history teachers, project coordinators and an expert from the Leeds West Indian Centre, Dr Carl Hylton. Their thoughts were that the findings clearly indicated some areas for development in the current scheme of work for this topic, and some areas where key learning outcomes needed to be emphasised more clearly, namely:

- Life in Africa both before, during and after slavery
- Slavery in the past, comparison of slavery before teaching the TAET

And areas which were already addressed but where certain points needed to be emphasised or potentially readdressed:

- Justification for slavery
- Comparison with modern slavery
- Slave resistance, potentially through case studies

After further discussion, teachers were asked to reflect on the following question: 'Can this topic provide an opportunity for me to address prejudice and possible racist attitudes, or is the way the topic is approached reinforcing them?' This provoked the following reflections:

- Do I have enough knowledge to make the most of this opportunity?
- Do I feel confident to do this?
- Is this about History teaching, or should this be left to another department?
- I can make changes to my personal practice, but my influence on the whole team (scheme of work) may be limited. We are an 'outstanding school' and our department is highly regarded and achieves good results.

- I would value the chance to work with other colleagues, in other subject areas, to do more 'Reflective Practice', and to see how we can approach 'making change' more holistically across the school.

- Being given the time to reflect on a specific topic has helped me to teach this topic better and has improved learning outcomes for students.

The teachers here used the Reflection Tool as a lens to reflect on the effectiveness of their teaching, following Brookfield (1995) who comments that the goal of the critically reflective teacher is to 'garner an increased awareness of his or her teaching from as many different vantage points as possible' (Miller, 2010, p. 1). Brookfield proposes four lenses that can be engaged by teachers in a process of critical reflection: the autobiographical; the students' eye; our colleagues' experiences; and theoretical literature. He suggests that these lenses correlate to processes of self-reflection, student feedback, peer assessment, and engagements with scholarly literature. He explains further that the autobiographical lens, or self-reflection, is the foundation of critical reflection. Teachers may focus on their previous experiences as a learner, or on their experiences as a teacher in order to 'become aware of the paradigmatic assumptions and instinctive reasonings that frame how we work'. In this example, teachers used processes of self-reflection (the autobiographical lens), student feedback (and their observations of students' own reflections, and peer review, omitting engagements with scholarly literature.

## CASE STUDY: TEACHING AND LEARNING ABOUT SUSTAINABILITY

The following Case Study from a secondary school in Leeds is based on a collaboration between four departments: English, Art and Design, Drama and R.E. The teachers (x8) chose the theme of sustainability for a 'Project Day', i.e. an off-timetable day, involving 220 Year 8 students. Students were in mixed ability tutor groups. Questionnaires were prepared by the teachers, and responses reviewed together as a group after the event.

### Method

Questionnaires were designed and students were asked to complete them twice – before and after the project day, thus the impact of the day could be measured. (questions are shown in italics).

### Section 1:

Question A

*Do you know the difference between renewable and non-renewable sources? Yes/No/I don't know*

In both initial and exit responses, the overwhelming majority answered 'yes'. Interestingly, slightly fewer (4%) answered 'yes' on exit than initially.

## Question B

*Can you name 3 or more renewable sources? Yes/No/I don't know*

In both initial and exit responses, the overwhelming majority answered 'yes'. However, slightly fewer (1%) answered 'yes' on exit than initially. Many students wrote the names of 3 renewable energy sources under their response, but these were not taken into account as they were not required.

## Question C

*Can you name 2 or more fossil fuels? Yes/No/I don't know*

In both initial and exit responses, the overwhelming majority answered 'yes'. However, slightly fewer (7%) answered 'yes' on exit than initially. Many students wrote the names of 2 fossil fuels under their response, but these were not taken into account as they were not required.

## Question D

*Do you think climate change is changing the weather? Yes/No/I don't know*

In both initial and exit responses, the overwhelming majority answered 'yes'. However, slightly fewer (6%) answered 'yes' on exit than initially.

## Question E

*Do you know what fracking is? Yes/No/I don't know*

Students were least confident on this question, with the majority answering 'No' both times.

Strikingly, there were no respondents to any of the Section 1 questions who put 'I don't know' in the exit questionnaire. The 'I don't knows' from the initial poll, however, appear to have been translated into 'Noes' on exit. This would suggest that, rather than students gaining in knowledge, they have made marginal gains in their own confidence that they understand the question. So a student who was previously unsure what the terms 'renewable' and 'non-renewable' even referred to, for instance, now knew what the question was about, and also knew that they had forgotten the definitions of these terms. In questions B and C, they now knew, when they tried to remember the names of the fuels, whether they had succeeded or not.

The majority of 'Noes' for question E also suggests that students were responding honestly to the questionnaire. By this stage they knew they did not have to provide evidence of their answer, and could have lied in order to appear cleverer, yet they apparently did not. This would seem to indicate that a reliable set of data had been collected.

One teacher reflected:

The findings would suggest that students did not retain information taught on project day well. Possible explanations could be:

- that they know that what they learn on project day is not going to be marked or tested;

- that introducing unusual terms such as biofuels and fracking in the debate confused some students;

- that putting them in teams focussing on only one energy source narrowed their learning too much; or

- that the ability groupings for the debate affected some groups' retention more than others.

## Section 2:

*Here is a list of some of the best energy sources. Put them in order from 1 – 5 with 1 being the best energy source and 5 being the worst.*

On entry, 32.98% of students thought solar energy was by far the best. This dropped slightly to 30.21% on exit. Next came wind (entry 12.57%, exit 18.23%) Again there was a wide margin between wind in second place and oil in third. Natural gas did the same as biofuels on entry but better on exit. Average scores also give a similar picture with the ranking on entry solar, wind, natural gas, biofuels, oil; and on exit only biofuels and natural gas changing places.

One teacher reflected:

This data suggests that students were already confident at identifying renewable energy sources, and also knew that they were better in ecological terms. The project day had little impact on their attitudes. However, biofuels did slightly better on exit compared to natural gas, possibly reflecting a better understanding of the issues surrounding biofuels as a result of the debate.

## Section 3:

*I don't /I know a lot about energy sources.*

One teacher reflected:

> Students' answers were slightly weighted towards 'I don't know' in both initial and exit responses. The change in their answers was statistically insignificant. This suggests that the project day had little impact on student's confidence in their own knowledge.

*I don't/I feel I am able to make a difference to climate change.*

One teacher reflected:

> Students' answers were strongly weighted towards 'I feel I am able to make a difference' in both initial and exit polls. However, the impact of the project day was slightly negative, swinging 2% towards 'I don't feel I am able to make a difference'.

This raises many questions for us as teachers. Empowerment is generally considered a good thing, but in relation to climate change can be delusional. Those governments which have most strongly opposed action on climate change in international negotiations (e.g. Ireland, Canada, Australia) have also invested most in messages of individual empowerment which are in fact profoundly disempowering because they are based on the false assumption that individual consumer choices can have a significant impact. It may be that discussing fuel sources, over which students have little or no influence, makes them feel less able to 'make a difference'. However, our lessons did not include information about how to find and switch to lower carbon providers, nor did they offer ways of engaging with the issues, for instance by joining one of hundreds of campaigning charities, NGOs and civil society groups.

*I wouldn't/would like to take part in a campaign to protect our earth's resources.*

One teacher reflected:

> Students' answers were strongly weighted towards 'I would like to take part in a campaign' in both initial and exit polls. However, the impact of the project day was very slightly negative, swinging 1% towards 'I wouldn't like to take part'. It would be interesting to know how this might change if we included information during the project day, or following it up, about the many organisations which offer ways to campaign on these issues.

*I don't/I feel hopeful/optimistic about the future of our planet.*

One teacher reflected:

> In both initial and exit polls, students indicated optimism about the future of the planet, and the impact of the project day was very slightly positive, with a 1% swing towards hopefulness. Again, it is very hard to know what aspects of the lesson or day might have contributed to this effect, or whether other factors were at play (such as international events in the news). However, possibilities include being made aware of the many renewable technologies which exist; and feeling (rightly or wrongly) that if I can debate it, surely the powers that be must be able to solve the crisis.

*I think big businesses are/aren't doing what they can to protect our earth's resources.*

One teacher reflected:

> Faith in big business was overwhelming, and grew by 1% between polls. This could be considered a negative result, since it is big businesses – especially extractive energy companies – which are arguably contributing most to the worsening ecological crisis. Another way to interpret students' responses which perhaps credits them with too much understanding of political economics but with an accurate grasp of human nature, is that big businesses are doing what they can to change/protect our planet, but that in competition with each other, and with a fiduciary responsibility to maximise returns to shareholders, what they can do is woefully inadequate in the absence of government regulation.

Our energy sources lesson may have engendered a sense that there are technological, and profitable, solutions to the ecological crisis.

## CASE STUDY: DISCUSSION BY TEACHERS INVOLVED IN THE DESIGN OF THE QUESTIONNAIRE AND PROJECT DAY

It is clear from Section 1 that students did not retain knowledge of energy sources from the project day. They felt more confident that they understood the questions, and knew when they didn't know the answers.

Section 2 suggests that students already knew about the environmental impacts of most fuels, but perhaps picked up some understanding of the complex issues surrounding biofuels.

It is clear from Section 3 that the project day made little difference to students' optimism, confidence, or sense of empowerment. The data raises questions about

what we teach and how we teach it, if we wish students' emotional responses to the issues to enable them to engage more effectively in shaping their world. We felt that the questionnaire was designed well, and we were able to collect highly measureable data, despite the qualitative nature of some of the areas we were investigating. We learned a great deal about how to conduct such a study, as well as gaining some insight into the impacts of our teaching on attitudes.

Perhaps most importantly, the process of gathering and interpreting this data raises questions about what we wish to achieve when teaching issues around global sustainability. These are profound questions that are being avoided more than they are being addressed in the education profession. As teachers we cannot assume that simply passing on information to young people will yield the affect responses we are hoping for. As teachers we ourselves need training in what kinds of outcomes might be desirable in terms of attitudes and emotions, as well as how to frame issues appropriately. Such training is unheard of, as far as I'm aware.

> ▶ **Key Point**
>
> Teachers need further professional development that explores desirable outcomes in terms of attitudes and emotions

In particular, teachers are generally encouraged to be extremely cautious about influencing students' attitudes. Yet, where climate change is concerned, attitude change is a fundamental building block for creating a safer world. If we cannot rely on appropriate attitude changes resulting from exposing students to the facts, what then? As one teacher asked 'How ethical would it be to design educational content with the desired attitudinal outcomes in mind as a starting point?'

## CONCLUSION

Brookfield (1995) asserts that 'When understood as a critically reflective process, good teaching becomes synonymous with a continuous and critical study of our reasoning processes and our pedagogic actions' (p. 42). He also acknowledges that 'Critically reflective teachers know that what happens in their classroom changes the world. At the very least, the way they treat students increases or dampens students' sense of agency. Being aware that classrooms mirror the structures and inequities of wider society…' (p. 266).

Whilst it is not always possible to allocate time for critical reflection, without exception, teachers involved in this work identified this as being crucial and valuable to their teaching. Having appropriate tools and structures, like the WCT Reflection Tools, can help this process with both teachers and with students. For instance, two of the teachers reflected:

> The Reflection Tools provided an extremely useful tool for students to discuss their learning, really engaged them.

> Students were able to engage with the curriculum much easier as it prompted them to think about questions from their own interpretations and not just follow the teacher.

Going further than self-reflection to understand student experiences is of utmost importance. 'Seeing our practice through students' eyes helps us teach more responsively', (Brookfield, 1995: 35). Teachers confirmed that using the Reflection Tools for both self-reflection and engaging with student feedback revealed areas where teaching habits may need adjustment. They valued the opportunity to work with other colleagues not of their discipline, and felt more confident to review their practice and less isolated in their thinking.

Teachers also acknowledged that not all students understood how to reflect on their learning. Again, using the Reflection Tools to support the process, understanding the need to 'model critical, democratic teaching', understanding that 'their enquiries into themselves, their students, and their practice turn the classroom into a laboratory for purposeful experimentation.' (Brookfield, 1995: 264)

## BIOGRAPHIES

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# REFERENCES

Bright, B. (1993) 'What is Reflective Practice?' *Curriculum*, 16, 69-81, quoted in Moon, J. (1999) *Reflection in Learning and Professional Development, Theory and Practice*, Kogan Page, London

Brookfield, S. (1995) *Becoming a Critically Reflective Teacher*. San-Francisco: Jossey-Bass.

Open University (n.d.), Features of Reflection, Open University, Available from www.open.edu/openlearn/education/learning-teach [Accessed October 30 2016].

Leeds Development Education Centre (2015) First Steps in Assessing Global Learning: Teachers' Guide. Leeds: LEEDS DEC. Available at: http://www.globalschools.org.uk/teaching-resources [Accessed 8th May 2017].

Miller, B (2010) Brookfield's Four Lenses: Becoming a Critically Reflective Teacher, University of Sydney Arts Teaching and Learning Network. http://sydney.edu.au/arts/teaching_learning/academic_support/Brookfield_summary.pdf [Accessed October 30 2016]

Moon, J. (2005) *Guide for Busy Academics No. 4: Learning Through Reflection*. Higher education Academy.

# Zero is where the real fun starts' – evaluation for value(s) co-production

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## INTRODUCTION

In this paper, we propose that the dominance of quantifiable measurable phenomena over qualitative, less tangible aspects of experience is simply a provisional, although ubiquitous, discursive artefact, a story no more necessary or truthful than any alternative view. The pedigree and increasing pervasiveness of this story can be traced to the ascent of the primacy of rational thinking, which assumes that knowledge is fixed and can be externally verified, that humans can 'know' - in an absolute sense - and consequently control, the material world around them, which to the Enlightenment period was closely associated with the scientific revolution. From the early 18th century, philosophy became increasingly dominated by scientific discourse, and its principles of reason and logic. Ethics were subject to the same rational treatment, with the emergence of the utilitarian principle guiding moral decisions: 'the greatest happiness for the greatest numbers' (Hutcheson, 1725, Treatise II, Section 3). The authority of the Church was challenged, in favour of attributing authority and legitimacy to government and individual liberty. Arguably, 'homo economicus' - the hypothetical portrayal at the foundation of modern economics of humans as rational self-maximising individuals, displaying predictable behaviour - was born, or at least conceived, during the Age of Enlightenment. Soon followed the Industrial Revolution, and even our modern education system mirrors the features and conditions then created to streamline and manage human resources within the ever-increasing pace of the commercial machine: 'ringing bells, separate facilities, specialised into separate subjects ... educat[ing] children in 'batches''. In the early 20th century, the American industrial engineer Frederick Winslow Taylor published 'Principles of Scientific Management'. 'Taylorism', as it became known, is a production efficiency methodology, which proposed to fragment tasks into the smallest possible measurable part, closely observe workers and measure their output in minute detail, and bestow reward or discipline accordingly.

There have, arguably, been many benefits of 'valuing what's measurable' and its associated conceptual landscape, from improved women's rights (Mary Wollstonecraft's 'A Vindication of the Rights of Women' was published in 1791), protection of human rights through fairer judicial systems, and widening access to educational opportunities. However, it is not difficult to also trace the origins of the social and environmental challenges of today - associated with our anthropocentric view of nature as a resource in service to our ever-increasing obsession with economic growth - in the various chapters and engrossing plot of this story. One needs only scan the newspapers to find evidence that, in its extreme articulations, our obsession with quantification and measurability has long since become a burden, even for our educational system, on individual teachers and children. A recent article in Der Spiegel, entitled 'Release our Kids – Grades are not Everything: What Really Matters in Life' laments the fact that schools have become a highly stress-inducing system, resulting in children moving from school to university already being burnt-out, and quoting the President of the German National Teachers Representation as saying 'Grades have lost their indicative power (for future career/success), even if people still believe they do'. What matters, suggests the journalist, are 'Love, passion, curiosity' (Der Spiegel, 2016: 96).

In order to explore the ways in which this story, our current paradigm, has been created and reinforced, we here briefly introduce the concept and methodology of Critical Discourse Analysis (CDA), which foregrounds language as being the prime site of the enactment and recreation of ideology, and as such suggests that it should be the focus of analysis for those seeking to understand power relations, domination, and resistance.

## THE IMPORTANCE OF WORDS

*'The limits of my language means the limits of my world.'* Ludwig Wittgenstein

The study of language as a discipline originated in the early 20th century, and early linguists took a generally scientific approach, much concerned with sorting through diversity, finding common structures and learning how to work with those. But gradually, and as a result of interdisciplinary cross-pollination from fields as diverse as epistemology, sociology and politics, a new powerful perspective emerged. Akin to how Newton's insights might have opened our eyes to the fact that the laws of physics apparently govern all of our existence, linguistics started to look at the interplay between language and social realities, and with the keyword of 'discourse', the boundaries of this previously niche field and its everyday relevance were thrown open. In the second half of the 20th century the

study of language and discourse became as fundamental to understanding our human world as mathematics was to the natural sciences.

Discourse in its narrower/colloquial sense refers to a particular form of communication, often implying an educated, specialist conversation, e.g. legal discourse is recognisable by its archaic technocratic nature. But to the linguist-sociologist, discourse has a much broader yet very specific meaning. Discourse in their understanding is everything we do interpersonally, all that gives meaning to ourselves and our world(s). This includes texts of all kinds and genres, all spoken language, but also includes gestures, signage, pictures, film etc. As such, discourse is the fabric into which the image of our world is woven - and without discourse we would not have any image of the world to look at. This 'social constructivist' approach is built upon the assumption that reality is not something we encounter and then describe as best we can, but, as far as human knowledge and its development is concerned, we make up, or construe, the world 'as we know it' through the act of communicating about it.

> **▶ Key Point**
>
> Discourse is everything we do interpersonally, all that gives meaning to ourselves and our world(s).

Communication is a social process, a collective endeavour. Whenever we express ourselves and say something about the world within or around us, we initiate 'discursive events' which create or reinforce (or, even, deconstruct) a particular worldview. If words constitute not only world-views but the world (at least all that we can know if it) a powerful tool seems to be at our disposal. But its uncritical use might amount to complicity in creating a world we would not want to sign up to. Here are just a few examples about how intricate yet relevant this process is:

- What does it convey about our collective compassion when people seeking help are described in the media as a crisis for us, with little regard to the crisis they are fleeing from? And what does it reveal about the state of our society when their arrival at our borders is thus, in our heads, turned into a 'tidal wave' (Burleigh, 2015)?

- It seems we are willing to be 'hard' or 'sweet' talked into certain attitudes and assumptions by words nobody really understands. The phrase 'hard-working families' has become so familiar in political discourse, that the use of these two words together serves to de-problematise each of them: what is a family anyway? why should 'hard-working' become a common-sense synonym of 'worthy'? - a process called 'collocation' in discourse studies (Fairclough, 2010).

- As a last example, what are the emotions, attitudes, perceptions of and assumptions about the world we live in that are conjured up when we describe our social processes and aspirations by applying words and imagery from economics? Phrases such as 'pay attention', 'homework', 'it pays off', 'the idea has currency' are economic metaphors that are so deeply embedded in discourse that they are difficult to spot. This phenomenon called 'econophonics' steeps every walk of life with the neoliberal sentiments of individualism, competition and inescapable austerity (Giacalone and Promislo, 2013).

These examples may seem extreme, even evoking violence. But, whilst the process of the social construal of realities by communicating about them is seldom fast or dramatic, nothing is irrelevant. And the three cases presented also serve to illustrate one important element of contemporary discourse studies: the role of power. If we accept that the words we use matter, and that discourse is the site of the creation and reinforcement of our shared sense of reality, we also

> ▶ **Key Point**
>
> Critical Discourse Analysis is a values-driven approach that recognises how power is embedded within the words we use.

need to recognise that this is not a process in which everybody's contribution has equal weight. The amount of airtime that some people (or institutions) enjoy and the importance that others attribute to their words, varies greatly. And obviously, deliberately or naively, the advantage of determining the agenda by dominating the discourse can be used to fortify one's position and further one's own interests. Hence, discourse is never a neutral process and discourse analysis cannot simply be a description of what was said. It always requires a critical stance based on the values and objectives we as individuals or practitioners want to hold and manifest in this world. This values-driven attitude as a research programme is called 'Critical Discourse Analysis', or CDA. Paying attention to power and its determination within discourse means recognising that not only do words matter, they can actually kill.

## HOW THIS MATTERS FOR EDUCATORS

There are innumerable possibilities for exploring the implications of a critical discourse lens for education practice, and a clear alignment with Education for Sustainable Development and Global Citizenship (ESD/GC). Individuals within this sector are 'practical critical theorists'. That is to say, global education is an approach based on principles of critical engagement, recognition of multiple perspectives, reflective practice and consciously 'holding a space' that enables equality, democratic participation, and recognises the importance of co-creation of new forms of knowledge in order to challenge inequalities and support social justice. This includes engaging with the tension inherent in relying heavily on conditional grant funding for outcomes-oriented projects, and the implication

of the Faustian bargain which has been struck, which 'compromises [the movement's] radical roots and values base ... within a donor-led agenda' (Troll and Skinner, 2013).

In terms of classroom practice, the current requirement for British schools to promote fundamental British values provides an illuminating example of the ways in which prevailing discourse gives clear indications of how power and societal conventions are replicated. 'British Values' is an example of collocation; the two terms being repeatedly used together serves to deproblematise both. And research carried out by the Common Cause Foundation (PIRC, 2011) has shown that values are a universally experienced socio-cultural phenomenon, a set of deeply held beliefs that influence, and are therefore evidenced in, our decisions and behaviours; they cannot be dictated or bestowed, but are co-created within a community, through the process of exchange amongst members, the communicative practices we here call discourse.

But beyond the explicit curriculum taught in school, CDA invites us to ask different questions about the ways in which discourse (language as well as other non-verbal 'texts') contributes to a whole wealth of lessons which children learn through the hidden curriculum. These may include:

- What do children learn about authority and power through teachers being always referred to as Mr. or Miss/Mrs?

- Why does the term 'sustainability' no longer appear in the national curriculum?

- What does the term home*work* tell us about the implied purpose of education?

- What are the effects of learning being parcelled into discrete subjects?

- Despite often telling children that there is no right or wrong answer to a particular question, what is conveyed by the fact that their classroom walls are enthusiastically plastered with the right answers?

- What do fervent security measures at the school gates/reception tell children about the state of the world outside?

- What are we to make of the tension between the stated aims to build children's self-esteem, and the relentless barrage of external assessment that they are subject to?

It is not possible to 'teach' ESD/GC without giving children the tools to learn about things in a different way. Thus critical thinking, dialogic learning and child-led learning approaches become mechanisms for resisting or subverting the effects of dominant discourse, and moving away from an educational system which is evaluated purely on the basis of quantitative assessment.

## HOW THIS MATTERS FOR EVALUATION

When taking evaluation beyond a monitoring and management exercise by asking 'How do we know it's working?' critical discourse analysis offers various ways to engage with the question reflectively. In the first instance, it demands critical scrutiny of the original intention - or objective - of the activity under evaluation. How do we know that the aim of the activity was 'right' or 'useful', and is it described clearly enough to confidently measure progress against it? If those principal considerations are not taken seriously, the effort of evaluation would generate potentially interesting but ultimately irrelevant results. But beyond that, all elements of the question 'How do we know it's working?' need to carefully appraised as well.

For example, would any reply to 'how' be acceptable? Are there any unintended impacts of the evaluation approach itself which might contradict the initial objectives or values of that activity? And who is the 'we' that poses the question? Is it asked on behalf of the beneficiaries of the activity? And if yes, would they agree or even give consent to the evaluation efforts? Or is the 'we' those delivering the activity, being professionally interested in improving their own practice? Lastly, the 'we' could be another third party entity, funders for example, and their agenda is concerned with generating evidence of 'value for money', resulting in discoursive 'colonisation' of the delivery of activities by economic assumptions.

Section 2 above already illustrates the ways in which critical discourse analysis may explore the idea of 'to know'. But particularly when it comes to measuring qualitative elements, our epistemology and heuristics – or what we think we can know and how we go about extending that knowledge – becomes a minefield of biases and fallacies. Ultimately, what can be said with scientific certainty might turn out to be so little that any effort expended proving it becomes misdirected. And if we allow ourselves to ascertain anything beyond that speck of certainty, one way or another we seem bound to commit one self-serving fallacy or another. With all these fundamentals considered, the first issue with the question 'How do we know it's working' might now look like the easiest part to answer: what is the 'it' we are trying to evaluate and what do we mean by 'it's working'? As ESD/GC does not primarily aim to deliver a specific knowledge content or some context-independent skills, but has its core and foundation in its values, any measure that conveys objectivity and quantifiability would seem to be at odds with ESD/GC intrinsically. And even if evaluation is an external requirement, a critical attitude is a necessary condition for sufficient clarity and transparency throughout the process, so that detrimental side-effects (akin to the 'hidden curriculum' referred to above) may be prevented.

The examples above represent a set of aspirational ideas, to which no simple guidance can be given other than a reminder of the importance of maintaining a critical stance. Nevertheless, we will suggest one talking point by looking to how the same questions have been addressed in another field, with specific reference to the role of discourse. In light of the above mentioned econophonics, the nature of counting and the pervasiveness of money, an opportune example seemed to lie in the widespread but little known field of so called

'community currencies'. Initiatives involved in this practice try to redesign the nature of money into something that is not in conflict with the objectives of convivial communities, social equality and environmental sustainability. Such initiatives range from informal grass-roots groups who use simple paper accounting or open source software applications for their transactions, up to commercial players who provide credit to businesses at no interest and with low transaction costs.

From 2012 to 2015, the EU Interreg project CCIA led by the New Economics Foundation in London convened six not-for-profit organisations including several municipalities from the UK, France, the Netherlands and Belgium to facilitate shared learning around their individual practices of community currencies, to develop shared tools and strategies and to consolidate the recognition of community currencies in the academic and policy arenas (CCIA, 2015). Part of the outputs of this project was the development of an evaluation framework to ascertain the impact of the different community currency models and practices.

Similar to ESD/GC, for this community of practice even trying to adopt a holistic evaluation framework would have meant to enclose the practice of community currencies in a discourse that has its semantic and ideological roots in our current monetary regime and would thus hamper their efforts from the start. Even well known evaluation approaches like the 'Social Return on Investment' methodology still recognize value only in terms of proxy-pricing of intangible outcomes in their equivalent Pound Sterling value (Cabinet Office, 2009). In effect the 'it' - the activities and objectives - of each community currency programme is a unique intervention with a highly context-dependent set of stakeholders, objectives and legacies. Attempting to make sense of this diversity by seeking a common economic denominator for all community currency practices would misrepresent what they stand for and aim to achieve locally.

In recognition of the dilemma that we here described as a merit of a critical discourse awareness, the evaluation framework proposed and tested by the CCIA consortium and described at length in their publication 'No Small Change' (New Economics Foundation, 2013) did not focus on indicators and measurement options, as both would vary greatly for each case study, but supported the initiatives that are looking into evaluation to find answers to the question 'How do we know it's working?', the concrete outcomes sought and the often hidden assumptions that determine the interventions. Being mindful of the fact that evaluation itself is a discursive process, is particularly relevant for values-driven interventions such as community currencies and ESD/GC. To this end the framework described in No Small Change focuses on the constellation and interaction of stakeholders which constitutes the 'discursive community'. By employing a variation of the 'Theory of Change' methodology common to many evaluation approaches (see Anderson, 2009), it seeks to make the description of individual desired outcomes so concrete, that deriving indicators for an ensuing evaluation can be easily achieved by external evaluators, researchers or the initiative's team itself. In so doing, the 'No Small Change' approach allows all stakeholders to continually reflect on what the purpose of the intervention is and what hidden assumptions and drivers determine the pursued activities.

> ▶ **Key Point**
>
> Understanding evaluation itself is a discursive process, is particularly important for values-driven interventions such as community currencies and ESD/GC.

The outcomes and indicators determined by all stakeholders of a given community currency will naturally be highly diverse across all the different initiatives, as will be the methodologies for data collection and analysis appropriate to them. However, providing a coherent and considered way to arrive at this diversity made more sense for this field of practice than the demands of observers, prospective partners and funders, and have been lauded and appraised by both the practitioners and researchers in the field (New Economics Foundation, 2015). In light of the conceptual insights from the previous sections we recommend a similar approach be considered for, or in lieu of, conventional evaluation methodologies for the diverse field of ESD/GC.

## CONCLUSIONS/OUTLOOK

Max Weber used the term 'disenchantment' to describe the intellectual moves in modern society towards rationale, reason, and scientific understanding, away from belief and imagination. Are there ways in which the ESD/GC movement can become consciously aware of the ways in which it is colluding in its own colonisation, and adopt discursive positions that challenge this story? What might education look and feel like if the discourse of economics and measurability was entirely absent? Weber described this as a 'world [which] remains a great enchanted garden' (Weber 1971: 70).

CDA can bring a fresh and illuminating perspective to help understand the ways in which we communicate with each other - using language but also non-verbal 'texts' - as the prime site of co-creation of ideology.

There is potential for further exploration, both practical and academic, of the boundary between ESD/GC and the practices of community currencies. The inclusion of a critical education about economic, money/currency, and exchange needs to be one of the core components of ESD/GC. There is already much finance education happening in schools, but it is aimed towards enabling children to become better consumers, good savers, and effective pension planners. The principles of ESD/GC call for a more nuanced approach, supporting teachers to create materials and methodologies for a truly globally aware and sustainability-geared monetary, financial, economic curriculum. Economy is what we make of it, and it's about time we take it out of the hands of economists.

Our title 'Zero is where the Real Fun starts' was borrowed from a short poem by the 14th century mystic poet Hafiz. Indeed there is only one more sentence to it: 'There's too much counting. Everywhere else!' (Ladinsky, 1996). There can be numerous interpretations of the verse, but it speaks to us of the fact that learning is the heart of life, and that the seeming ubiquitous preoccupation with quantitative measurement, which has transformed schools even in the last ten years into data-driven units set in competition with each other, is at best missing the point, and at worst letting down the children in their stewardship. Not everything that matters can be counted, and not everything that is counted matters. Or, as the fox reminded the little prince: 'It is only with the heart that one can see rightly; what is essential is invisible to the eye' (Saint-Exupery, 1995) – and to the accountant-evaluator, we may add. If what matters is love, curiosity (as proposed by the 'Der Spiegel' journalist quoted above), personal development and critical literacy, then we need to transform ESD/GC evaluation approaches by starting with the values upon which they are based, consciously rejecting domination by quantification and monetary heuristics, and deconstructing the assumptions which shape our collective construal of what is worthwhile.

# BIOGRAPHIES

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# REFERENCES

Anderson, A. (2009) *The Community Builder's Approach to Theory of Change – A Practical Guide to Theory Development*, Aspen Institute

CCIA (2015), *People Powered Money – Designing, developing and delivering community currencies*. Available at: http://communitycurrenciesinaction.eu/peoplepoweredmoney/ Accessed December 14th 2017

Cabinet Office (2009) *A Guide to Social Return on Investment*. Available at:http://www.socialvalueuk.org/resources/sroi-guide/ Accessed February 1st 2017

Burleigh, M, Daily Mail [online], 26 June 2015. Available at:http://www.dailymail.co.uk/news/article-3141005/Tidal-wave-migrants-biggest-threat-Europe-war.html Accessed January 16th 2017

Der Spiegel (2016) Nr. 35, Spiegel Verlag

Fairclough, N. (2010) *Critical discourse analysis: The critical study of language* (2nd ed.), Pearson

Giacalone, R. A. and Promislo, M. D. (2013) *Broken When Entering: The Stigmatization of Goodness and Business Ethics Education*, Academy of Management Learning & Education 12 (1), 86-101

Hutcheson, F. (1725) *An Inquiry into the Original of our Ideas of Beauty and Virtue*, Treatise II, Section 3. Available at: http://oll.libertyfund.org/titles/hutcheson-an-inquiry-into-the-original-of-our-ideas-of-beauty-and-virtue-1726-2004 Accessed January 18th 2017

Ladinsky, D. (1996) *I heard God laughing: poems of hope and joy* – renderings of Hafiz, London: Penguin Books

New Economics Foundation, CCIA (2013) *No Small Change – Evaluating the success of your community currency project*, London. Available at:http://communitycurrenciesinaction.eu/no-small-change/ Accessed January 21th 2017

New Economics Foundation, CCIA (2015) *Money with a purpose – Community currencies achieving social, economic and environmental impact*. Available at: http://communitycurrenciesinaction.eu/ccia-final-evaluation/ Accessed January 25th 2017

Public Interest Research Centre (PIRC) (2011) *The Common Cause Handbook*. Available at:http://valuesandframes.org/download/reports/Common-Cause-Handbook2.pdf Accessed January 25th 2017

Robinson, K. (2006) *Ken Robinson: Changing education paradigms*. Available at:https://www.ted.com/talks/ken_robinson_changing_education_paradigms Accessed January 18th 2017

Saint-Exupery, A. de (1995) *The Little Prince*, Ware, Herts: Wordsworth Classics
Taylor, F. W. (1911) *The Principles of Scientific Management*, New York: Harper & Brothers

Troll, T & Skinner, A. (2013) *Catalysing the 'Shadow Spaces': Challenging Development Discourse from within the DEEEP Project*, Policy & Practice: A Development Education Review. Available at:   http://library.deeep.org/record/1014/files/DEEEP-ARTICLE-2015-001 Accessed January 25th 2017

Weber, M. (1971) *The Sociology of Religion*, Boston Mass: Beacon Press

Wollstonecraft, M. (1791) *A Vindication of the Rights of Women*, Boston Mass: Thomas and Andrews

# How do teachers engage with school values and ethos?

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## INTRODUCTION

This paper addresses the knowledge, skills, values and capabilities required of teachers in facilitating a meaningful curriculum for ESD/GC. It draws upon a research project conducted during the academic year 2012-2013 with twenty-one teachers in a Catholic High School. The study examined how these teachers perceived and implemented the expectation that they engaged with the school ethos, which had a focus on Five Core Values. While the research was not specifically on how teachers managed a curriculum for ESD/GC, (although that was part of the school's curriculum), I believe the process teachers used for values presentation and ESD/GC to be similar, precisely because these aspects of a school are more than simply functional. Both values in a school ethos and curriculum for ESD/GC relate to more than academic content – they cause us to ask: *What does this mean for me, and how I choose to live my life*?

## THE RESEARCH CONTEXT

The research took place in a Catholic 11-18 High School in England during the school year 2012-2013. There were pupils and students from a wide range of socio-economic backgrounds, and 62% were identified as baptised Catholic (Diocesan Inspection Report, 2011). An Ofsted Inspection in 2011 referred to the school as 'characterised by a palpable ethos' and being an 'inclusive, harmonious community', where 'students have a well-developed moral sense' (Diocesan Inspection Report (2011).

Values were a prominent part of the expressed ethos of the school, and had been established as such since the appointment of the current Headteacher, in 2006. However, the values had not been a strong focus in the school prior to that, despite its Catholic foundation; while always 'a great school', the Headteacher commented that when he arrived, 'teamwork, and culture and ethos … needed renewing' (HT, 2012b, 8). Five

> ▶ **Key Point**
>
> Five core values terms were adopted as the aspirational ethos of the school: Respect, Co-operation, Compassion, Honourable Purpose, and Stewardship.

Core Values terms were developed by a process of discussion and negotiation, finalised by the senior team, and adopted as the aspirational ethos of the school. They were: Respect, Co-operation, Compassion, Honourable Purpose, and Stewardship. The Headteacher stated, 'Values are at the core of what I think is the main motivational driver in terms of leading a good church school' (HT, 2012a, 6). Along with this set of core values, there were themes such as 'Pay it Forward' relating to acts of kindness, and the strap line 'Aspire not to have more, but to be more' attributed to Archbishop Oscar Romero (1917-1980) of El Salvador (Gearon, 1998).

The main data collection for the case study took place during the academic year, with a minimum of five days in each of the six half-term blocks. There were three stages of interviews with volunteer teachers, and the interviews were recorded and fully transcribed. The volunteer sample consisted of twenty-one teachers, which was about a third of the teaching staff; twelve were female, and nine were male. Five of the teachers were newly qualified teachers (NQTs), and another two were experienced teachers, although new to the school. Through these subgroups I gained fresh impressions of the school. Seven of the sample had been in the school for ten years or more, so were able to speak about the changes brought about since 2006 when the current Headteacher had taken over the headship, introducing values and a new approach to school ethos. Three of the sample held senior responsibility, and a further three had pastoral middle management roles while six were academic department leads. All curriculum subject areas were represented in the sample. Five of the teachers had training or mentoring roles with other schools.
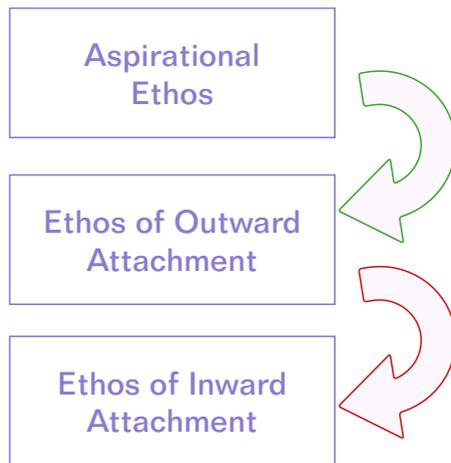


**Figure 1:** Structure of School Ethos (adapted from Donnelly, 2000)

This group of teachers formed the core of the data collection and analysis, but many other staff at the school had general discussions with the researcher. The longitudinal nature of the data collection meant that there was time to reflect on data, and then return to the school with new questions, or to revisit previous topics in order to triangulate data and to test emerging themes. The two key research questions were:

• How do the Five Core Values influence the day-to-day activities, choices and behaviours in the school?

• How do the Five Core Values impact upon the roles and work of teachers?

The relevance of these questions in relation to ESD/GC resides in the following areas. Firstly, this research sought to identify a perspective that was being imparted in the school and find out how teachers interpreted and communicated that perspective. Secondly, the research sought to understand what made the perspective meaningful.

## THEORETICAL FRAMEWORK

The study focused on the school's aspirational ethos and how this was interpreted. Ethos as a term is used in the literature in a variety of ways, of which two dominate: one is to refer to the aspirations of a school and its educational purposes and the other refers to the mood or atmosphere that is experienced (Hogan, 1984; Allder, 1993; Donnelly, 2000; McLaughlin, 2005). Ethos may be aspirational as the intention is that 'A mission statement should frame, inspire, give purpose to, drive and guide, the daily work of an educational community' (McKinney and Sullivan, 2013: 216). Therefore, the ethos of an institution may be evident in its policies, activity, decisions and relationships (Donnelly, 2000: 150) and promoted visually in displays and on the website. However, experience of school life may or may not live up to or match the public message (Donnelly, 2000; McLaughlin, 2005). I used Donnelly's terminology to frame the layers of ethos, as shown in figure 1.

Within this framework, the content of the aspirational ethos was examined and the outward manifestations of it identified. Teachers' perceptions of how the ethos should be expressed in action and relationships were sought. Through analysis of the data an aim was to identify evidence of inward attachment to the school's values and ethos and what that might mean to the teachers and for the school community's future action and development.

# FINDINGS AND DISCUSSION

The Values terms were evident in a variety of contexts. There were visuals such as posters in corridors and headings on school documentation. The Values were reflected upon in assemblies, both those taken by teachers and those by the students. The use of space and time during the school day to make them evident indicated that the school's ethos, as a message, was important to senior management. In observations around school and in the classroom, it was noted that teachers referred to the Five Core Values, especially when talking about how the students should work together, and often linking to the content of the lesson.

In order to understand how the Five Core Values 'influenced the day-to-day activities, choices and behaviours in the school', I used word-cards of the Values terms on a table during the interviews, and encouraged teachers to arrange them in a way that was meaningful to them. Questions focused on the meaning of the terms to each teacher, and how, in their experience, the Values were experienced. On occasion, Values terms were prioritised. An example of this is shown below in Figure 2:
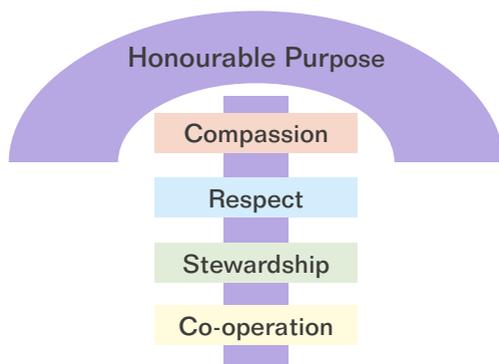


**Figure 2:** Pattern of the Five Core Values Cards: Teacher Y.

For Teacher Y, the concept of Honourable Purpose was the umbrella that brought all the meanings of the Five Core Values together, and acceptance of it could be life changing, as he explained:

> Honourable Purpose is the one that ... sits up there separately at the moment, it says that 'If you do it, you are the pupil that we're looking for. You are the individual human being that could **make a difference**.' (Teacher Y.71, researcher's emphasis).

The variety of the patterns given to the five values word-cards and the different priorities given to terms by teachers were striking. There was no uniformity and no evidence that certain Values terms would be emphasised by a particular teacher, for example, by subject taught, or faith perspective, or time in the school. There was, however, an indication that Heads of Year found 'Compassion' particularly meaningful. This term was used frequently by them in the context of understanding the difficulties many students faced in their home lives, and the world today.

Cooling argues that a shared anthropology is fundamental for genuinely shared values (Cooling in Arthur and Lovat, 2013: 110). There was evidence of Values underpinning the relationships with students: for example, seeing everyone as an individual deserving of Respect. It meant teachers were subject to the same expectations as students – an example being, saying sorry. All the teachers in the study identified that they had a responsibility to be a role model, and the term 'lived-out values' was used by the teachers to express this obligation: as Hill states, '[requiring] commitment of the whole self' (Hill in Arthur and Lovat, 2013: 29; see also Pring, 2010: xxi). Another example of living-out Values was the link made between 'Stewardship' and management of resources in the classroom, the use of Fair Trade products in the canteen and action on recycling. 'Stewardship' extended into the curriculum, as in Art, where murals were created of found objects (litter) in the school grounds. Indeed, the term 'Stewardship' appeared even more personally meaningful for two teachers. One spoke of stewardship in terms of the futures of the students, linking it to how she taught her subject, and the commitment she had to the students. The Values term had moved beyond simply relating to external behaviour to providing internal meaning. Another teacher used the term to define what being a teacher was all about for him, particularly in care for the students as people: 'I think it's stewardship of the kids ... you are stewarding their life in some way ...' (Teacher H.48).

> **Key Point**
>
> The values terms moved beyond simply relating to external behaviour to providing internal meaning.

This diversity of interpretation and emphasis indicated three aspects of engaging with an aspirational ethos. The first was that all teachers in the study did indeed connect with the Values of the school, accepting their importance, and these Values were in varying degrees and with different emphases significant in their role and work. The second related to the teachers themselves: they assimilated the terms into a pre-existing personal ethos, as shown by stories and key moments they described to illustrate the importance of a Values term. The third aspect was the sense of freedom that teachers had in relation to the school's very specific message. The Headteacher spoke of the school's aspirational ethos as supporting a 'personal journey'. The assurance with which teachers described that journey in their individual interpretations showed that this was an enabling factor in engaging with the ethos of the school.

## IMPLICATIONS FOR ESD

The focus of this paper is on the knowledge, skills, values and capabilities which teachers need to facilitate a meaningful curriculum. The knowledge that teachers needed for Values education concerned not just content but also the visible application of it, and they interpreted how they as teachers would live them out. Equally, they identified the need to provide opportunities to students to live out the Values as well. The skills and capabilities teachers stated as most helpful in supporting the ethos of the school were dialogue and negotiation. Thiessen's term 'critical openness' is a useful concept and descriptor for the way that dialogue operated. It encourages frank questioning, conducted with respect (Thiessen, 1993). This, I would argue, allowed for genuine engagement with the Values and ethos, and would also help to make a curriculum meaningful.

Given that the aspirational ethos and values of the school were presented as a meaningful, relevant and important message, the same would need to be said of the curriculum related to ESD/GC. This research indicated that for a curriculum to be made meaningful it needs to move from cognitive to affective. The Values in this school were not just talked about, they were acted out. Teachers articulated how they made the school's values relevant in the classroom and around school. Furthermore, there was evidence of how values influenced the systems of the school – through policy decisions, timetabling and budgets; how they were integrated into the life of the school outwardly through assemblies and inwardly in relationships. However, teachers also discussed how an ethos (or curriculum) may lack meaning when it is perceived to be hypocritical (Hill, 2008). The same can be true for ESD/GC: if it is just words, without commitment, then it will not be meaningful.

> ▶ **Key Point**
>
> The Values were not just talked about, they were acted out. They influenced policy, timetabling and budget decisions.

## CONCLUSION

The teachers in the study had been presented with Values that they were to promote, in the same way that teachers may be asked to deliver ESD/GC. All teachers in the study stated that the values were important and sought to apply them in their teaching role and relationships, albeit in diverse ways. This willing attitude towards the aspirational ethos is linked to Donnelly's idea of outward attachment and might be seen as simply compliance. However, it became clear that, by having time to reflect and consider the implications of the school ethos, there was evidence of a Values cycle, where the Values engagement became part of the individual's perception of what it meant to be a teacher and promoted attitudes relating to the Values. It was at this level that the ethos moved towards inward attachment and, through this Values cycle, further enhanced the meaning of the aspirational ethos.

As a result of this case study, I suggest that the ESD/GC curriculum needs to involve several features. The most important is the clarity of the aspirational ethos that underpins it – that is, the educational purpose of ESD/GC, and also the values connected with it. Having identified this starting point, there needs to be a commitment to cultivating an ethos of outward attachment at every level of school life, including governance, systems and relationships. ESD/GC must be lived out, and in order for this to be meaningful, and not hypocritical, all members of the community need time and space to reflect on and identify how the purpose and values of ESD/GC are shown in the school and the areas for which they are responsible. Finally, there needs to be support for teachers to develop the knowledge, skills, values and capabilities that will empower and sustain them in this role.

## BIOGRAPHY

**Alison Clark** began her career as a secondary school teacher, working in High Schools, Futher EducationColleges and in Teacher Education at Liverpool Hope University. She is currently based in the north-west of England and divides her time between providing training on values and global learning in primary and secondary schools, and being a school governor. She is a member of the Chartered Management Institute, an Associate for the International Values-based Education Trust and an Associate at the Liverpool World Centre.

# REFERENCES

Allder, M. (1993) 'The Meaning of 'School Ethos.' *Westminster Studies in Education* 16, pp. 59-69.

Arthur, J. and Lovat, T. eds. (2013) *The Routledge International Handbook of Education, Religion and Values*. Abingdon: Routledge.

Cooling, T. (2013) 'Teachers and Christian religious values.' In: J. Arthur and T. Lovat (eds), The Routledge International Handbook of Education, Religion and Values, pp. 100-113. Abingdon: Routledge.

Diocesan Inspection Report (2011) [Reference Anonymised.]

Donnelly, C. (2000) 'In Pursuit of School Ethos.' *British Journal of Educational Studies* 48 (2), pp. 134-54.

Gearon, L. (1998) *A Modern Martyr*. Norwich: Chansitor Publications Ltd.

Hill, B.V. (2008) 'How Learners Respond to the Teaching of Beliefs and Values.' *Journal of Education and Christian Belief* 12 (2), pp. 101-113.

Hill, B.V. (2013) 'Do values depend on religion? would it be best if they didn't?' In: J. Arthur and T. Lovat (eds), *The Routledge International Handbook of Education, Religion and Values,* pp. 28-41. Abingdon: Routledge.

Hogan, P. (1984) 'The Question of Ethos in Schools.' *The Furrow* 35 (11), pp. 693-703.

HT (2012a, 2012b, 2013) *Interviews with the Headteacher*.

McKinney, S.J. and Sullivan, J., eds (2013) *Education in a Catholic Perspective*. Farnham, Surrey: Ashgate.

McLaughlin, T. (2005) 'The Educative Importance of Ethos.' *British Journal of Educational Studies* 53 (3), pp. 306-25.

Office for Standards in Education (OFSTED) (2011) *Inspection Report.* Manchester: Ofsted. [Reference anonymised.]

Pring, R. (2010) Preface and Introduction. In: T. Lovat, R. Toomey and N. Clement (eds), *International Research Handbook on Values Education and Student Wellbeing*, pp.xix-xxiv. Dordrecht: Springer.

Thiessen, E.J. (1993) *Teaching for Commitment: Liberal Education, Indoctrination, and Christian Nurture.* Montreal and Kingston, Canada: McGill-Queen's University Press.

# In search of core values

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## INTRODUCTION

The debate around sustainability and the environment raises fundamental questions about what we value, what we think is important and the way that we live our lives. It calls into question the purpose of schooling and the nature of the society we want to create both now and in the future. These are over-arching issues which are not just confined to Education for Sustainable Development (ESD). They are legitimate concerns for all academic disciplines, and they impact directly on economics, politics, religion, literature, the arts, architecture, engineering and many other areas. Building the capacity of educators is vital if we are to develop an informed response to current ecological challenges. This paper explores the way that one university has begun the process of identifying and affirming the values and principles which might underpin this endeavour.

## WHY DO VALUES MATTER?

Put simply, values provide us with a sense of direction and help us to make choices and decisions in both our professional and personal lives. Booth and Ainscow (2011) see values as 'fundamental guides and prompts to action' which spur us forward (21). How we derive our values and whether they are absolute or subjective are questions which have exercised moral philosophers and spiritual leaders from at least the time of the Ancient Greeks. Some people opt for theological interpretations – values are God-given and are part of a set of religious beliefs. Others favour social and cultural explanations which highlight the needs and welfare of groups. But values also operate on an individual and personal level. Altruism and self-sacrifice, for example, describe the way a single person behaves rather than the response of a whole group or nation.

Without trespassing further into this debate, it is interesting to note that modern neurological research is beginning to suggest that some socio-moral norms may be 'hard wired' and thus culturally universal (Goswami 2015). Even very young babies, for example, appear to have a sense of fairness and preference for helping rather than hindering others. Although further evidence is needed, such findings begin to suggest that the beliefs and principles which are central to ESD could be based on innate human propensities.

There is a sense in which values need to be contextualised and applied in practice. It is easy to say that we believe in certain things but it is much harder to live by our ideals, as conflicts often arise. For example, our loyalty to our friends and family may be at odds with our respect for authority. Or the people that we love may not always turn out to be the people that we trust. Furthermore, what we believe matters most in our private life may not always align with the ethos of our working or professional environment. Children too are liable to experience differences between the values that they experience at home and how they are expected to behave at school. It is important to recognise these tensions. Talking about what is most meaningful and important in our lives builds our understanding of ourselves and enhances our sense of identity, even if it doesn't result in agreement. It also helps to stop us feeling unhappy, misunderstood or compromised

Such dilemmas open up a debate about whether there is a hierarchy of values. Is love or loyalty, for example, more important than honesty or trust? Rather than seeking to establish an order or sequence, Booth and Ainscow (2011) provide an alternative model which illustrates how values interconnect with each other. Using the metaphor of a flower, they portray inclusion as the 'stalk' which, together with courage, compassion, trust and rights, provides the support for other values. The 'petals' are formed of a number of mutually reinforcing values such as community, equality, non-violence and other sustainability. Wisdom, love, joy, honesty and other positive qualities appear at the centre of the flower (Figure 1). For Booth and Ainscow the role of inclusion as a core principle is fundamental. If it is replaced by its opposite value, exclusion, all the other values change too. For example, courage is replaced by compliance, trust is replaced by competition and sustainability is replaced by exploitation. There would, of course, also be fundamental implications in terms of our behaviour and sense of priorities.
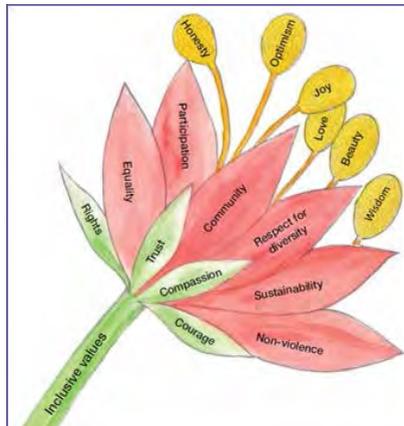


**Figure 1:** Values are Overlapping and Inter-Related (Booth and Ainscow, 2011)

## OPENING UP A DEBATE

How then can educators, both individually and collectively, build their understanding of the values which underpin their work and develop common understandings? The cycle of strategic planning which schools and universities undertake provides a key opportunity to open up such discussions as a wide range of stakeholders are usually involved. At Canterbury Christ Church University, for example, managers, staff, students and governors have all contributed to a debate which has seen a steady shift towards sustainability perspectives. Ten years ago environmental issues hardly gained a mention. Now the latest strategic framework acknowledges the importance of building a sustainable future in both the mission and values statements. Furthermore, sustainability is explicitly identified as one of 'six cross-cutting themes' and it is implied in several of the others, especially internationalisation and employability (Canterbury Christ Church University, 2015). In due course, the university's achievements and progress will be evaluated against these criteria.

The restructuring of the Faculty of Education which was undertaken in 2014 provided a further chance for a fundamental review at a more specific level. This process involved a fundamental evaluation of roles and responsibilities and led staff to reflect on their practice in both private and public conversations. As they considered their fundamental beliefs, many colleagues referred to the distinctive ethos which they believed was widely shared across the Faculty. Features which stood out as particularly significant included a deep commitment to understanding learning and a concern for children and their various needs, coupled with a strong sense of collegiality. Such values, although implicit, are vulnerable unless publically affirmed and are liable to become eroded by external pressures. It is for this reason that staff working in the primary phase met together for an in-service development event to try to further articulate their shared values and beliefs.

> ▶ **Key Point**
>
> Values are vulnerable unless publically affirmed and are liable to become eroded by external pressures.

## BUILDING A CONSENSUS

Colleagues from the School of Teacher Education and Development began by exploring the terrain and entering into an open discussion about their values, visions and dreams. They then divided into groups where they could share and develop ideas in greater detail and begin to collaborate on building a consensus. Although there were no official convenors, one member of each group agreed to take notes to share with others and to compile a summary. There was tacit agreement that discussions should be positive and forward looking – this was not the forum for making complaints or sharing grievances.

After a lengthy and animated dialogue, each group reported back to the others to share ideas. The main points were written down as bullet points on a flip chart by the group spokesperson, together with any immediate observations or comments from other staff. Colleagues were also invited to provide individual feedback using post-it notes to capture wider, and possibly divergent, views. The format of the day and the spirit in which it was conducted was both affirmative and collegial. Amin and Roberts (2008) build on Wenger's notion of a community of practice (Wenger, 1998) to recognise how impromptu networks can develop in situations where professionals come together to experiment and create new ideas. The way that colleagues engaged with the values discussion showed many of the features which Amin and Roberts identify – including the untidiness that surrounds creative endeavour and the difficulties surrounding dissemination.
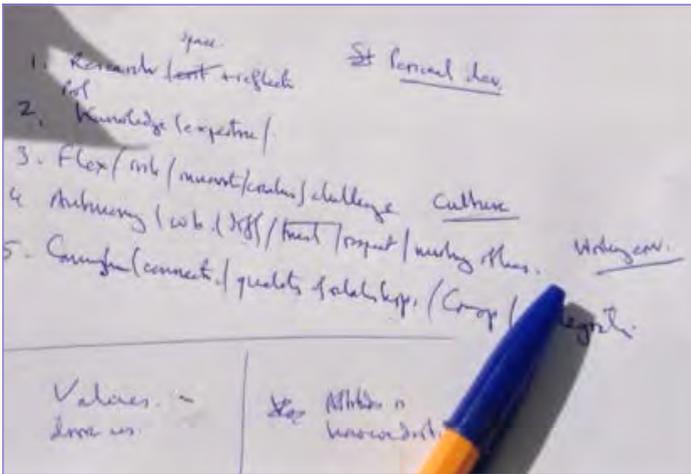


**Figure 2:** Five Main Themes Emerged from the Data

In order to identify an agreed statement of values, three colleagues with research experience agreed to undertake a more detailed analysis of the days' discussions. The flip-charts, post-its and other notes were carefully scrutinised and categorised into emerging themes using a grounded theory approach (Glaser and Strauss, 1967). Each statement was examined in turn and all three researchers had to agree that it had been correctly categorised and was genuinely rooted in what staff had written, both in spirit and in detail. After much discussion a set of statements emerged as succinct summaries which encapsulated the original notes and which articulated the ethos of the School in a meaningful way (Figure 2). There were five themes, each imbued with values:

*Community:* We learn from each other, through co-operation, collaboration and the building of quality relationships.

*Respect:* All learners need to be in environments where they are trusted, nurtured, loved and supported in becoming autonomous.

*Knowledge:* We believe in the importance of developing the expertise of all learners in all disciplines.

*Evidence:* We recognise that the education profession must be underpinned by research, debate and the opportunity for critical reflection.

*Innovation:* We support each other to move beyond compliance by taking risks, being creative and thinking globally.

The next step was to report back to the School on what had been achieved and to discuss how the summary statements might best be used. In the ensuing discussions, questions were raised about how the values could be disseminated to students, whether they should be published and if they might be used for judgement or assessment. The values statements were also seen as important for informing all aspects of practice, including school partnerships, and as a base for programme and course development. Some colleagues challenged the extent to which the values reflected their personal views. Others affirmed that the process of discussion had itself reinforced the ethos of the School which had been the stimulus for the whole exercise. The debate continued.

## REFLECTION AND ANALYSIS

It would be an exaggeration to claim that discussing and agreeing values has transformed the practice of the Faculty or School. It has, however, had a significant impact. As well as being affirmative, the process has served to raise the profile of values and reinforced their important in underpinning practice. An article about the process has been posted on the University blog (Barnes and Scoffham, 2014). Colleagues are also clearer about the values that they share and better placed to talk about values in their work with students. Finding commonalities and affirming the deeper purpose of educational practice also seems to have been particularly helpful at a time of unsettling organisational change.

There are also signs that the values debate will have a more lasting impact. Candidates applying to work in the School of Teacher Education and Development are now made aware of its ethos when they come to be interviewed. The values which underpin the Christ Church approach to primary education are also included in marketing material. Interestingly, there has been an impact in other academic areas too. The new framework for sustainability which will be applied across the University now identifies a similar set of values as its ethical underpinning and has clearly been informed (and inspired) by the developments in the Faculty of Education.

How then do the general principles and values of primary educators relate to sustainability which is a much more specific area of study? At first glance, there might seem to be little congruence. The term 'sustainability' does not appear directly in any statements the educators devised, and terms such as social justice and global equity – two key values which are integral to ESD – are not identified either. However, a closer reading reveals that the foundations for sustainability education are embedded within all the statements. Taking each in turn:

1. *Community:* Building and working with communities at both a local and global scale are part of inclusive practice and lead directly to considerations of equality and justice.

2. *Respect:* Learning to understand yourself, honouring the wisdom and experience of others and working collaboratively are key features of a sustainability mind-set.

3. *Knowledge:* Being sufficiently well informed about environmental issues is a basic requisite for wise decision making.

4. *Evidence:* Recognising research evidence that sustainability education involves overcoming hidden barriers and psychological resistance is essential if it is be effective.

5. *Innovation:* Being creative and adopting new approaches to environmental problems is essential if we are address global warming and other global issues.

This overlap should not come as a surprise. The ethos which underpins sound educational practice is necessarily universal. What is much more interesting, however, is that ESD is not normally considered in such a wide context and is usually underpinned and supported by a narrower set of considerations. Concepts such as conservation, stewardship and resource management, whilst important, have limited application outside the world of ESD. Taking a different starting point has led to a much broader perspective.

## CONCLUSION

Generic values such as the ones developed by the Christ Church primary ITE tutors need unpacking if they are to be applied to sustainability education. However, they have wide appeal and are relevant to many different contexts. The way they have been generated in an inclusive manner and the meaningful involvement of a significant number of colleagues is also important. Such an approach offers a model which could be re-interpreted in different settings.

Recent guidance for higher education providers from the Qualifications and Assessment Authority (QAA) now formally recognises the role of values in ESD. The guidance declares that 'all graduates will share responsibility as stewards not only of the environment but also of social justice' (2014: 6). The guidance goes on

to note that 'the development of personal values is increasingly seen as important for professions where ethics and moral behaviour are a hallmark of good practice' (2014: 6). This guidance is not unproblematic. There is deep seated unease in both schools and universities about promoting particular orthodoxies and ways of behaving. Bias and indoctrination stand in stark opposition to critical thinking and academic freedom. However, giving greater prominence to values and recognising them more explicitly might be one of the hallmarks of an increasingly confident and mature approach to ESD.

Whether we acknowledge it or not, values underpin all aspects of education at both an explicit and an implicit level. Basic decisions about learning and the selection of curriculum content are necessarily based on a set of beliefs and principles about the things which we believe really matter. But it is also important to acknowledge that the values dimension to education is much more prominent in some subject areas than others. In mathematics, for example, the subject matter is very often either abstract or neutral and there is a particularly strong emphasis on skills. ESD stands at the other end of the spectrum. Here a commitment to the welfare and well-being of others at an individual, local and global level is a fundamental pre-requisite. So too is a deep concern for the natural world and the health of the planet that sustains us. It is important to acknowledge this ethical basis, to find ways in which colleagues can develop shared values and to incorporate them appropriately in teaching programmes. Recognising the way that values interconnect and overlap is an important part of this process and exploring these complexities could be one way to develop an increasingly mature understanding of the role of sustainability perspectives in all aspects of education.

## BIOGRAPHY

**Stephen Scoffham** is a Visiting Reader in Sustainability and Education at Canterbury Christ Church University, where he has a leadership role developing sustainability and environmental perspectives in university life. He is the author of many texts for children and teachers on primary geography and is co-author of the Collins Primary Geography textbook series (Collins, 2014). His professional interests include intercultural understanding, the global dimension, creativity and learning. Stephen has been an elected member of the Geographical Association's governing body since 2011 and is an educational advisor for Commonwork, a Kent-based charity which explores sustainable living and working.

# REFERENCES

Amin, A. and Roberts, J. (2008) 'Knowing in Action: Beyond communities of practice.' *Research Policy* 37 (2), pp. 353-69.

Barnes, J. and Scoffham, S. (2014) 'Values Matter.' *Considered - the Faculty of Education Blog at Canterbury Christ Church University*. http://www.consider-ed.org.uk/values-matter/ Accessed 8th September, 2015.

Booth, T. and Ainscow, M. (2010) *Index for Inclusion*. Bristol: Centre for Studies on Inclusive Education.

Canterbury Christ Church University (2015) 'Strategic Framework 2015-2020.' Available at: https://cccu.canterbury.ac.uk/strategic-framework/strategic-framework.aspx Accessed 11 May, 2015.

Glaser, B. and Strauss, A. (1967, 2012) *The Discovery of Grounded Theory: Strategies for qualitative research*. London: Aldine.

Goswami, U. (2015) *Children's Cognitive Development and Learning*, York: Cambridge Primary Review Trust.

Hicks, D. (2013) *Education for Hope in Troubled Times*. Stoke on Trent: Trentham.

Lucas, B. and Claxton, G. (2010) *New Kinds of Smart.* Maidenhead: Open University.

Parkin, S. (2010) *The Positive Deviant*. London: Routledge.

Quality Assurance Agency (2014) *Education for Sustainable Development: Guidance for UK higher education providers*. Gloucester: QAA.

Wenger, E. (1998) *Communities of practice: learning, meaning, and identity*. Cambridge: Cambridge University Press.

# Research Summaries
## Research in Action

# Research Summaries

'Research in Action' aims to encourage the sharing of ideas and innovations in teacher education by making connections between research and practice. The journal aims to showcase research undertaken at Liverpool Hope University and within our partnership schools. This section provides brief summaries of recent/ongoing research projects undertaken by Liverpool Hope staff, colleagues from our partnership schools and PhD/EdD students to encourage professional learning and dialogue.

## Can national identity ever have 'fundamental values'?

A number of staff and students at Liverpool Hope University are currently exploring the historical, philosophical, political and educational aspects of national identity and its translation into curricular and educational arenas. The moral panic around fundamentalism and radicalisation interacts with themes such as community cohesion and multiculturalism which have been actively contested in public and policy discourse since at least the Oldham Riots of 2001. The strategy to prevent violent extremism through the promotion of 'Fundamental British Values' is just one example of this. The prime mover has been seen as Islamic, but there are further underminings in nationalisms within the UK such as the Scottish referendum of 2014, as well as anti-EU expressions of nationality. 'Brexit' for example was a demand for a return of 'political sovereignty': 'we want our country back', as well as a demonization of immigrants. More generally there have been other assertions of nationality, as in Hungary, Russia, and to some extent the US, as well as a growing sense of disillusion with the injustices and inequalities of globalisation. Fundamental British Values, as the UK government promotes the approach, raises issues of interpretation that are being explored by these researchers. This research also seeks to understand how policies such as Prevent and Fundamental British Values are being mediated and enacted in diverse educational settings. The findings have been discussed on BBC Radio Merseyside (http://www.bbc.co.uk/programmes/p04hnrcb) and informed training materials for the Global Learning Programme across the UK. The research team led a symposium on this subject at the Thirteenth International Congress of Qualitative Inquiry (QI2017), held at the University of Illinois 17-20 May 2017.

Research projects:

- 'Fundamental British Values: what's fundamental? what's value? And what's (now) British?' Professor Ian Stronach and Dr Joseph Maslen, Department of Education Studies

- 'Radicalising 'British' children into a manufactured concept of 'British'ness. A problematization from an Englishman at Liverpool Hope' Associate Professor Dr Alan Hodkinson, Department of Disability and Education, Fundamental 'British' Values.

- 'Beginning Teachers' Understandings of Fundamental British Values: A Multi-Method Case Study' Associate Professor Phil Bamber, Department of Education Studies,

- 'Tolerance in Fundamental British Values: A case study on young British-Turkish people in Northwest England' Ms Asli Kandemir, PhD student, Department of Social Science

- 'National identity and the prevalence of ableist and disablist ideologies' Ms Ella Houston, Professional Tutor and PhD student, Department of Disability and Education

- 'Being valued as a 'post-truth' citizen' Dr Zaki Nahaboo, Department of Social Science

- 'Fundamental British Values and home education in the UK' Dr Harriet Pattison and Dr Babs Anderson, Department of Early Childhood

For further information please contact Associate Professor Philip Bamber, bamberp@hope.ac.uk

# Church of England School Leadership: The impact of the Coventry Diocese Church School Leadership Course

This research, undertaken for an EdD at Liverpool Hope, and awarded in 2016, explores the learning experiences of aspiring and newly appointed leaders of Church of England schools who undertook a one year church school leadership course in Coventry Diocese. By exploring the narratives of course participants from the first 3 cohorts, this research develops understanding of effective formation and equipping of aspiring leaders for Church of England schools. A fourth cohort undertook the course during the research period. Their reflections, together with interviews with course leaders, Diocesan Education Officers, and focus groups of participants and mentors from the first three cohorts, refined

the themes which emerged from the narrative data. Emerging themes were examined using an explanatory framework adapted from a model developed by James Lawrence (2004) for use in ministerial leadership development within the church context. This enabled a degree of clarification of what participants meant if, and when, they talked about 'a transformational course', and enabled some understanding of what, if anything, changed, and how and why any transformation they identified had occurred.

The learning experiences identified were unique to each individual and related to different aspects of their lives and education practice. From a range of different belief positions, individuals experienced various life-changes. Greater self-awareness and self-belief resulting from clarifying personal values and beliefs were related to the development of vocation, character, integrity and authenticity, which for some was underpinned by development of faith or spirituality. Competency to lead a church school was characterised not just by new knowledge and understanding, but also by confidence and courage to articulate a newly clarified purpose and vision for the church schools, leading to significant changes in some schools as a result. Specific aspects of course structure and pedagogy, including its reflective and relational nature, and experiencing Christian practices, emerge as significant causal factors for learning. This has implications for wider national and diocesan thinking about the formation and development of *all* teachers and leaders in Church of England schools.

This research has already informed the Church of England Foundation for Educational Leadership strategy to develop school leaders within the Church of England's network. The findings of this research contributed to the foundations for the new Church of England Professional Qualification for School Leadership.

Farnell, A. (2018) *Grow your own school leaders*. Cambridge: Grove Books Limited.

For further information contact Dr Alison Farnell at alisonfarnell30@gmail.com

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# Christian Faith Transmission within the family context, during Early Childhood

This research investigated the influence that Christian parents have upon the faith of their young children. First, it was necessary to uncover the essence of Christian faith in early childhood, in order to assess the factors that may influence it. Faith was viewed not only through a theological lens, but also by utilising a social sciences perspective. This drew upon insights from the fields of psychology, education, child development, children's spirituality and theology. Understanding

the origins of faith in early childhood within the Christian home involved ascertaining whether faith is innate or passed on through human endeavour. This enquiry therefore explored the nature of faith nurture, particularly whether it was resourceful or toxic to the child. An observational tool was developed for observing and documenting faith in childhood, capturing an understanding that faith nurture should be a balance between both treasuring aspects of faith that are part of child's 'being' in Christian families, and teaching and developing other facets.

Further empirical research utilised this tool as part of a three-year longitudinal study of 43 children. This investigated the correlation of potentially influential factors with observations of the child's faith. It was found that the influence of parents is highly significant on faith in early childhood, with the parent whom the child feels emotionally closest to, having the greatest influence. The reasons for parental attitudes and approaches to Christian nurture were frequently found to be subconscious, yet impacted greatly upon the faith of the child. Future research will seek to explore other factors which may be related to a child's faith, such as socio-economic context, special educational needs and family setting.

For further information contact Sarah Holmes at holmess1@hope.ac.uk

## What if Worship

This research has developed a new theological framework for Church of England Primary Schools to impact upon practices of collective worship. This research emerged from concerns about the mismatch between the regard in which collective worship is commonly held and the theological understanding of those who daily lead it in Church schools. Collective worship is deemed to be one of the distinctive features of a Church school by the National Society and Diocesan Boards of Education. This is reinforced through the regular inspection of the quality of collective worship via the Statutory Inspection of Anglican and Methodist Schools. This research found that, due to the lack of theological underpinning, collective worship can often be reduced to nothing more than moral education. The research included a participative case study which involved staff of a Church primary school in the implementation of What if Worship (recently renamed Seeing Anew). What if Worship is a tool adapted from What if Learning to provide a theological framework for exploring the nature and purpose of collective worship. It allows a new way of seeing collective worship as a central community activity with formative practices and is linked to the Christian concepts of the Kingdom of God, the Trinity and Incarnation. The research found that What if Worship supports and enhances the practices of and attitudes towards collective worship among staff in Church schools.

This research has been published as 'How to See Collective Worship Anew' by Grove Books (Brown, 2017). Other research dissemination and impact activity has involved local and national training on 'Seeing Anew'. For instance, alongside whole school professional development activity, Head teachers and collective worship coordinators of schools in Derby Diocese have received training on the approach. As a result, several schools have adopted the approach and have in turn become centres of excellence with other schools, both church schools and community schools visiting to observe and learn. The 'Seeing Anew' approach has also been shared with curates as part of their Initial Ministerial Education and have presented at diocesan level to the Bishop's Council. Those interested can use the training material for themselves as well as watch several short films of teachers and pupils talk about the challenges and impact of using the approach. Alison Brown has since been invited onto a working party convened by Charles Clarke and Linda Woodhead to consider the place of collective worship in education legislation.

Brown, A. (2017) How to See Collective Worship Anew. Cambridge: Grove Books Limited.

For further information contact Dr Alison Brown at
Alison.Brown@derby.anglican.org

# Reviews & Events

Research in Action

Special Issue, June 2017

# Book Reviews

Babs Anderson (Ed.) *Philosophy for Children: Theories and praxis in teacher education,* paperback, 154 pages. Published August 2016 by Routledge.

As an advocate of philosophical enquiry, Babs Anderson has carefully crafted this book to explore the evolution and implementation of Philosophy for Children (P4C) in the U.K. It includes contributions from numerous authors in the field of education that focus on P4C's history, purpose and place in education, associated pedagogies and communities of enquires. As a P4C level 1 trained primary teacher educator with mathematics as my main subject passion, the chapters related to P4C in the primary school and in higher education are of particular to interest to me.

Having taught within the primary sector, I highly recommend this book to encourage individuals and hopefully whole schools to develop their practices. An area for development for many teachers and trainee teachers is to provide the children more opportunity to have a voice and to avoid too much teacher talk. Dialogic approaches, advocated by a P4C enquiry, enables the teacher and pupils to have a better balance and quality of discussion in the classroom.

The philosophy for children approach enables a structure for deep and meaningful discussions, where children are nurtured to be caring, collaborative, creative and critical and thinkers. Controversial discussions, such as those around pressing local and global issues, can be facilitated skilfully by the teacher, who with specific SAPERE* training, focuses on improving personal development of Socratic questioning and dialogue.

Modelling the potential of higher order Socratic questioning and encouraging student participation are key in higher education, and for our future teachers. Preparing trainee teachers to demonstrate curiosity, to be able to articulate fluently and in a well - considered way can only help them to be better prepared to teach. Creative and critical thinking in particular, links to trainee teachers' resilience and reflectiveness of responding and reacting to received feedback.

For practitioners in school-based settings there are challenges in developing whole school approaches, for instance the financial implications of training. Nevertheless, if trained staff value the potential of becoming a philosophical teacher, good practice can be shared and modelled. Implementing new initiatives takes time; teachers would need the space to reflect, develop and improve their practice. From first-hand experience of facilitating P4C enquires for children

students and staff, I strongly recommend practising philosophical enquires and dialogic pedagogies as a form of CPD for educators. There is evidence to confirm that discrete hourly philosophical enquires, can improve primary school attainment (Gorard et al, 2017) and promote developments in cognitive, critical reasoning skills and dialogue in the classroom and emotional and social developments. (Clackmannanshire Project 2001/2).Other research detailing the impact of philosophical enquires is located at: http://sapere.org.uk/Default. aspx?tabid=204 *SAPERE - the charitable Society for Advancing Philosophical Enquiry and Reflection in Education.

Gorard, S., Siddiqui, N. and See, B. H. (2017) Can 'Philosophy for Children' Improve Primary School Attainment? Journal of Philosophy of Education, 51: 5–22.

*Ms Mahnaz Siddiqui, Professional Tutor in Teacher Education at Liverpool Hope*

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## Douglas Bourn, *The Theory and Practice of Development Education: A Pedagogy for Global Social Justice,* paperback, 222 pages. Published January 2015 by Routledge.

Teachers, academics and students are justified to be wary of 'adjectival educations' such as peace education, human rights education, sustainability education, global education and intercultural education. What, they may ask, distinguishes these approaches from good education? Development education, the focus of this book, has brought together a range of individuals and organisations actively engaged in learning about development issues over the last 5 decades. From the margins, and driven by 'a common belief in wanting to make the world a better place' (Bourn, 2015: 3), this international educational movement has harnessed the support of non-government organisations and diverse funding streams to influence educational policy and practice. In the UK this has included the introduction of the Global Dimension as a cross-curricular theme and more recently the Global Learning Programme professional development initiative for teachers.

This book from Dr Doug Bourn, the Director of the Development Education Research Centre at the Institute of Education, London, provides an insightful and timely overview of theory and practice in this field. Development education has paved the way for education for sustainable development and global citizenship that are now embedded in the 2030 Sustainable Development Goals. For instance,

target 4.7 will be measured by 'the extent to which ESD/GC are mainstreamed at all levels in (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment' (UNESCO, 2016: 287).

The central argument of this book is that Development Education is underpinned by a distinctive pedagogical approach informed by theoretical perspectives such as post-colonialism, transformative education and critical pedagogy. Moving from the margins to the mainstream demands looking beyond evaluation of easily identifiable measures to satisfy funders towards research that evidences the contribution of development education 'to learning and education in general' (Bourn, 2015: 166). The case studies provided here on evaluating training programmes for teachers, research into school linking and the use of the 'How do we know it's working?' toolkit demonstrate how this may be enacted. These illustrations are limited through dependence upon instruments of self-report and recourse to capturing 'actions' that result from intervention. Realising Bourn's vision for development education requires further understanding of the learners' being, alongside their agency, fore grounding the cultivation of particular values as discussed in this Special Issue.

United National Educational, Scientific and Cultural Organisation (2016) Global Education Monitoring Report: Education for people and planet. Available at: http://en.unesco.org/gem-report/ Accessed 8th May 2017

*Associate Professor Philip Bamber*

# Events

## Announcing Forthcoming Conference Papers

### European Association for Research on Learning and Instruction (EARLI) Biennial Conference 2017

**29th August to 2nd September 2017, University of Tampere, Finland**

'Enhancing preservice teachers' efficacy beliefs through participation in a school-university partnership programme' by Ms Sue Cronin, Head of School of Teacher Education and Dr Claire Lloyd, Lecturer in Teacher Education, Liverpool Hope University.

### British Educational Research Association (BERA) Annual Conference 2017

**5th- 7th September 2017, University of Brighton, England**

'Mathematics teaching via an alternative route: Mathematical Capital and Subject Knowledge Enhancement Courses' by Dr Mary Stevenson, Senior Lecturer in Teacher Education, Liverpool Hope University.

'The role of music in supporting the development of phonological awareness' by Ms Veronica Poulter, Lecturer in Teacher Education, Liverpool Hope University.

## Announcing Forthcoming Conferences at Liverpool Hope University

### British Educational Studies Association Annual Conference
### *'Education as a collaborative process: the entanglement of ethics, research, policy and practice'*

**28th to 30th June 2017, Liverpool Hope University**

For further information contact Dr Cathal O'Siochru,
e-mail: osiochc@hope.ac.uk

### Disability and Disciplines: The International Conference on Educational, Cultural and Disability Studies
**5th - 6th July 2017, Liverpool Hope University**

http://ccds.hope.ac.uk/ourconference.html

For further information contact Dr David Bolt, e-mail: boltd@hope.ac.uk

## Teacher Education for Equity and Sustainability Network (TEESNet) Tenth Annual Conference

*'Making the Sustainable Development Goals Real: The Role of Teacher Education in Promoting Quality Education for Sustainable Development and Global Citizenship Education in Schools'*

**Thursday 14th September 2017, Liverpool Hope University.**

http://teesnet.liverpoolworldcentre.org/home/teesnet-2017/

To present a paper or for further information contact Dr Philip Bamber, e-mail bamberp@hope.ac.uk

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## British Society for Research in Learning Mathematics (BSRLM) Conference

**Saturday 11th November 2017, Liverpool Hope University.**

http://www.bsrlm.org.uk/

For further information contact Dr Mary Stevenson, e-mail: stevenm@hope.ac.uk

# Call for Papers
## Research in Action

Special Issue, June 2017

# Call for Papers for Autumn 2017 Issue

Research in Action is designed to encourage the sharing of ideas and innovations in teaching and learning by making connections between research and practice.

Each edition will bring together a selection of high quality research recently undertaken by Hope postgraduate students and teaching staff. We also showcase collaborations between the School of Teacher Education and our partnership schools, undertaken to advance the understanding and improvement of practice. These contributors will offer research-informed and scholarly ideas and inspiration to encourage professional learning and dialogue. The journal will include updates of new publications, details of upcoming events, and school-university partnership opportunities.

The journal aims to support a stimulating forum for professional dialogue amongst educators within and across institutions, building networks amongst our lively professional community of new and existing practitioners, teacher educators, and colleagues from partnership organisations.

## Peer Review

All papers for the Journal will undergo a peer review process, which is designed to be supportive and constructive, providing early and developing writers with thorough and helpful responses to their papers. We welcome papers, work-in-progress, research reports and mini articles, books reviews of relevance to the community, and abstracts of action research, projects and early initiatives.

Submissions are given an initial screening by the editor prior to scrutiny by members of the Editorial Board. Decisions, recommendations and comments to support submissions are conveyed to authors together with feedback about the paper.

Detailed guidelines, including advice on writing abstracts, will be made available on request. Some key points, which we would be grateful if authors followed, are:

**Font:** Calibri 11pt, centred

**Paragraph spacing:** 1.15 line spacing and 10 pts after paragraph

**Title:** Use bold CAPITALS (18pt) for your article title, with an initial capital letter for any proper nouns.

**Authors' names:** Bold. Give the names of all contributing authors on the title page exactly as you wish them to appear in the published article.

**Affiliations:** List the affiliation of each author (department, university/school).

**Correspondence details:** Please provide an institutional email address for the corresponding author.

**Headings:** Please indicate the level of the section headings in your article: First-level headings (e.g. Introduction, Study, Conclusion and /or Implications) should be in bold CAPITALS (14pt), with an initial capital letter for any proper nouns. These should be centred on the page.

Second-level headings should be left-aligned in bold, with an initial capital letter for any proper nouns.

Third-level headings should be in italics, with an initial capital letter for any proper nouns. Please be sparing about going down to a third level.

**References:** use Harvard style.

The following lengths apply:
- Research reports and mini articles –   up to 3500 words. This should begin with an Abstract of 200-300 words.
- Work in Progress – up to 2500 words
- Book Reviews – 150 to 300 words
- Short summaries  outlining project activity, action research, initiatives for sharing, etc. – 300 to 500 words
- Event announcements and reflections – 100 words.

**Date for Submission:**
All papers/prospective submissions for consideration to be e-mailed to: Ursula Leahy (leahyu@hope.ac.uk) by September 4th, 2017

**Review Feedback date:**
October 2017, spring/summer 2018 (to be confirmed).

Call for Reviewers and Members of the Editorial Board – The Journal Editors would like to invite interested persons to become reviewers and editorial  board members. Please indicate initial interest by email to lloydc@hope.ac.uk

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# Research in Action

Special Issue | June 2017

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