

<b>Institution:</b> St Mary's University College
<b>Unit of Assessment:</b> 25: Education
<b>Title of case study:</b> Establishing the conceptual, methodological and adaptive capabilities for sustainable societies
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>The case study outlined here is concerned with how human behaviour and social practices can be shaped and guided by applying education for sustainability. Outreach for this work influences both policy and practice through advisory roles with international curriculum reforms (Australia- ACARA), national training and development consultancy in high-impact organisations (World Bank, Liverpool FC and Burnley FC, Mott MacDonald, Business In The Community), and practical applications including setting up for the DfE the first School of Sustainability / high school as an academy in Burnley, Lancashire and establishing other sites in urban and rural settings in various locations of the Pop-Up-Foundation project across the world.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)        (2007-2013 ongoing – Key Researcher Professor Paul Clarke)</p> <p>The concept of Becoming Naturally Smart (Clarke 2012) is evidenced through practical analysis and intervention in an extended notion of education for sustainability, where school remains a central part of the community architecture but fundamentally changes in its practice to act as incubator for innovative solutions leading towards an eco-economy. Clarke's work has sought to create an understanding of the dynamics that enable and inhibit people in making positive choices about sustainable living. The direct route to change behaviour is achieved through a focus on individual, enterprise and community learning, and this is conceived as a layered concept; a representation of shared interests both economic and ecological, relationships, actions, and an engagement with both physical and virtual places - the common dimension across the layers of community being the capability and capacity to adopt into human sphere the lessons from the biosphere. This formed the starting point for Clarke's major single authored book 'Education for Sustainability: Becoming Naturally Smart' (2012), which captured the essential elements of why, how, and what needs to be done to substantially change cultural behaviour towards sustainable solutions.</p> <p>He created a trial model for participating schools, communities and businesses focused upon a set of connected enquiries: how to develop solutions which ensure cyclical practice in growing food, generating and using energy, managing waste and water, in order to ensure enhanced outcomes for self, society and the natural environment. The programme is developed as an open-source initiative, attracting contributions from other academic colleagues and the general public and is the first ever education partner for the World Bank Connect4Climate knowledge sharing initiative. This cooperative model of development means the adoption of an emergent design to the research, using field-based teams in each participating school who report their own work within a shared frame of reference defined through the Pop-Up-Farm project, a specific school-focused initiative operating within the Pop-Up-Foundation.</p> <p>The Pop-Up-Foundation was commissioned personally by HRH Prince of Wales, to enhance the impact of his charitable work with young people across the Burnley and Burslem communities in the UK. The Pop-Up-Foundation programme leads projects within indigenous communities in Western Canada and Australia, in urban communities in New York USA, France, China, and rural Uganda. The scale and scope of the work of the Pop-Up-Foundation has accelerated rapidly in the last year, promoted through speaking at strategic and policy level meetings, keynote addresses at three major international conferences – International School Effectiveness and Improvement Congress 2011, and</p>

recently World Innovation Summit in Education (WISE) 2012, Canadian Education Research Conference Victoria BC 2013, and via press coverage and deliberate outreach to communities through football and mass-media.

Four Pop-Up-Farm schools are now operating in northern Uganda and a fifth is being built by the project as a demonstration eco-school, in a region which has been in civil war for the last 20 years. The project is trading coffee that is grown in the immediate vicinity of the school communities and the project team has established a school-school connecting project through its UK based coffee company to establish a sustainable revenue stream which will be used to enhance economic livelihood and provide opportunities for more children to benefit from educational support. The replication potential of this approach has been internationally recognised beyond the education sector, and Pop-Up-Foundation was awarded the global industry (peer-voted) 2Degrees Sustainability Solution of the Year Award for 2012.

### 3. References to the research (indicative maximum of six references)

Clarke, P. & Kelly, A. (2013) *The challenges of globalisation and the new policy paradigm, in, The International Handbook of Educational Effectiveness: Research, Policy and Practice*, London, UK: Routledge. DOI: Supplied on request from institution.

Clarke, P. (2012) *Education for sustainability: Becoming naturally smart*, London, UK: Routledge. DOI: Supplied on request from institution.

This seminal text draws together Clarke's recent ideas and research related to education for sustainability. It was reviewed externally for REF purposes as 3\*.

Clarke, P. (2012) *Cultivating the sustainable future: The educational challenge*. Melbourne, Australia: Centre for Strategic Education. ISSN 1838-8558 ISBN 978-1-921823-29-9. DOI: Supplied on request from institution.

This paper was a revised and updated version of the keynote address which Clarke gave to the International Congress for School Effectiveness and Improvement (ICSEI) in Cyprus, 2011. It was the first time a keynote address in this international congress concerned itself with the sustainability theme.

Clarke, P. (2010) Community Renaissance, in M.Coates (Ed.), *Shaping a new educational landscape*. London, UK: Continuum. DOI: Supplied on request from institution.

### 4. Details of the impact (indicative maximum 750 words)

The practical outcome of Clarke's research is the Pop-Up-Foundation, an incubator organisation which hosts a set of practical, research and dissemination projects. These enable and promote opportunities for people in different geographical settings to experiment, share findings and learn about sustainable living solutions.

The underpinning research has been formative in the development of new thinking about how people can participate in the design and development of sustainable solutions in their own lives. In so doing, they may participate in a broader social movement which is taking place in adapting human consciousness to changes brought about by changing climate and environmental conditions. This is evidenced by the following examples of media outputs:

Guardian 19/10/2010 Incredible Edible: Todmorden's local food revolution  
<http://www.guardian.co.uk/lifeandstyle/video/2010/oct/19/incredible-edible-todmorden>

Guardian 31/10/2012, Pop-up farms in schools: students step out of the classroom and into the farm <http://www.guardian.co.uk/teacher-network/2012/sep/19/teaching-sustainable-living-pop-up-farms>

Daily Telegraph 27/07/2012 School gardens: growing greener kids

<http://www.telegraph.co.uk/gardening/9428891/School-gardens-growing-greener-kids.html>

Lancashire Telegraph 08/03/2012 'Pop-up farms' help East Lancashire pupils learn to grow

their own food. [http://www.lancashiretelegraph.co.uk/news/burnley\\_9575863](http://www.lancashiretelegraph.co.uk/news/burnley_9575863).

[Pop up farms help East Lancashire pupils learn to grow their own food/](http://www.lancashiretelegraph.co.uk/news/burnley_9575863)

Irish Times 9/09/2012 School garden a class act.

<http://www.irishtimes.com/newspaper/magazine/2012/0929/1224324489785.html>

New Indian Express 26/11/2012 Pop-up of an eco-friendly solution.

<http://newindianexpress.com/education/edex/article1352030.ece>

Public debate has been informed and shaped by the approach Clarke has taken to the work because it is outward facing and has challenged established norms on sustainability, particularly through the engagement of school and local communities. He does not primarily speak through his work to the academic community. Instead, he uses the academe to facilitate the debate and ensure that it remains credible and grounded. As a part of Clarke's broader role working with a global consultancy company (Mott MacDonald), he has used their internal global network to formulate a strategic method to connect communities that were grappling with similar environmental, social and economic challenges. This method provides a common platform for debate and enquiry across the worldwide network, and is the basis of his involvement with the World Bank as a selected Knowledge Provider.

Public debate and increased cultural understanding is evident in the media interest through television, radio and newspaper articles. Clarke has pursued the debate at numerous conferences and meetings worldwide such as the International School Effectiveness and Improvement Congress (Keynote speaker January 2011) and the World Innovation Summit in Education (WISE) Conference Qatar (November 2012, Keynote speaker), through to numerous seminars and invited speaking events around the world (Vancouver Schools network Keynote speaker 2012, Adelaide School Principals Conference 2012, to community-based events such as the Transition Towns Gathering in Liverpool 2011, Nesta conference 2011, Regional Corporate Sustainability Seminars (Manchester 2011) and International Cooperative Movement Convention (2012), Canadian Education Research Congress, Vancouver 2013 (Keynote Speaker), Food Security Conference Brescia, Italy, (Keynote Speaker), Food Security Special Invited Summit, Washington DC, USA (World Bank). He has worked independently, but has also shared research interests with colleagues working in other supportive sectors and with other disciplines. He has been keen to illustrate this through the range of articles submitted, from the substantive self-authored work which formulates the preconditions of the work in progress and scopes some of the next steps, to the collaborative pieces which were invited as chapters within specific themed books (see the Community Renaissance chapter in Coates 2010) to the invited paper for the seminar series for the Centre for Strategic Education based in Australia, to the chapter with Kelly, for the International Handbook of Educational Effectiveness. This process of research and writing is evidence of the impact the work has had on democratic participation in the global community's exploration and evaluation of sustainability practices.

Evidence of the impact of the work outlined in this case study is shown in the following two examples. In East Lancashire, a network of primary schools has developed over time which continues to work on sustainability curricula. Such initiatives have resulted in

demonstrably much greater levels of community outreach through innovative use of the school landscape, food growing and healthy living schemes.

The Pop-Up-Farm project has been used in Uganda to inform and facilitate a structured approach to renewing the school community after civil war. The outcome of these direct links has been the formation in 2011 of a company selling coffee (Happy Coffee Bean Company), the profits of which are returned to the school community to support their regeneration programme. The impact of this programme reaches beyond the school by enabling children of the community to realise a place for themselves in the future through improved social welfare practices and employment and educational opportunities.

Overall, the main thrust of the work of the Pop-Up-Foundation and Clarke's research through this vehicle has been to contribute to improved social, cultural and environmental sustainability through the influence on creation and delivery of curricula and the shaping and informing of public attitude and values.

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

All of the writing developed in relation to the case study projects is made open-source via the internet and can be accessed at three websites along with an on-going archive of resources and articles.

[www.school-of-sustainability.com](http://www.school-of-sustainability.com)

[www.pop-up-farm.com](http://www.pop-up-farm.com)

[www.pop-up-foundation.org](http://www.pop-up-foundation.org)

These websites are run by the author, report on-going work in progress and have open access to the general public.

Individual users/beneficiaries who could be contacted by the REF team to corroborate claims:

**SCHOOL-BASED**

Beneficiaries include primary schools in Burnley, Lancashire: Headteacher representative  
Contact - Headteacher, St Leonards School, Padiham, Burnley.

**CHARITY-BASED**

HRH Prince of Wales START initiative linked to BiTC - closely involved with the Pop-Up-Farm aspect of the project

**UNIVERSITY-BASED**

Southampton Education School, University of Southampton

Joseph Lau Chair Professor of International Educational Leadership, Head of Department of Education Policy and Leadership, Director of The Joseph Lau Luen Hung Charitable Trust Asia Pacific Centre for Leadership and Change

Impact of the keynote speech made at ICSEI

World Innovation Summit in Education Conference, Doha contact 2012 WISE Summit

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