

Institution: University of East London

Unit of Assessment: 25

Title of case study: Improving public pedagogy to benefit society

1. Summary of the impact

Work undertaken at UEL on public pedagogy has supported the application of pedagogical research across public and political spheres, in particular in terms of 'disaster education'. This has delivered public education and social inclusion benefits to policy-makers and practitioners working in the fields of UK and international disaster education. Other key beneficiaries include local authorities, further education students, and transport operators and attendees of the 2012 Olympic Games. In addition to the benefits of its Disaster Education research, the Centre's more recent 'RadioActive' community radio projects (started April 2012) have engaged disenfranchised young people and increased social inclusion.

2. Underpinning research

The research underpinning the impacts described here is wide-ranging, but is unified by its common focus on the theme of public pedagogy and, more specifically, on understanding how pedagogical research can deliver applied benefits within public and community spheres. Overlapping with more traditional areas of educational research such as community learning, informal and vocational learning, lifelong learning, technology enhanced learning and social justice, our work covers disaster education, technology-enhanced inclusive education, the pedagogisation of emergency events, and community radio and social media.

The Unit's research on disaster education has been progressed via two major ESRC and EPSRC grants awarded since 2009. These have enabled John Preston (Professor of Education at UEL since 2010 and PI for both projects), Namita Chakrabarty (Senior Lecturer throughout the period of assessment) and Magda Kolokitha (researcher at UEL from 2010) to develop a unique strand of research on disaster education with relation to pedagogy and social justice through two projects.

The first of these projects, carried out in 2009-2010 and titled '*Preparedness pedagogies and "race": an interdisciplinary approach*', involved research into race equality in disaster education and was conducted in close collaboration with the Cabinet Office, private sector disaster education professionals, community groups (East London Mosque and Essex Neighbourhood Watch groups), and local education authorities (Sussex). The subsequent 2010–2012 project, '*Game Theory and Adaptive Networks for Smart Evacuations*' also put collaborative work – this time with policy officials from both the Cabinet and Home Office, local authorities in Birmingham, Carlisle and London, Essex Resilience, and the US Department of Homeland Security - at the centre of both the production and dissemination of its research insights. The project looked at the implications of new media such as Twitter and Facebook on disaster education in a large-scale evacuation.

Key findings from these projects included the identification, first, of disaster preparation as a primarily rich pedagogical (rather than a simply didactic) activity, and second of a range of activities that can be used to deliver effective public pedagogy in this arena, including the use of drama education or network learning by social media. The research further demonstrated that issues of social justice and representation have traditionally been overlooked in disaster education, and proposed appropriate interventions to redress this gap [1, 3].

These findings informed subsequent work developing research tools and hypothesising new approaches to public education in the field of disaster preparation and response. Notable among those is Chakrabarty's innovative application of theatre education methods to pedagogic interventions for social justice in disaster education. This novel methodology attracted further ESRC support as part of the Council's 2010 'Festival of Social Science', in which Chakrabarty involved Further Education students and Sussex local authority emergency policy planners to her simulation of an emergency exercise known as 'Operation Snowman' [2]. In January 2013, Preston was appointed an ESRC Global Uncertainties Leadership Fellow and became PI on a new ESRC-funded project, 'Mass population response to critical infrastructure failure', a comparative



project on differences in disaster response in five countries.

Research led by Ravenscroft (Professor of Education at UEL since 2011) on Technology Enhanced Inclusive Education [5] constitutes another important sub-theme of our work on public pedagogy, and has particularly supported our development between 2012 and 2013 of the 'Radioactive projects'. These used social media for vocational and informal learning [5], articulated through a Friereian approach to pedagogy and learning design to combat social exclusion.

Finally, our public pedagogy research has also included transport planning for the 2012 Olympic Games. In 2012 Ravenscroft (PI), Preston (Co-I) and Kolokitha (Co-I) worked on the ODA-funded 'Olympic Development Authority transport observation' project, a large-scale, multidisciplinary exercise to inform transport planning arrangements for the 2012 Olympic Games. The conceptual framework for this research was an understanding of large-scale events as pedagogical, involving learning by all participants. Observational research methodologies, including the use of static and roaming observers, as well as of Twitter data and passenger counts, were used to gather data pertaining to the opening of the Westfield shopping centre in Stratford, East London. Key findings, which included our identification of pedagogical methods for increasing passenger flow, were delivered and used by the ODA in 2012.

This diverse body of work coalesced in the establishment in September 2013 of UEL's International Centre for Public Pedagogy (ICPUP).

3. References to the research

- [1] Preston, J. (2008) Protect and Survive: 'Whiteness' and the middle class family in civil defence pedagogies, Journal of Education Policy, 23, 5, 469-482. DOI: 10.1080/02680930802054412
- [2] Chakrabarty, N. (2011). The uncanny character of race: an exploration of UK preparedness through youth performance', in the special issue: Theatre Applications, of RiDE: the Journal of Applied Theatre and Performance, 16.3. 403-419 DOI: 10.1080/13569783.2011.589998
- [3] Preston, J. (2012) Disaster Education, Sense Publications: Rotterdam. ISBN: 978-94-6091-871-
- [4] Ravenscroft, A., Warburton, S., Hatzipanigos, S., & Connole, G.(2012a). Designing and Evaluating Social Media for Learning, Editorial for Special Issue of Journal of Computer Assisted Learning (JCAL), Vol. 28, 3, pp 177-182. http://doi.org/p54
- [5] Ravenscroft, A., Schmidt, A., & Cook, J. & Bradley, C. (2012b). Designing social media for informal learning and knowledge maturing in the digital workplace. Article for Special Issue of Journal of Computer Assisted Learning (JCAL), on Designing and Evaluating Social Media for Learning, (Eds.) Ravenscroft, Warburton, Hatzipanigos & Conole Vol. 28, 3, 235-249. http://doi.org/p55

Grants: 'Preparedness pedagogies and "race" was supported by an ESRC grant (RES-000-22-3437 / A) of £99,000; 'Game Theory and Adaptive Networks for Smart Evacuations' by an £864,000 EPSRC grant (EP/I005765/1); and 'Mass population response to critical infrastructure failure' by an ESRC grant of £470,000. Preston was PI on all three grants. RadioActive UK and RadioActive EU were respectively supported by grants of £120,000 from the Nominet Trust and £332,000 from EC LLP.

4. Details of the impact

Since 2008, the research outlined above has delivered benefits to a wide range of end-user groups operating at local, regional, national and (increasingly) international levels. We have worked with these groups on the development of improved emergency education and service provision. It has also, less directly, impacted upon a much broader pool of beneficiaries constituted by populations living within areas affected by these changes. In all projects, elements of co-production are used to maximise impact. The following examples illustrate the realisation of these benefits.



National impacts on preparedness education and warning / informing policy and practice: The research has informed elements of UK-wide policy and practice through its use by central government agencies including the Civil Contingencies Secretariat (CCS), which is responsible for emergency planning in the UK, and which has used the research to inform its warning and informing strategy for 2013 / 2014 [a]. As the Secretariat's Policy Manager explained, Preston's findings and expertise:

"...were helpfully shared with colleagues here which enabled them to provide feedback and kept CCS (Civil Contingencies Secretariat) informed of these emerging findings. At the end of the project Professor Preston gave a presentation to the National Committee for Warning and Informing the Public (NSCWIP) which was attended by various CCS members and other practitioners involved in warning and informing. The findings from this presentation were considered a part of the development of CCS's warning and informing strategy for 2013 / 2014" [a].

The use of the research by the CCS ensures its relevance to the whole of the UK population in a crisis situation, and to local populations in smaller emergencies. Changes based on the research findings have conferred city-wide and regional benefits by enhancing provision for warning and informing within these cities, and thereby increasing the security – and with it the wellbeing and quality of life - of their citizens. [b]. These findings have also been disseminated to the general public through high profile events, including the 2011 University of Cambridge 'Festival of Ideas' Violent Nature Debate, which was attended by an invited public audience of over 100 [h].

The national impacts of the research findings have also been realised through their communication between 2010 and 2013 to the advisory board of the 'Game Theory and Adaptive Networks for Smart Evacuations' project. That board included senior representatives of the Cabinet Office, Home Office, and Government Office for Science who, in turn disseminated key insights within their own organisations. In 2013 the Cabinet Office asked Preston to produce guidance on 'disaster education' to be distributed to all local authorities. Preston has also contributed to the policy debate on pandemic preparedness [g].

Benefits for international policy development and in warning / informing policy in the US: The Unit's disaster education research is, moreover, also beginning to produce benefits for international users: in 2011 the Department of Homeland Security (DHS) invited Preston to present his research at their Science Conference [d]. This, the only UK project presented at the conference, was used by the DHS to scope social media / disaster education policy and fed into the development of a set of guidelines ("Understanding Risk Communication Best Practices: A Guide for Emergency Managers and Communicators), published in May 2012 for the DHS [e].

City wide benefits in terms of emergency planning and preparation for mega events: The 'Game Theory and Adaptive Networks' project has informed emergency policy, planning and practice at city-wide levels. Following a series of focus groups and dissemination events, its findings have catalysed the reappraisal of existing disaster education provision in major UK cities; in particular, the research has prompted proposals among emergency planners in Birmingham, Carlisle and London for changes to their social media strategies for emergency situation responses. In 2010 Preston implemented a series of requirements analyses involving emergency planners across those cities, the results of which were reported in 2012 and which have already led to several changes in both policy and practice relating to disaster planning [b]. In addition, in September 2011 Preston and Kolokitha were asked by Essex Fire and Rescue Service to appraise their social media education strategy, leading to changes to the ways in which they communicated disaster education to their constituency.

Policy-makers and planners in London have also benefited from the production of our 2012 planning report for the ODA, which led to changes in the activities of transport operators in the run-up to the Olympic Games, including better signage and the increased use of volunteers to direct attendees. These changes, which helped increase public safety during a national 'mega event', brought benefits not just for planning officials, but to all those involved in and attending the highly successful 2012 Games [i].



Benefits in terms of deepening individual understanding of preparedness: On a smaller scale, but also with intensive impact, Chakrabarty's research into the application of theatre education methods to disaster education provided the basis for her development in 2010 of a tabletop exercise to inform the development of disaster preparation policy and emergency service delivery within West Sussex local authority. 'Operation Snowman' constituted a unique intervention within this local authority, highlighting completely new social and practical issues in its disaster preparation planning, and suggesting novel and effective methods of tackling these. Since taking part in the exercise, the Local Authority has responded to the research findings by taking steps to facilitate the inclusion of young people in emergency planning, and to explore issues of youth understanding of emergencies. This was achieved by inviting the FE students and emergency planning professionals who participated in the research to share their experiences and new knowledge via an internet forum set up in 2010 both to help them reflect on the project and to provide a publicly accessible learning resource for use by young people and policy makers. Participants' responses demonstrated that the exercise significantly enhanced their understanding of emergency preparedness, a subject about which they had hitherto known little or nothing. The theatre education was undertaken in a unique preparedness site (the nuclear bunker in which the exercise was staged), and they reported that the activity invoked in them a sense both of agency and responsibility, altering their perceptions of disaster preparedness education [c, f].

Improving social inclusion for young people through internet radio: The Friereian approach to pedagogy and learning design in the 'Radioactive' project, led by Ravenscroft, has resulted in the involvement of 55 young people (8 – 19) from disadvantaged backgrounds and 8 youth workers in creating community radio. This has led to social inclusion and civic participation benefits for the young people and for society [j].

5. Sources to corroborate the impact

- [a] Evidence of Preston's impact on improving national strategy for warning and informing the public in an emergency through work with Cabinet Office / CCS is provided in a letter from the CCS Policy Manager. Available on request
- [b] For the impacts of Preston's research on city emergency preparedness see National Steering Committee for Warning and Informing the Public NSCWIP newsletter: http://bit.ly/1h33mwe p. 2
- [c] For evidence of Chakrabarty's work on altering participants' attitudes towards disaster preparation: http://ukpreparedness.ning.com/forum/topics/emergency-exercise-2010
- [d] For Preston's contribution to Department of Homeland Security policy recommendations: http://www.orau.gov/dhssummit/presentations/March%2031/Panel07 ReportOut.pdf
- [e] For Preston's contribution to improvement in the DHS Guidance for first responders: http://www.start.umd.edu/start/publications/UnderstandingRiskCommunicationBestPractices.pdf pp. 18 and 31
- [f] Evidence of Chakrabarty's contribution to developing young people's understanding of preparedness see http://bit.ly/1eioAmh
- [g] For Preston's contribution to developing policy on pandemic preparedness: http://www.esrc.ac.uk/ images/Britain2010%20Science%20section tcm8-7940.pdf pp. 86-97
- [h] For dissemination of research insights through the 2011 University of Cambridge 'Festival of Ideas' Violent Nature Debate: http://www.sms.cam.ac.uk/media/1198092/statistics. The Violent Nature Debate video has been downloaded more than 700 times by audiences around the world.
- [i] For Ravenscroft's contribution to Olympic transport improvements: http://bit.ly/1h33zzw
- [j] Ravenscroft's contribution to social inclusion is described at: http://www.radioactive101.org.uk/