

Institution: Cardiff Metropolitan University		
Unit of Assessment: UOA23: Education		
Title of case study: Upskilling teachers to fundamentally transform the new "Curriculum for Wales" (CfW) in all state schools		
Period when the underpinning research was undertaken: 2003 - 2020		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Prof David Egan	Dean, Emeritus Professor	1990-2011, 2018-present
Prof Gareth Loudon	Professor	2002 – present
Bethan Gordon	Deputy Dean	2001 – present
Dr David Aldous	Senior Lecturer	2014 – present
Dr Anna Bryant	Director of Teacher Education	2010 – present
Dr Jennie Clement	Lecturer	2019 – present
Dr Lowri Edwards	Lecturer	2018 – present
Gemma Mitchell	Lecturer	2019 – present
Period when the claimed impact occurred: December 2018 – December 2020		
Is this case study continued from a case study submitted in 2014? No		
1. Summary of the impact (indicative maximum 100 words)		
<p>In 2022, Wales will implement a completely new curriculum in all its schools, affecting 468,383 pupils and allowing 22,000 teachers to design their own curricula within a national framework. In preparation, Cardiff Met's research underpinned the upskilling of teachers to be change managing creative enquirers in 33 schools, impacting the professional practice of ~ 1,045 staff and the learning experience of ~ 14,900 pupils. Its success led to more than 300 additional schools embarking on the programme designed to facilitate the new curriculum. Cardiff Met's original project lead for this programme has now been formally seconded to Welsh Government to develop a national strategy for education research.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>Cardiff Met staff positively impacted Welsh education through the National Professional Enquiry Project (NPEP), an all-Wales programme designed to prepare teachers for the launch of a new curriculum in 2022. Cardiff Met successfully tendered to the NPEP in 2018, capturing £310,489 of the NPEP's £1.1 million with an interdisciplinary underpinning research offering spanning a range of pedagogic specialisms, creativity and design thinking - a major feature of the NPEP's success. All members brought individual areas of expert knowledge, but for clarity this section focuses on key researchers.</p> <p>Egan's research expertise lies within the fields of Welsh education strategy, policy and practice including learning and teaching pedagogy, educational leadership, professional learning and educational equity [R1]. His role in the project was to use that expertise to align the expertise of the team with Welsh Government's policy drivers and the professional learning needs of teachers.</p> <p>Health and wellbeing research expertise is critical to Cardiff Met's impacts because Wales's 'Wellbeing of Future Generations Act' is a national priority that legally enshrines quality of life for Welsh citizens. Bryant's and Edwards's research in physical literacy, health physical education and professional enquiry contribute to this field. In 2016 Bryant et al [R2] used child-centred methods to develop a nuanced understanding of children's participation - and non-participation -</p>		

in physical activity, via a twelve-month ethnographic study in Welsh secondary schools. Outcomes revealed the success of any initiative to improve participation hinged on understanding children's perceived image of the type and range of activities offered and the ability of the sport development officer to connect with children. Between 2017 and 2020 Bryant and **Edwards** worked on a programme of research on the professional learning of teachers around physical literacy in the context of health and well-being [R3]. Recommendations included developing clearly articulated definitions and philosophically aligned approaches. That work resonated with the health and wellbeing 'Area of Learning and Experience' within the new Curriculum for Wales and provided a body of knowledge and methods to underpin impact, including prioritising relationships, adopting a collaborative co-constructive approach to individual school need and feedback.

Aldous's research interests are in developing sociological theory and co-design methodologies to inform advances in the transformation and enactment of health and education policies and professional practice. A 2010 paper with Brown [R4] explored the sociological dynamics of Newly Qualified Teachers (NQTs) transitioning into their first teaching posts. Findings highlighted the challenges faced by NQTs and the potential for sociological theory to offer a powerful framework to explain and develop mechanisms to support these transitions.

Since 2010, **Loudon's** research has focused on the factors and processes affecting creativity. In 2014, he and Deiningner [R5] examined the psychological, physiological and environmental factors required to optimise creativity inside organisations. In it they present the 'Listen, Connect, Do' (LCD) model, derived from multiple empirical studies and focussing on the 'State of Being' required to support sustained creativity. They also highlight how the LCD Model might be implemented in organisations to support and enhance the creativity of individual researchers and the organisation as a whole. In NPEP the approach was used to develop creative approaches in the development of research enquiry projects.

Gordon (now Cardiff Met's NPEP lead) has longstanding design research expertise. Her focus has been on contextual simulation [R6], where her research has informed guidelines for fidelity levels required in user development scenarios. The development of such design-focussed research inevitably develops design thinking expertise. Together with Loudon's creativity knowledge, this underpinned the approaches used in the Professional Enquiry workshops delivered by the team during the NPEP and, ultimately, the tools and methods from which teachers developed practical solutions from their research enquiries.

Collectively, these areas of distinct but complimentary expertise underpinned the impacts described here.

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

Five of the outputs below were published following rigorous double-blind peer review processes and three of the four journals have international editorial boards.

- [R1] **Egan, D.** and Grigg, R. (2017). 'Professional Learning for Teachers in Wales' Wales Journal of Education 19 (1) 1-16. <https://doi.org/10.16922/wje.19.1.1>
- [R2] **Bryant, A.S.**, Bolton, N., Fleming, S. (2016), Extracurricular sport and physical activity in Welsh secondary schools: Leisure lifestyles and young people, Journal of Physical Education and Sports Management, 2(2), 41-55. <http://dx.doi.org/10.15640/jpesm.v2n2a4>
- [R3] **Edwards, L. C., Bryant, A. S., Morgan, K., Cooper, S. & Keegan, R. J.** (2019) A professional development program to enhance primary school teachers' knowledge and operationalization of physical literacy, Journal of Teaching in Physical Education, 38, 126-135. <https://doi.org/10.1123/jtpe.2018-0275>
- [R4] **Aldous, D.**, and Brown, D. (2010) Framing bodies of knowledge within the 'acoustics' of the school: exploring pedagogical transition through newly qualified Physical Education teacher experiences, Sport Education and Society, 15,4,411-429. <https://doi.org/10.1080/13573322.2010.514737>

- [R5] **Loudon, G.H.** and Deininger, G.M. (2014) A new model for supporting creativity in research organisations, R&D Management Conference, 3rd – 6th June, Stuttgart.
<http://hdl.handle.net/10369/6658>
- [R6] **Gordon, B., Loudon, G.** & Gill, S. (2019) Product user testing: The void between Laboratory testing and field testing, IASDR Conference Proceedings, Manchester, Sept.
<https://iasdr2019.org/> <http://hdl.handle.net/10369/10865>

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

In 2022, Wales will completely replace a centrally-controlled approach with a new 'Curriculum for Wales' (CfW) in all its state schools. CfW's core precept is that teachers are best placed to decide the needs of their pupils. It will empower **individual teachers** to develop **bespoke curricula** within a national framework and will affect Wales's school population of **468,838** pupils and **22,000** teachers¹. Cardiff Met are a key partner in the NPEP which is developing the Nation's capacity to launch CfW across Wales in 2022.

Impacts on teachers and pupils

- i. Cardiff Met's role in the NPEP was to leverage research expertise to support staff in the two Southeast Wales consortia which together account for ~ **47%** of Wales's school population. Our researchers directly supported 'Lead Enquirer' staff in **33** schools to become **creative, problem-solving enquirers**, capable of leading enquiries into specific areas of pedagogical interest and using the resulting knowledge to change working practices and develop practical curricula within the new CfW framework. Lead Enquirers initially reported the change being '*daunting*' saying they were '*sceptical at the start*' and '*used to being told what to do*'. They now report it being '(our) *daily practice*' and '*a mind-set*' [E1] "*We (now) have a culture of enquiry that is part of everyday practice and is the mechanism that we use to improve teaching and learning. It is embedded into our self-evaluation processes ... Having the expertise of the Cardiff Met staff helped us to develop consistency within the system but it was then backed up with a very personal approach that empowered us as professionals in a very supportive way.*" - **Teacher – Cadoxton Primary School** [E2]

"The Cardiff Met team have ensured the whole research and enquiry process has been robust, focused and beneficial for the individual schools involved." **Headteacher – Stanwell School** [E2]
- ii. The 33 Lead Enquirers **cascaded** the new techniques within their schools, reaching ~ **1,012** other staff and ~ **14,900** pupils²: "*We wanted to make sure that they were skilled to the level that I had been by attending the ... Lead Enquiry Days with Cardiff Met.*" - **Deputy Headteacher, St Gwladys Bargoed Primary School**. [E3]
- iii. Loudon and Gordon's **practical creativity** and **design thinking** techniques gave teachers the tools to develop novel concepts based on their research findings and turn them into practical curricula: "*The creativity and design thinking tools we learned from the Cardiff Met team empowered us to explore a multitude of ideas for areas of enquiry. They supported and encouraged us to challenge our assumptions by introducing new tools and wider reading. Their input has dramatically and positively impacted on how I approached my professional enquiry.*" - **Teacher, Stanwell School** [E2]
- iv. To aid implementation, the team authored a comprehensive handbook [E4] explaining the tools and techniques in the training programme and available to **all teachers in Wales**. "*I particularly find the handbook useful as a reference guide. This has then positively impacted on the culture of enquiry in the school as we have been able to upskill staff using the same resources that the University used during our Engagement days.*" – **Teacher, Glan Usk Primary School** [E2]

¹ BESA: <https://www.besa.org.uk/key-uk-education-statistics/> accessed 20 November 2020

² Calculations assume a secondary school complement of 70 staff / 800 pupils and a primary schools complement of 15 staff / 300 pupils.

- v. The training our researchers have delivered has impacted the learning experiences of pupils involved in the NPEP who have experienced curricula designed for their specific needs: *“We are starting to experiment with ways in which our pupils can develop and use enquiry questions as a stimulus for pupil/teacher co-construction of curriculum topics and projects.”* - **Deputy Headteacher, Rhws Primary School** [E2]

“The feedback from all our stakeholders is that this approach to learning is bespoke to the child and about real authentic contexts ... The children are able to talk about their learning in a much more reflective way.” - **Teacher – Cadoxton Primary School** [E2]

Impact on Government Policy

- i. At the end of the NPEP’s first year, a report primarily authored by **Egan** led the Welsh Government to re-shape the remainder of the programme, switching from a national to a regional approach, with Cardiff Met assigned to partner consortia in the populous Southeast Wales region [E5].
- ii. The NPEP’s success led to Welsh Government scaling it up to involve more than **300** schools [E6], while the COVID-19 pandemic saw them broaden the scope of teacher enquiries to include learning and re-imagining schooling and assessment, pedagogy and inclusive learning. In effect this was testimony that the NPEP had given teachers the tools to deal with major disruptive change: *“As the Welsh education system attempts to recover from the impact of the COVID-19 pandemic, we are empowering our teachers to use professional enquiry as a key feature of learning lessons from the period we are living through, including the impact of distance and blended learning.”* – **Educational Directorate, Welsh Government** [E6]

In summary, Cardiff Met’s interdisciplinary researchers have positively impacted teachers, pupils and government policy, setting the scene for a truly transformative education landscape in Wales. *“I have been more inspired to be a good teacher by participating in this scheme than by anything else in my career.”* - **Teacher, Porthcawl Comprehensive School** [E2]

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

- [E1] PowerPoint including quotes from Lead Enquiry School on the culture of critical enquiry.
- [E2] Testimonials about NPEP from Teachers and Headteachers.
- [E3] Case study: [St Gwladys Bargoed Primary School](#) including video interview about NPEP.
- [E4] “Undertaking Professional Enquiry” handbook.
- [E5] Proposals for the future development of new Curriculum for Wales pilot.
- [E6] Testimonial about NPEP and Cardiff Met’s role from Welsh Government.