

**Institution:** University of Westminster Unit of Assessment: 17 Business and Management Studies Title of case study: Informing Government Policy on the Value of Further Education in Social Period when the underpinning research was undertaken: 2010 - 2020 Details of staff conducting the underpinning research from the submitting unit: Period(s) employed by Name(s): Role(s) (e.g. job title): Peter Urwin Professor of Applied submitting HEI: Oct 1995+ Economics and CER Director; Franz Buscha Professor and Research Aug 2006+ Director (WBS): Senior Research Fellow Augusto Cerqua Mar 2014 – Dec 2018

Period when the claimed impact occurred: Aug 2013 – Dec 2020

# Is this case study continued from a case study submitted in 2014? \times N

#### **1. Summary of the impact** (indicative maximum 100 words)

Since 2010 Urwin has led a series of innovative econometric studies of large government administrative datasets that identify positive evidence on the value of Further Education (FE) learning. Urwin's engagement with policymakers has ensured prior survey-based evidence has been recognised as undervaluing this learning. Resulting impacts include:

- Providing an evidence base that significantly informed the decision to suspend an anticipated 25% cut to the Adult Skills Budget (a major source of funding for the FE sector) in the 2015 Spending Review.
- Changing attitudes to FE learning and understanding of its role in social mobility among policymakers, such that a previously side-lined sector is now being given strong backing by the government.
- Changing government data practice such that access to, and the sharing of, interdepartmental
  datasets is now widely used in Department for Education policymaking.

#### 2. Underpinning research (indicative maximum 500 words)

Previous research (Dearden, McGranahan, Sianesi 2004; Dickerson & Vignoles 2007; Greenwood, Jenkins, Vignoles 2007) estimated that many individuals studying vocational qualifications at Level 2 and below (particularly NVQ2 and NVQ1 qualifications) secured zero or negative earnings returns (gains) from FE learning.

Prof Urwin's programme of research has shown that the very focus of FE on helping the most disadvantaged was a key reason for an underestimation of returns in these survey-based studies. Specifically, disadvantaged individuals are much more likely to select technical FE learning, and these individuals would receive a particularly low wage if they did not engage in this learning. Therefore the estimate of what they would have earned in the absence of, for instance, an NVQ2 (the "counterfactual") needs to be particularly low. Unfortunately, to estimate this counterfactual, survey-based studies used control groups that had much better labour market prospects, rendering the data and methods in survey studies insufficient. Survey-based studies overestimated what FE learners would have earned in the absence of, for instance, an NVQ2 qualification, and therefore underestimated the returns (observed minus counterfactual earnings) to FE learning.

Urwin produced the evidence to support this argument through his leadership of a series of econometric investigations from 2010 onwards, using datasets that draw together administrative information from DWP (Department for Work and Pensions), HMRC (HM Revenue and Customs), BIS (Department for Business, Innovation & Skills, now BEIS) and DfE (Department for Education).

The starting point for this programme of investigation [1] used components of these admin datasets – specifically, linked NPD-ILR-WPLS – to create counterfactual estimates using the population of individuals who were seen to register for, for instance, an NVQ2 as their highest learning aim, but did not achieve the qualification. Such "non-achievers" may be seen as a more appropriate control group in this context, in that they are "the sort of individual who takes this qualification as a highest learning aim". This approach, which was only possible with admin data,



estimated positive impacts of lower-level vocational learning that were diametrically opposed to those in survey-based studies.

However, this was only a first step and at this point it was possible that if non-achievement was occurring because of illness, family breakdown or other negative (one-off) impacts, then artificially low counterfactual estimates would result. A subsequent report [2] applied Coarsened Exact Matching (CEM) with difference-in-differences, together with additional dissections of the data. The results of this study further re-enforced the possibility that Urwin was uncovering value added that had been hidden to those using survey datasets.

Though it was increasingly unlikely that higher estimated impacts were a result of non-achievers experiencing one-off negative impacts, Urwin and colleagues refined their approaches across two further projects [3] [4]; and recently published the most compelling evidence to date for the validity of favourable estimated returns to FE learning [5]. These latter studies of admin data (ILR-WPLS-LMS-ND) are able to use two control groups to create counterfactual outcomes (both non-achievers, as in previous studies, and more "traditional" untreated comparison groups); and in [5] the CEM approach (matching on extensive employment and learning histories) is adopted within a dynamic evaluation framework that investigates the possibility that selection into non-achievement / achievement is driven by unobservable factors, using distance to training provider as an instrumental variable.

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

- [1] **Buscha**, **F**. and **Urwin**, **P**. (2013) "Estimating the labour market returns to qualifications gained in English Further Education using the Individualised learner Record (ILR)", Department for Business, Innovation and Skills. [77pp]
- [2] Bibby, D., **Buscha, F.**, **Cerqua, A.**, Thomson, D. and **Urwin, P**. (2014) "Estimation of the labour market returns to qualifications gained in English Further Education", *Department for Business, Innovation and Skills*, Research Paper No. 195. [113pp]
- [3] Bibby, D., **Cerqua, A.**, Thomson, D. and **Urwin, P.** (2015a) "The Impact Of Skills And Training Interventions On The Unemployed: Phase II", *Department for Business, Innovation and Skills* and *Department for Work and Pensions* (published as cross-departmental *HM Government Report*) [120pp]
- [4] Bibby, D., Cerqua, A., Gould, M., Thomson, D. and Urwin, P. (2015b) "Further Education: Social Mobility, Skills and Second Chances", *Department for Business, Innovation and Skills* [35pp]
- [5] Cerqua, A., Urwin, P., Thomson, D. and Bibby, D. (2020) "Evaluation of Education and Training Impacts for the Unemployed: Challenges of New Data" *Labour Economics*, Volume 67, 101907. ISSN 0927-5371. [Peer reviewed]

#### **Funding**

Via government commissioned studies for which Prof Urwin was P-I

- BIS (2012) The returns to Further Education in England 2004-2010: £32,126. Led to output [1]
- DWP (2013) Feasibility study to look at an impact analysis of training and skills for the unemployed: £19,356
- BIS (2014) Estimating the Labour Market Returns to Learning in English FE: £52,350. Led to output [2]
- BIS and DWP (2014) *Measuring the Impact of Skills and Training Interventions on the Unemployed:* £130,300. Led to outputs [3] and [5]

Via research funders for which Prof Urwin was P-I

- ESRC (2016) DfE: Early identification of young people at risk of poor educational and labour market outcomes: the role of educational institutions, ES/P000975/1: £161,719
- **4. Details of the impact** (indicative maximum 750 words)

#### Avoiding Cuts to the Adult Skills Budget in the 2015 Spending Review

The previous survey-based research in this area underpinned the headline statement of the *Review of Vocational Education: The Wolf Report* (2011): "Among 16 to 19 year olds, the Review estimates that at least 350,000 [per year] get little to no benefit from the post-16 education system" [a-i, p.7]. This set the tone for policy debate, with Further Education (FE) seen to be failing



disadvantaged young people due to the poor value delivered by its provision of technical qualifications. This made the sector a target for budget cuts, with the Chancellor having told government departments to expect reductions of between 25 and 40 per cent in the November 2015 Spending Review [a-ii]. Given the broader context of austerity, professional organisations such as the Association of Colleges expected the Spending Review to make a 25% cut to the Adult Skills Budget that supports FE learning [a-iii].

However, Prof Urwin's direct engagement with BIS/DWP (including commissioned research resulting in outputs [1] to [4]) and a range of other key stakeholders, as well as his advocacy in policy discussions with HM Treasury, overturned this perception among policymakers. This led to the retention of the full Adult Skills budget in the 2015 Spending Review. The Chancellor's Autumn Statement on 25th November 2015 stated that: "We will not, as many predicted, cut core adult skills funding for FE colleges – we will instead protect it in cash terms", adding: "We will maintain the current national base rate of funding for our 16 to 19-year-old students for the whole Parliament" [a-iv]. In cash terms this was **the retention of an Adult Skills budget of £1.5 billion, avoiding anticipated cuts of £375m** [a-v, p.18]. This key impact was achieved through Urwin's undertaking of innovative research and his translation of its findings for key stakeholders, as described below.

Publication of outputs [1], [2] and [4] had already occurred prior to the 2015 Spending Review and began to impact significantly on attitudes to FE and the understanding of its role in social mobility across academic, policy, and practice communities through direct engagement that included: Urwin and Cerqua's presentation of their research in June 2015 to a large audience of academics and policymakers at InstEAD (Sheffield Univeristy), which featured lively debate with audience members Prof Dearden and Baroness Wolf [b-i]; a July presentation to *The 157 Group* (now Collab Group), a UK network of 35 colleges and college groups of FE [b-ii], and an October presentation to the *Federation of Awarding Bodies*, the British trade association for the qualification and assessment industry [b-iii].

Further policy pressure was created by a September 2015 *Times Educational Supplement* (TES) article that detailed the findings of these outputs, challenged the previous evidence flagged in the Wolf Report, and included a comment from **Baroness Wolf herself recognising Urwin's research findings as important to reversing the poor perception of <b>FE**: "If we are now finally getting some concrete proof that shows low-level qualifications do bring some benefits, then that's a good thing, and not before time" [b-iv]. This was followed on 13<sup>th</sup> November by a further TES article [b-v] detailing the evidence provided by output [4].

In regard to government itself, Frank Bowley, Head of Further Education Data and Analysis at DfE, confirms "Urwin worked closely with the FE Skills team to ensure that this overturning of previous estimates provided a robust evidence base, [which] **stimulated the FE Skills Team's policy position**" [c-i]. Bowley adds that: "In a series of briefings and meetings with HM Treasury, Urwin explained why these new findings were a significant improvement on previous estimates and that a cutting of support to FE was not consistent with a policy goal of improving social mobility" [c-i].

Output [3] was not formally published until Dec 2015, so drafts were shared internally with relevant government policymakers and Prof Urwin began delivering a series of cross-departmental seminars from April 2015 detailing both the published (outputs [1] [2]) and emerging [3] research evidence [c-ii to c-v]. From August 2015 to October 2015, Urwin and Cerqua engaged in detailed discussions with HM Treasury to present and defend these findings; showing clearly that these new favourable estimates were much more robust than previous survey-based estimates and making the argument that, as this evidence showed FE is an important ladder of opportunity for disadvantaged young people, government policy priorities on social mobility would be contravened if cuts were made to its budget [c-vi & c-vii].

Of the ongoing impact achieved through Urwin's interventions, Bowley states: "Avoiding these expected cuts had significant social and economic impacts. It ensured that disadvantaged young people and the unemployed could maintain access to valuable vocational learning within FE at level 2 and below. These are levels of learning that we expect of the average school leaver at KS4 [Key Stage 4] and removal of support for these courses would have removed an important 'second chance' for many disadvantaged people. This work continues to have significance in terms of changing the context and policy discourse around FE in government, with a greater recognition of its value to all learners, and especially disadvantaged young people" [b-vi].



#### Changing Policy Attitudes to FE and the Understanding of its Role in Social Mobility

Prof Urwin's research and engagement activities in the run-up to the 2015 Spending Review, and subsequent to this, have helped change the nature of policy debate on FE, resulting in the ongoing impact of repositioning FE as a key component of social mobility within UK policy circles.

Further to Bowley's testimony above, Lord Willetts, former Minister for Universities and Science (2010-2014) and current President of the Resolution Foundation's Advisory Council and Intergenerational Centre, writes: "Previous evidence suggested little or no earnings return to qualifications gained at this level. That earlier literature had a big influence on how we saw things in the Coalition, appearing to show little value for level 2 NVQs for example. However Professor Urwin and his colleagues tried to allow for the prior disadvantage of many students doing these courses. This led to more favourable findings and has transformed understanding of the vocational qualifications delivered by FE. It is leading to a reshaping of the agenda for FE and showing its important role in providing opportunities for many disadvantaged young people and boosting social mobility" [d-i].

This change in perception of FE within government policymaking is evident in The Social Mobility and Child Poverty Commission's December 2015 State of the Nation 2015: Social Mobility and Child Poverty in Great Britain report, which cites output [2] to highlight "that those in possession of Level 2 qualifications are much less likely to be out of work" and the need for ensuring that funding for Level 1 and Level 2 course provision can be protected" [d-ii, p.163], and, more recently, by the May 2019 Augar review (Post-18 review of education and funding: independent panel report), which similarly drew on Urwin's research to make this case [d-iii]. The Augar review draws on output [2] to "show that full Level 2 qualifications yield some of the highest increases in earnings" [d-iii, p.124] and also increase such learners' "chance of being in employment by 2 percentage points (based on 3-5 year averages after achievement), compared to those that do not achieve the qualification" [d-iii, p.53]. On the basis of the positive estimates produced by Urwin and colleagues, and in response to the decline in post-18s undertaking such qualifications (from 400,000 in 2012/13 to just over 50,000 in 2017/18), Augar "make[s] proposals to reverse these trends and create a clear educational route for adults wishing to study and train at Levels 2 and 3" [d-iii, p.49]. Such proposals include the reformation of the currently complex FE funding rules and the removal of tuition fees, at a cost of £500m [d-iii, p.54, 123, 204].

The government's December 2020 announcement of an investment of £375 million into the Lifetime Skills Guarantee (LSG) continues to evidence the marked policy shift towards significantly resourcing FE learning [d-iv]. The Prime Minister's LSG announcement explicitly responds to how the "Augar review highlighted the complexity of the funding system" – i.e. as a barrier to achieving the gains evidenced by Urwin, as above – by "mov[ing] to a system where every student will have a flexible lifelong loan entitlement to four years of post-18 education" [d-iv]. Urwin further fed into the attainment of this impact via the DfE. The DfE's September 2020 written evidence for the Education Select Committee *Inquiry into Adult Skills and Lifelong Learning* prominently cites Urwin's work (outputs [2] and [3]) to evidence that "adult skills and lifelong learning also has significant positive labour market impacts for its learners" [d-v]. The positive returns found in this work and presented to parliament are thus an important reason for the continuing emphasis on lower-level vocational qualifications by policymakers.

#### **Developing Government Data Practice**

As part of the 2011-12 contracts that produced some of the first positive estimates of value added from FE learning ([1] and [2]), BIS commissioned the team led by Prof Urwin to begin creation of a production standard version of the ILR-WPLS *Database*. This enabled BIS – and now DfE – to embed a variety of analytical and reporting functions within an updatable database for use in policymaking.

This work was an essential proof of concept in the process of developing the analysis of administrative data across government and has had the longer-term institutional impact of **changing government practice in regard to its use of databases**. Used from 2013 to 2016, Anthony Harris, Lead Data Scientist at the DfE confirms: "Prior to this [intervention by Urwin's team], use of ILR-WPLS admin data for this purpose was in its infancy, and whilst there had been some analysis, different approaches had been adopted to data manipulation and this was the first time that" such a database "could easily integrate regular updates of HMRC-DWP data" [e-i]. This

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was enabled through the building of this integrated relational *Database* in the MS SQL Server, such that it linked data sourced from HMRC, DWP, BIS and HESA – including P14 earnings data, benefits records, P45 employment data and further learning in Higher Education undertaken by FE learners. Harris describes how this change in practice "optimised the use of limited staff resource; and began the development of processes for sharing that would allow secondary analysis by government departments, academics and others" [e-i]. In regard to FE, the *Database* helped elucidate "the new more favourable estimated returns to FE learning [which] have been used extensively to underpin CBA [cost-benefit analysis] estimates across DfE (and publications such as the FE Skills Index)" [e-i].

Having developed governmental data practice, Harris confirms that the ILR-WPLS *Database* "was an important precursor for Longitudinal Education Outcomes (LEO), which was launched in 2016 and is now widely used in policy making across the whole of DfE" [e-i]. The LEO now provides regularly updated CBA figures, which are calculated using the original "work of Urwin and colleagues [who] developed a new approach to estimation" [e-i]. This work continues to form a crucial part of the DfE evidence base, and findings using LEO and these calculations are regularly cited in inquiries and committees – for instance, in the DfE's aforementioned submission to the December 2020 *Adult Skills and Lifelong Learning* inquiry, which featured as its centre-piece an FE "returns table" produced using both [d-v].

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

- [a] (i) A. Wolf, Review of Vocational Education: The Wolf Report, March 2011 [link] (ii) Times Educational Supplement, "FE escapes expected slash-and-burn in spending review", 25/11/15 [link] (iii) Association of Colleges, The Department for Education budget after 2015, May 2014 [link] (iv) HM Treasury and The Rt Hon George Osborne, "Chancellor George Osborne's Spending Review and Autumn Statement 2015 speech", 25/11/15 [link] (v) House of Commons, Adult further education funding in England since 2010, Dec 2019 [link]
- [b] (i) Bibby, Cerqua, Thomson, Urwin, "Does Literacy and Numeracy learning help the unemployed find a job? Evidence from England using ILR-WPLS admin data", presentation at InstEAD, 22/5/15 (ii) Bibby, Cerqua, Thomson, Urwin, "The Central Role of English Further Education in Social Mobility", briefing to The 157 Group, July 2015 (iii) Bibby, Cerqua, Thomson, Urwin, "The Role of English Further Education in Social Mobility", presentation to Federation of Awarding Bodies, 23/10/15 (iv) Times Educational Supplement, "Exclusive: level 2 qualification can add 12% to students' earnings, study finds", 4/9/15 [link]; (v) Times Educational Supplement, "Exclusive: disadvantaged learners would be worst hit by FE cuts, research reveals", 13/11/15 [link]
- [c] (i) Testimony: Frank Bowley, Head of Further Education Data and Analysis at the DfE (ii) Urwin, "What can big data tell us about FE? Examples of analysis using the ILR-WPLS", presentation to BIS, 16/4/15 (iii) Urwin, "New findings on the value of FE", Cross-departmental presentation, 18/5/15 (iv) Urwin, "Updating findings on the value of FE", Cross-departmental presentation, 29/6/15 (v) One-to-one (verbal) briefing by Urwin for Rebecca Endean, Director Research Base, BIS, 6/10/15 (vi) P. Urwin & A. Cerqua, "Evidence on the Impact of FE Skills and Training Interventions using Admin Data: Response to HM Treasury, following the meeting of 24<sup>th</sup> August", 12/10/2015 (vii) P. Urwin & A. Cerqua, "The Expansion of Apprenticeships in 2010/2011 and Implications for Forthcoming Expansion", 13/7/15
- [d] (i) Testimony: Lord Willetts (ii) The Social Mobility and Child Poverty Commission, State of the Nation 2015: Social Mobility and Child Poverty in Great Britain, Dec 2015 [link] (iii) Dr Philip Augar, Independent panel report to the Review of Post-18 Education and Funding, May 2019 [link] (iv) Gov.uk, "PM's skills speech", 29/9/20 [link] (v) ASL0012, "Written evidence submitted by the Department for Education...", Sept 2020 [link]
- [e] (i) Testimony: Anthony Harris, Lead Data Scientist at the DfE