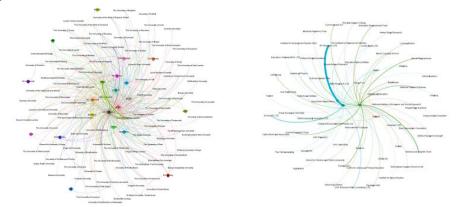


edpol.net

England's Education research 2018/19

A case for reform and mediation



Purpose and content

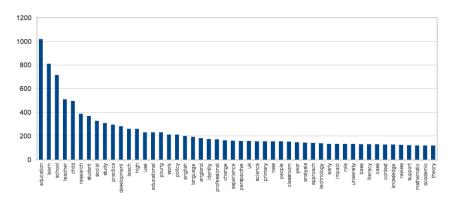
The purpose of this paper is to understand the level of investment in England's education research*, what proportion is orientated towards policy makers (as opposed to practitioners) and how useful is the research to these policy makers**.

- Conclusions and overview
- 2. Source and destination of funding
- 3. Research for policy makers versus practitioners
- 4. Research freedom and its implications
- 5. Other challenges and proposals for reform
- 6. Postscript: REF impact measurement
- 7. Appendices

^{*} Initiated from England, given other home nations have individual research strategies

^{** &}quot;Policy makers" refers here to government ministers and all those who wish to influence them, as they seek to legislate on areas of national macro-policy, such as assessment; curriculum; accountability; admissions; school systems; policies on skills and vocational training; apprenticeships; funding; performance; mobility; equity. It excludes areas that are (increasingly) under the control of school and college leaders, teachers and lecturers (and also includes pedagogy).

1. Conclusions and overview



Conclusions and suggestions

Only a very small proportion of England's education research attempts to address long-term, national policy making questions. The small amount available is difficult to locate, accesses and navigate. The current governance and structure of research make this hard to address. Education research is:

- Institutionally fragmented, by source and destination
- Not following a long term plan, vision or structure
- Typically atomised and disconnected
- Of widely varying quality

As a result, fundamental questions of education policy are not adequality supported by research and evaluation.

A collection of IfG*, Royal Academy and Royal Society recommendations to strengthen bi-lateral relationships between policy makers and researchers may be helpful, but could deepen biased behaviour.

Structural issues in England's education research requires a systematic response:

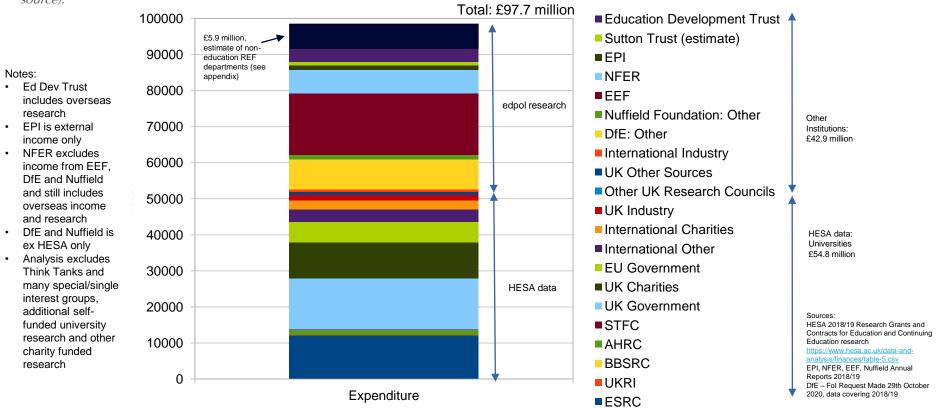
- Better strategic and long-term coordination (see EPI review of other Nations' research organisation)
- Areas of Research Interest (ARIs) should be based around long term fundamental questions in education (page 28)
- There is a need for high level synthesis of national and international research
- There should be a mediating capability, that can address these needs for all policy makers**

^{*}Institute for Government

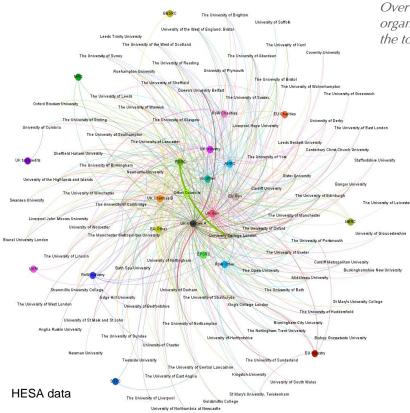
^{**} See edpol paper on Centre for Evidence in Education Policy

The fragmented source of English education research funding, 2018/19

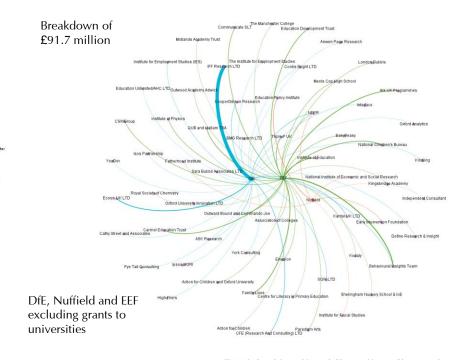
edpol has identified nearly £100 million of funding for education research. HESA data measures all externally funded education research in Universities. Other sources of research funding is directed to non-university institutions. (N.B. The data comes from multiple sources so deeper analysis varies according to source).



The highly fragmented destinations of English education research, 2018/19



Over twenty major organisations fund ninety two universities and sixty five other organisations. This report shows that research for policy makers is a small proportion of the total, is hard to navigate and lacks synthesis and objective mediation.



DfE – Fol Request Made 29th October 2020, data covering 2018/19

Other nations' systematic approach to education research

England's fragmented and partially directed approach contrasts with other nations, where education research is largely organised by longstanding institutions of government, with secure funding, demarcation between practice and policy and guidance from long term plans.

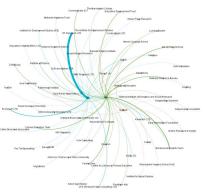
	Finland	Singanoro	Australia	lanan	Scotland
Major institutions and relationship to Government	 Finnish Education Evaluation Centre (FINECC) - Within Finnish National Agency for Education (EDUFI) Independent "freedom" of evaluation methods, organisation and results 	• National Institute of Education (NIE) • Office for Education Research • Centre for Research in Pedagogy and Practice	 Australia Australian Council for Educational Research (ACER) – independent Longitudinal Study of Australian Youth (LSAY) National Youth Affairs Research Scheme Department of Education Commissions Research 	 National Institute for Educational Policy Research (NIER) Japan Educational Research Association (JERA) Educational Policy Research Institute (NFERI) Some institutions existed for a 	• Education Scotland* created: • National Improvement Hubresource database for practice • Research Strategy for Scottish Education 2017
	• Established 1999	 Established early 2000's 	• Running 20 – 30 years	century	• Instituted 2011
How funded, magnitude and relative spend	 Government funding £3.3 million (19/20) 0.015% of education spend (2016) "Examining effectiveness, efficiency and economy" 	 Funded by Ministry of Education (MoE) Education Research Funding Programme (ERFP) Fourth tranche 2018-22 Pedagogy / Practice £5m p.a Policy Grant awarded \$\$50 - 350k 	 ACER contracted revenue AUS\$ 90 million p.a. Murdoch Children's Institute Co-operative funding between national government and states Queensland runs comprehensive program 	 Funded by Government €22.5 million (19/20) 0.007% of total educational spend 	Scottish Funding Council
Priorities and how set	 Duties governed by legislation Supervised by Evaluation Council (Sector, Training, work, student representation) Detailed specification of research – "to conduct evaluations related to education and teaching" Four year cycle of work 	 Research with policy impact clear part of 2022 strategic vision To have an impact on policy and pedagogy Guided by economic planning and education strategy 	 States commission ACER for research ACER includes a "what works" department LSAY – to understand transitions and pathways Recently Department commissioned five large scale reports including drivers of outcomes 	 NIER – collects and analyses academic research to plan and design education policy – mid and long term Also to respond to solutions to urgent Political issues NIER department focuses and coordinates direction of research projects 	 Research Strategy 2017 produced on behalf of Scottish Government and Education Scotland OEID recommendations To use a more rigorous and evidence-based approach System focus and "What works" "Learning together" - for connection between policy, research, practice

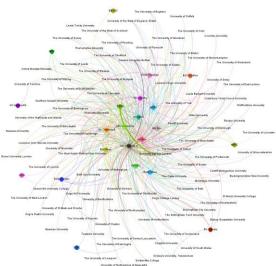
Articulating the shortcomings of England's education research

At the policy making level there is a high level of dissatisfaction with many aspects of education research and evidence . Below are abstracts from 30 interviews

Issue	Quote	Source	
Accessibility and relevance	Most academic journals are behind paywalls, the CS can't always get hold of these, or at least, not quickly enough. It might take two weeks to agree who's budget pays for a single report There is no departmental function to get research reports We need to make the academic contribution more relevant	SpAd SpAd SpAd	
Timeliness and scope	Evidence based reform should include stakeholder engagement - what are the challenges on the ground? If you don't have knowledge in the department, you do need to have it on tap. The DfE commission a lot of research, but few people read it Research cannot be used on its own, have to talk to practitioners as well	Expert SpAd SpAd MP	Institute for Government 2018: Many officials were frustrated that academic work misses the key issues and fails to help
Overseas research & context	Overseas evidence is critical but it can't just be lifted from one country to another Evidence can be used very selectively, need to look at what was trying to be achieved within particular countries. You cannot import ideas and just drop them in	SpAd MP	them answer the questions they face in forming policy.
Evidence for macro policy making	There is not enough system thinking, given the many journeys available on school improvement Results in education may take 10 years to really show - the policy cycle time is too short Manifesto writing engages people who don't know enough. There is a lack of institutional history and evidence at a macro level. Ideally people would go back to old CS and Ministers to discuss. Once the manifesto is written, it causes all sorts of problems.	MP exCS Expert	
Biased selection of evidence	CS can be marginalised if they speak truth to power There is huge pressure on the Civil Service to bend and filter evidence, to retro fit evidence to support policy proposals	MP Expert	ources: Excerpt from 30 edpol interviews

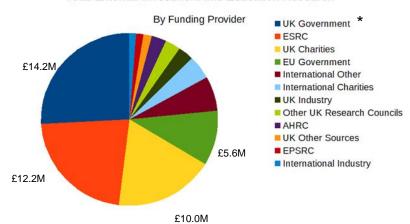
2. Source and destination of funding





Source: £54.8 million investment into University-led Education Research

Total External Investment into Education Research



HESA data: total £54.8 million

The Higher Education Statistics Authority (HESA) identifies £ 54.8 million of funding into universities under 12 different groupings. The largest contributors are UK Government*, ESRC and UK charities.

HESA/university research is 60% of all identified education research

The REF data below shows that direct funding to universities reduced between 2009 and 2011, probably as the EEF funding was being introduced. Since then, it has broadly remained constant.

Research Excellence Framework (REF) data

Funding Source	2008-09	2009-10	2010-11	2011-12	2012-13
BIS Research Councils, Royal Society, British Academy and Royal Society of Edinburgh	16,634,236	14,706,675	12,396,700	11,630,518	12,338,459
BIS Research Councils income-in-kind	0	0	0	0	0
UK-based charities (open competitive process)	7,955,592	7,288,315	6,130,509	5,105,114	5,726,856
UK-based charities (other)	1,804,148	2,022,702	2,294,640	2,089,177	2,633,172
UK central government bodies, local authorities, health and hospital authorities	34,460,554	29,449,437	22,477,558	19,161,635	18,320,567
UK industry, commerce and public corporations	1,678,793	1,882,645	967,258	868,287	1,557,702
EU government bodies	2,963,888	3,187,519	4,220,539	4,564,024	4,864,075
EU-based charities (open competitive process)	404,808	513,059	465,459	305,069	259,205
EU industry, commerce and public corporations	52,518	18,809	12,000	3,001	18,666
EU other	204,053	267,458	211,572	290,237	489,199
Non-EU based charities (open competitive process)	1,668,568	3,340,678	2,261,469	1,901,137	1,743,336
Non-EU industry, commerce and public corporations	38,926	42,856	291,018	384,738	-8,753
Non-EU other	629,122	573,319	727,297	1,461,799	3,099,845
Other sources	1,753,131	1,644,227	2,029,899	1,601,862	1,424,340
Total	70,248,337	64,937,699	54,485,918	49,366,598	52,466,669

Source: HESA 2018/19

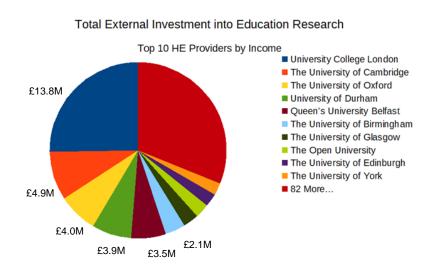
Research Grants and Contracts for Education and Continuing Education research https://www.hesa.ac.uk/data-and-analysis/finances/table-5.csv

^{*}UK Cent Govt, local authorities, health and local hospital authorities

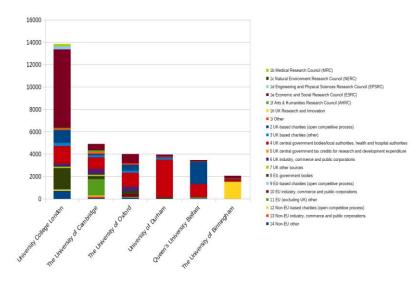
Destination: Grants to Universities for Education Research funding (HESA Data)

The top six universities receive 50% of university funding or approximately 30% of the £91.3 million identified in this report. UCL/Institute of Education is significantly ahead of other universities but includes significant longitudinal cohort analyses. The largest contributors are UK Government*, ESRC and UK charities with UCL/IOE receiving a disproportionate amount of ESRC funding, but including their cohort studies (see Appendix 1)

Total to all unis: £54.8 million



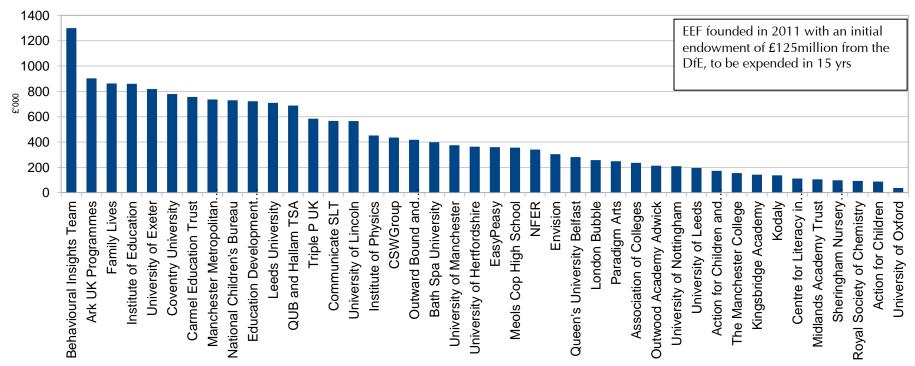
Total to top six unis: £27.4 million (see appendix 1 for alternative breakdown)



Source: HESA 2018/19 Research Grants and Contracts for Education and Continuing Education research https://www.hesa.ac.uk/data-and-analysis/finances/table-5.csv

Source and destination: £18.2 million Education Endowment Fund Grants 2018/19

The greater part of EEF grant funding is non-university (28 out of 42). The principles of the EEF's what works model is to focus on school and practitioner effectiveness, rather than macro/system policy change.

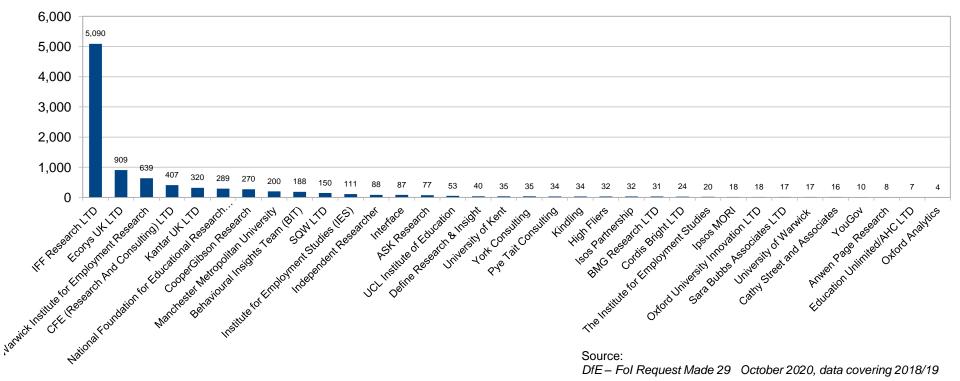


NB, the 18/19 destination of funds is not necessarily a guide to destinations in other years

Source: EEF Accounts and TAR 2018/19 submitted to the Charity Commission

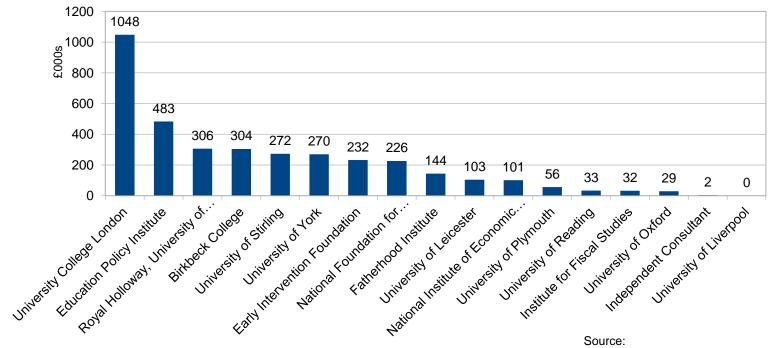
Source and destination: £9.3 million DfE Grants and Commissions 2018/19

Over 50% of DfE funding goes to IFF Research. Ecorys receives over 10%. The Warwick Institute is the third major recipient and is part of the university. Only 4 out of 32 institutions are universities.



Source and destination: £3.6 million Nuffield Foundation Grants 2018/19

Ten out of seventeen beneficiaries from Nuffield are universities. Twenty-nine % of grants are received by UCL/IOE



Nuffield Foundation – Annual Report 2019

3. Research for policy makers versus practitioners



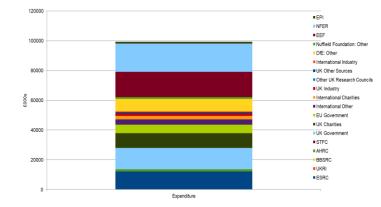
Method to understand research applicability and conclusion

The following analysis of research topics does not provide exact measurement since funding providers (to the right) and recipients provide patchy data. However, the available quantifiable data and the proxy data suggests less than 5% of research projects would be of use to policy makers for macro/system decision making and edpol's view is that in reality, this is likely to be in the 1 to 2% range.

A sub analysis was made of around a quarter of research funding for 2018/19, using source data from Research Councils, the DfE and Nuffield. This is 40% weighted to DfE commissions but even so, less than 10% of research work relates to macro policy.

University research makes up more than half of the total research expenditure. It has been analysed using REF submissions between 2009 and 2014*. "Policy" comes up in 3.3% of submission titles but close inspection suggests relevant submissions are less than 1%. Keywords were used related to policy topics. They arise in 10% of papers** but again closer inspection of titles suggest that a very small proportion would be relevant to policy makers, certainly lower than 5%.

The EEF funded research can be judged by EEF output and this is overwhelmingly aimed at school leadership and teaching practitioners. EEF research expenditure accounts for almost 20% of all the education research analysed by edpol.

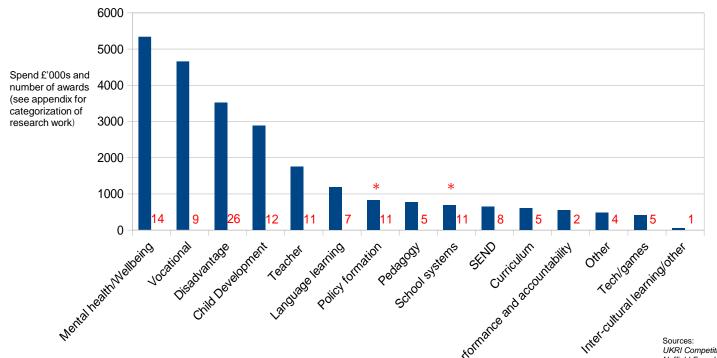


^{*}The strong relationship between REF submissions and HESA funding data is shown in the appendix 2

^{**} With possible overcount because multiple key words can occur in one submission.

Sub-analysis of investment by research category for 2018/19

The 133 research projects for DfE, UKRI and Nuffield which did not go to Unis were classified into the groups below (see appendix for classifications). The majority of spend is directed at practitioner guidance. Only 22 out of 133 projects provided research relating to school systems and policy formation. Inspection of title classifications (see appendices 3) indicates that less than half of these might be of interest to policy makers, so less than 10% of the total



Total funding from seven bodies: £24.2 Million.

- Economic and Social Research Council (ESRC): £9.8M
- Department for Education (DfE): £9.4M
- Nuffield Foundation: £3.6M
- UK Research and Innovation (UKRI): £0.9M
- Biotechnology and Biological Sciences Research Council (BBSRC): £0.2M
- Arts and Humanities Research Council (AHRC):<£0.2M
- Science and Technology Facility Council (STFC): <£0.2M

£13.8M goes to universities.

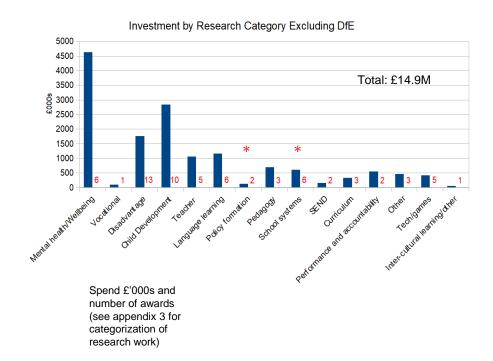
£10.4M to charities, research institutes, thinktanks, private individuals. Predominantly from the DfE.

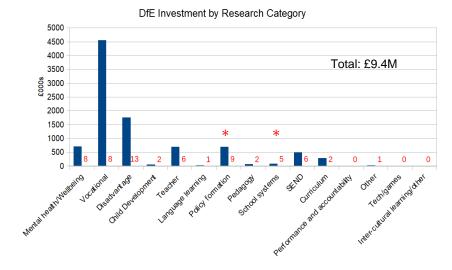
Sources:
UKRI Competitive Funding Decisions in 2018-19
Nutfield Foundation - Appual Report 2019

Nuffield Foundation – Annual Report 2019 DfE – Fol Request Made 29 October 2020, data covering 2018/19

Investment by research category - breakdown by source for 2018/19

The majority of the policy formation work is funded by the DfE, with little coming from research councils and Nuffield. School systems work is evenly split. The full extent of DfE commissioned work in 2018/19 is available in the appendix 4.



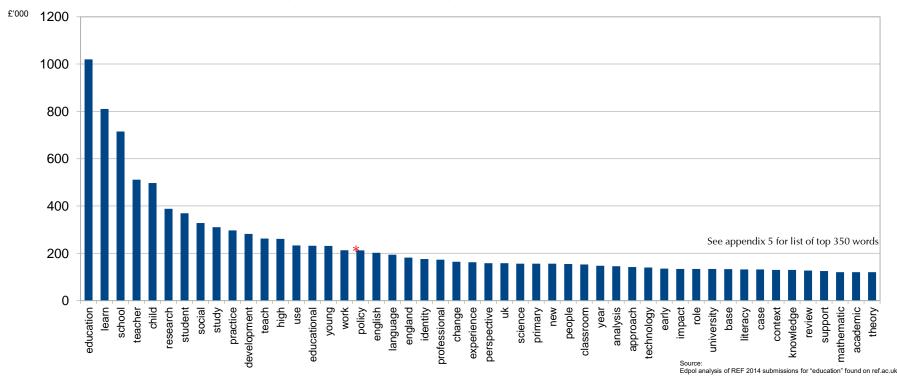


Sources:

UKRI Competitive Funding Decisions in 2018-19 Nuffield Foundation – Annual Report 2019 DfE – Fol Request Made 29 October 2020, data covering 2018/19

University research: most frequent words (lemmatised) in titles using REF submissions

During the 2009 to 2014 REF period, almost 5500 university research projects were submitted and assessed. The analysis of title headings is overwhelmingly related to school based and practitioner matters, with "policy" only being mentioned 184 times (3.3%).



University research: first 50 REF submissions which include 'policy' in the title

Closer inspection of titles including "policy" suggests only 15 related to macro policy making topics. This would take relevant policy work down to 1%

* 'Requisite Irony' and the 'Knowledge Based Economy': a critical discourse analysis of the drafting of education policy in the European Union 'Selling it as a holistic health provision and not just about condoms' Sexual health services in school settings; current models and their relationship with sex and relationships education policy and provision 'Are we being de-gifted, Miss?' Primary school gifted and talented co-ordinators' responses to the Gifted and Talented Education Policy in England "Sticking together!" Policy activism from within a UK coal-mining community 'Wasted down there': policy and practice with the under-threes 'Why Literacy Matters': Exploring a policy perspective on literacies, identities and social change "Willing enthusiasts" or "lame ducks"? Issues in teacher professional development policy in England and Wales 1910-1975 1-1 in Education; Current Practice, International Comparative Research Evidence and Policy Implications * A critical woman : Barbara Wootton, social science and public policy in the twentieth century → A journey into silence: students, stakeholders and the impact of a strategic governmental policy document in the UK. A promiscuous (feminist) look at grant-science: how colliding imaginaries shape the practice of NSF policy A review of thinking and research about inclusive education policy, with suggestions for a new kind of inclusive thinking A Theory of Motivation and Ontological Enhancement: The role of disability policy in student empowerment and institutional change A triumph of hope over reason? Aid accords and education policy in Kenya * Academies and the myth of evidence based policy: limits and possibilities. Action Research and Policy Behind the Policy Mantra of the Inclusive Museum: Receptions of Social Exclusion and Inclusion in Museums and Science Centres Beyond locutionary denotations: exploring trust between practitioners and policy Capabilities, values and education policy Centrifugal schooling: Third sector policy networks and the reassembling of curriculum policy in England. Challenging representations: constructing the adult literacy learner over 30 years of policy and practice in the United Kingdom Changing English?: the impact of technology and policy on a school subject in the 21st century Changing policy discourses on equity and diversity in UK higher education: What is the evidence? * Changing policy levers under the neoliberal state: realising coalition policy on education and social mobility * Chasing improved pupil performance: the impact of policy change on school educators' perceptions of their professional identity, the case of further change in English schools Children's rights and educational policy in Europe: the implementation of the United Nations Convention on the Rights of the Child Citizenship education for unity and diversity within multicultural societies: critical policy responses within Europe Comparative and international education: policy transfer, context sensitivity and professional development Lomparative education, the 'New Paradigm' and policy borrowing: constructing knowledge for educational reform Comparative performance measures, globalising strategies and literacy policy in Scotland Construction of difference and diversity within policy and practice in England Content and language integrated learning: panacea or policy borrowing myth? Contexts, Constraints and Resources in the Development of European Education Space and European Education Policy Continuing professional development for Scottish teachers: tensions in policy and practice Critical issues in designing mixed methods policy research Culture clash: mentoring student Literacy educators in a marketised and instrumentalist further education policyscape Lurriculum theory, curriculum policy and the problem of ill-disciplined thinking Decentralisation policy and practice in Ghana: the promise and reality of community participation in education in rural communities ★ Deconstructing 'Aspiration': UK policy debates and European policy trends Developing governmentality: conduct3and education policy Diagnosis and disengagement: exploring the disjuncture between SEN policy and practice Diminished states? National power in European education policy Disability, policy and education: contrasting perspectives from India and England * Economic wellbeing: critical reflections upon policy and practice in English primary schools Education and poverty: mapping the terrain and making the links to educational policy ★ Education policy

Education policy and philanthropy: the changing landscape of English educational governance

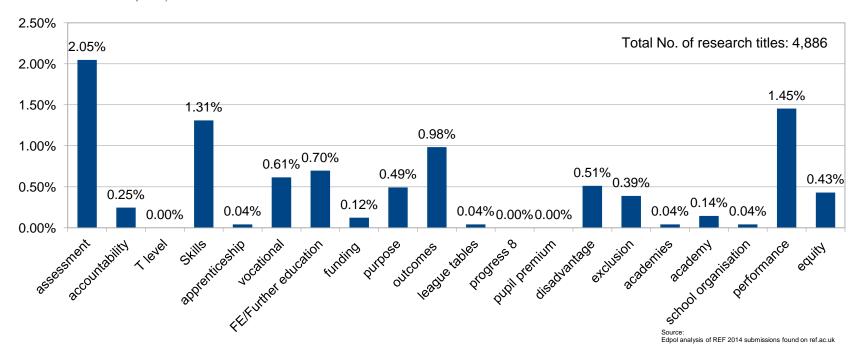
* Educational assessment policy and practice - a matter of ethics

Education policy and the "ideal learner": producing recognisable learner-subjects through early years assessment Education quality in post-apartheid South African policy: Balancing equity, diversity, rights and participation

20

Percentage of selected keywords in titles submitted to REF 2009 to 2014

A search of REF submissions was made using key words that might relate to macro policy topics. The total comes out at just over 10%. Analysis of the submissions with "assessment" in them (see appendix 6), shows that most relate to research work at the micro school level. A very small proportion, if any, relate to macro policy consideration of summative assessment policy options. It seems reasonable to deduce that less than 5% of submissions related to macro policy.



4. Research freedom and its implications

"The Haldane principle means that decisions on individual research proposals are best taken by researchers themselves through peer review. This involves evaluating the quality, excellence and likely impact of science and research programmes. Prioritisation of an individual research council's spending within its allocation is not a decision for Ministers... There are areas where Ministers should have no input: Ministers should not decide which individual projects should be funded nor which researchers should receive the money. This has been crucial to the international success of British science."

David Willetts, ministerial statement on 10 December 2010

Range of control on research funding

The extent to which research is guided can range from not at all e.g. academic work with provider discretion, through possible use of Areas of Research Interest (ARIs), to detailed specification e.g. commissioned work for independent research organisations. Examples are given below of the 2018 ARIs, the ESRC guidelines and Nuffield's priorities.

The **DfE's 2018 Areas of Research Interest (ARIs)** for schools and early years cover*:

- Effective approaches in different early years settings, and for pupils with different SEND (special educational needs and disability) conditions, based on insights from cognitive science and neuroscience.
- **Transition** between early years and primary, particularly for disadvantaged pupils.
- Improving equity by understanding **geographic differences** and predicting which schools might improve or deteriorate.
- **Parental engagement**, specifically the barriers and drivers to parental engagement in education in the home.
- Organising schools to become more financially efficient, and using technology to reduce staff workload.
- Improving **staff recruitment and retention**, especially in shortage subjects.
- Wellbeing of pupils and teachers, including the school's role in improving pupil mental health.

"The **ESRC** funds excellent research. The primary criterion is scientific quality. The ESRC expects its portfolio to include a diverse range of research encompassing, amongst other things, work based on single disciplines, research which combines disciplinary approaches, research focused on advancing scientific theory, and research aimed principally at developing practical applications [...] we encourage research proposals which demonstrate one or more of the following: innovation, interdisciplinarity and impact."

"Nuffield's goal is to find ways to improve educational outcomes through policy change and interventions that are grounded in robust evidence. We fund research and development projects relating to education across all life stages – from early years through school, to further and higher education and vocational learning. We want to understand young people's pathways as they move through these stages, and how they acquire skills and capabilities" Interests are: Skills and capabilities /Teaching quality/Young people's pathways/Educational disadvantage/Direct interventions

* From Harnessing Education Research 2018 – see appendices 7 to 11 for detail Source: https://www.nuffiel

Source: https://esrc.ukri.org/funding/guidance-for-applicants/ Source: https://www.nuffieldfoundation.org

Range of control by funding source and destination

Around 40% education research is directed – around 60% has full independence. Other than for "independents"*, only the DfE is sponsoring macro policy work. Even with the new ARI guidance, research will remain fragmented, with large parts provider-driven and without the guidance of a long-term plan (see following page)

Funding source	Approx %	Control	Mechanism	Focus	Destination
EEF	20	Strong (1)	Specify interest	Practitioner	75% non uni (2)
DfE	10	Strong (1)	Specify interest	Practitioner/Policy (3)	90% non uni (2)
Other govt	10	Mixed	Specify interest	Practitioner/Policy	Mixed
Commerce/ Charities	12	Mixed	Broad sponsorship	Practice	Mixed
Research Councils	20	Weak (4)	Areas of Research Interest	Mainly Practice	100% uni (4)
Nuffield	4	Mixed	Broad sponsorship	Practitioner/Policy	60% uni
Independents*	12	Strong (1)	Specify interest	Practitioner/Policy	Mixed (2)
Other	12	Mixed	Broad sponsorship	Practitioner/Policy	Mixed

⁽¹⁾ Only EEF, DfE and Independents have clearly directed research. This account for roughly 40% of funding and leaves another 60% highly fragmented and without clear direction

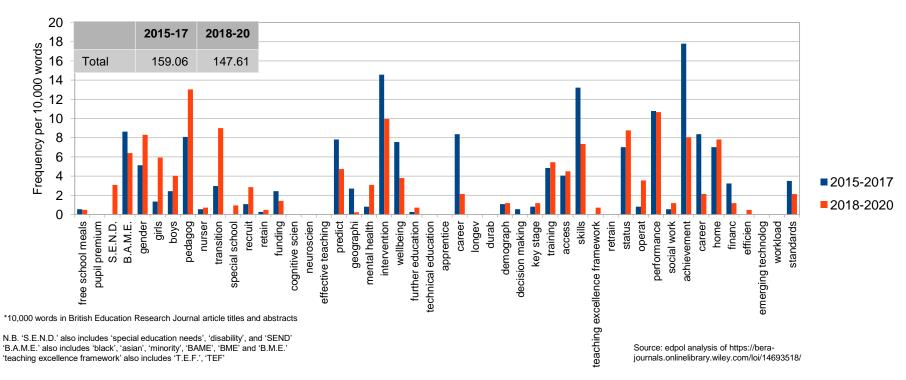
- (2) The majority of the directed spend is in the non-university areas
- (3) Spend directed at macro/system policy areas mainly comes from the DfE and a little from Independents
- (4) University funding provides enormous latitude, even with the ARI guidance (see following page)

All figures are based on edpol estimates and are approximate

^{*} For example, NFER and EPI excluding revenue from DfE, EEF and Nuffield

2018-20 frequency of DfE ARI keywords in the British Education Research Journal*

An analysis of the titles and abstracts in the BER Journal vis-a-vis the 2018 ARI key words (see appendices 7 to 8a) shows that the association between research and ARI topics actually falls after the issue of the ARIs. This can only provide a directional impression but it does suggest that the net effect of the ARIs are minimal or non-existent in academic circles.



The balancing act: Haldane principle and communicating priorities

As per the IfG 2018 study in this area (below) the government must maintain a balancing act. It has quoted the Haldane principle on one side and on the other, the need to be strategic and communicate priorities. ARIs are intended to help academics anticipate future government priorities. However, there are only a limited number of strategic ARIs (perhaps: parental engagement; geo-differences and cognitive science) and there is little to encourage research around "the fundamental questions" in policy making.

"The new 'Areas of Research Interest' (ARIs) aim to [better communicate research priorities to funding councils and academics]. They are a response to the 2015 review of the UK research councils, led by Sir Paul Nurse, which said that government needed to take a more strategic approach to research and development – and specifically recommended that departments set out priority questions they want answered through new or existing research"

ARIs are not a means for government to direct what research academia conducts. The Nurse Review emphasised **the Haldane principle** – that academics, not politicians, should make funding decisions about individual research proposals – as have statements by ministers and Sir Mark Walport, chief executive of UKRI.

..... Instead, they are intended to help academics working in policy-relevant areas to anticipate future government priorities. UKRI has created the Strategic Priorities Fund* specifically to support research in policy areas that do not fit into existing funding streams but are important priorities across government – for instance, housing, welfare, social cohesion and skills.

^{*}https://www.ukri.org/our-work/our-main-funds/strategic-priorities-fund/...but does not appear to cover education

Academic freedom and policy making impact

'A group of lads, Innit?' : Performances of Laddish Masculinity in British Higher Education

'Prevent'ing Education: Anti-Muslim Racism and the War on Terror in Schools

'Renaissance' without enlightenment: New Labour's 'Learning Age' 1997-2010

'Safeguarding sports' coaching: Foucault, genealogy and critique

'Producing' the Global Knowledge Economy: The World Bank, the Knowledge Assessment Methodology and Education 'Relative Ignorance': Lingua and linguaggio in Gramsci's concept of a formative aesthetic as a concern for power

'Sounds of Intent' : Mapping musical behaviour and development in children and young people with complex needs

'Requisite Irony' and the 'Knowledge Based Economy': a critical discourse analysis of the drafting of education policy in the European Union

Below is a sample of REF titles in education research. Few, if any, will provide national policy makers with meaningful guidance. None attempt to address the wide canvass of a policy making area. Examples of the macro policy questions that need addressing are on the following page. These topics are the basis of constant debate in the education world and they are not supported by a coherent evidence base from research.

'A tradition in ceaseless motion': Critical Race Theory and black British intellectual spaces 'Argument!' Helping students understand what essay writing is about 'Because tumi Bangali': Inventing and disinventing the national in multilingual communities in the UK 'Between authenticity and pretension': parents', pupils' and young professionals' negotiations of minority ethnic middle-class identity 'Choosing a student lifestyle?': Questions of taste, cultural capital and gaining a graduate job 'Citizenship': what does it mean to trainee teachers in England and Hungary? 'Diff-ability' not 'Disability' - Right brained thinkers in a left brained education system 'Dual-sector further and higher education: policies, organisations and students in transition 'Ethnographic Dazzle' and the construction of the 'Other'; revisiting dimensions of insider and outsider research for international and comparative education 'Exactly what do you mean by consistency?' Exploring concepts of consistency and standards in Curriculum for Excellence in Scotland Exploring Historicity and Temporality in Social Science Methodology: A Case for Analytical and Methodological Justice' In The methodological dilemma 'Fade to Grey': Older women, embodied claims and attributions in English university departments of education 'Fitting in' or 'standing out': working-class students in UK higher education 'Give me a lesson and I'll deliver it': Teaching Assistants' experiences of leading primary mathematics lessons in England 'History and hysteria': Peru's Truth and Reconciliation Commission and conflict in the national curriculum 'How we do things around here": Educational Change and effective Faculty leadership in post Blair Britain 'I can't read it; I don't know: Young children's participation in the pedagogical documentation of English early childhood education and care settings 'I don't know what literacy is': Uncovering hidden literacies in a community library using ecological and participatory research methodologies with children 'I just need more time': A study of native and non-native students' requests to faculty for an extension 'I just want a job': what do we really know about young people in jobs without training? 'I like it instead of maths': how pupils with moderate learning difficulties in Scottish primary special schools intuitively solved mathematical word problems 'I remember thinking, why isn't there someone to help me? Why isn't there someone who can help me make sense of what I'm going through?'; 'Instant adulthood' and the transition of young people out of state care 'I sat back on my computer . . . with a bottle of whisky next to me' : constructing 'cool' masculinity through 'effortless' achievement in secondary and higher education I thought it would be tiny little one phrase that we said, in a huge big pile of papers: children's reflections on their involvement in participatory research "I've been sort of laddish with them ... one of the gang': teachers' perceptions of 'laddish' boys and how to deal with them... 'If it weren't for my mum...': the influence of Australian Indigenous mothers on their children's aspirations to teach 'It really hurts and it is bullying': moral learning as political practice 'It's better than catching frogs': Understanding the importance of local context in the development of inclusive school self-evaluation in Lao PDR 'It's better to learn about your health and things that are going to happen to you than learning things that you just do at school': findings from a mapping study of PSHE education in primary schools in England 'It's like an itch and I want to get it away but it's still there': understandings and experiences of anxiety and depression among young people with intellectual disabilities "It's like saving "coloured": understanding and analysing the urban working classes 'Just be friends'; exposing the limits of educational bully discourses for understanding teen girls' heterosexualized friendships and conflicts 'Just one day like today': scale and the analysis of space/time orientation in narratives of displacement 'Knowledge as the Necessary Food of the Mind' Charlotte Mason's Philosophy of Education 'Nothing to do'; the impact of poverty on pupils' learning identities within out-of-school activities 'Nothing to do': the impact of poverty on pupils' learning identities within out-of-school activities. 'Nothing will prevent me from doing a good job'. The professionalisation of part-time teaching staff in further and adult education 'Out-of-school time' in England 'Partnerships in research': Multimodality and ethnography Perceptions of beginning teacher educators of their development in research and scholarship: identifying the turning point experiences

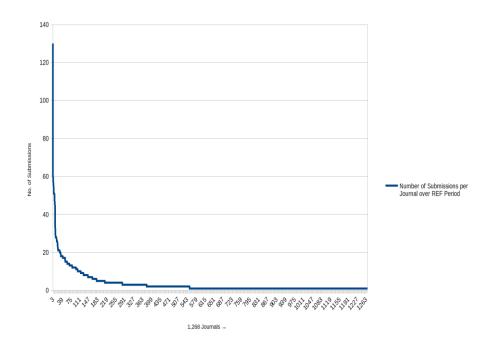
'Selling it as a holistic health provision and not just about condoms' Sexual health services in school settings; current models and their relationship with sex and relationships education policy and provision

Sample titles: first 50 REF submissions by alpha – those starting with an inverted comma

Examples: fundamental questions at macro/system level (Education in England)

Systems	Funding	Teacher Professionalism	Disadvantage	Curriculum	Vocational	Assessment	EYFS	Measurement & Accountability	Wellbeing	Success
					National					
Where should the line of responsibility sit between schools and government? Should secondary academisation be completed, held or reversed? How should the primary sector be managed? How is parental choice managed v balanced intake? (Choice v equity v effectiveness) What is the potential role of the middle tier? How does evidence gathering incorporate a teacher view?	What is the appropriate level of education funding? What is the correct resource balance between sectors! How far should funding correct regional imbalances?	What is correct balance between university, independent training and school development? How is empowerment balanced with accountability? What is the role of technology? How far will policy stability improve teacher retention? What is the priority and method of developing more great leaders?	What is the cost/benefit of early intervention? How far can and should schools overcome pupil disadvantage? Where is the best return on additional funding?	Does tertiary education determine secondary school goals and is this a problem? What is a stretching and inclusive curriculum for secondary? Is there a trade off between equality and excellence? How are minimum standards best achieved? Should the curriculum help develop the "whole child" and loos this create measter mint challenges?	How are technical and vocational options given more status? What is the appropriate funding level? Should the single curriculum run to year 9, 10, or 11? How can inclusion be increased? What is the strategy for adult education?	Should we have comparable or criteria-based attainment levels? What are the costs and benefits of the exam centered system? Should the timings and form of assessment/examination change? Should curriculum and assessment change be recommended to government?	How important is pre school nursery to early development? How prescriptive should the curriculum be from age 4 to 7? What is the appropriate SEN funding in EYFS?	Do we monitor what it is easy to measure? Can character goals be measured? How is school accountability and responsibility best balanced? Should inspection really be "improvement"? What is the importance of problem solving and teamwork?	How do we improve the health, welfare and life satisfaction of children in school?	What do we want education to deliver in the next 5/10/20 years? How should school success be measured? How do we balance compliance, enablement and wellbeing?
					Local					
How far can underperformance be rectified by local/area intervention? – [Should Opportunity areas be continued]? How should we maximise benefits in local school cooperation? How do we identify, evaluate and scale successful initiatives?		How is the best teaching talent attracted to the most disadvantaged areas?		Should there be greater opportunity to flex curriculum requirements at a local level?	Should policy be sector or place based? What are the future skills needs by area? What is the most effective model of cooperation between schools, FEs and employers?	Policy	option	How to better engage parents and the community?	At what level should care services be coordinated e.g. neighborhood; community; LA; mayoral or regional? How are care services coordinated where LAs no longer fulfil the role?	

5. Other challenges and proposals for reform



Typical presentation of education research

During the last REF period, university education departments made nearly 5500 submissions and approximately 4300 of these were published in journals (see appendices 12 to 14). In 2014, only one submission was issued on a website and 64 covered at conferences. The range of journals is vast with a tail beyond 1000 titles. Most are behind paywalls..and a material amount of research comes from non-education departments. Access and navigation is extremely difficult.

Journal Title	Number of Submissions per Journal	% of Total Submissions			
British Educational Research Journal	147	2.67%	140 -		
Oxford Review of Education	75	1.36%			
British Journal of Sociology of Education	63	1.15%			
Studies in Higher Education	63	1.15%	120 -	This analysis applies to the of	
Research Papers in Education	60	1.09%		HESA/REF research funding.	
Journal of Education Policy	59	1.07%		DfE commissioned research (c	
Journal Of Education Policy	59	1.07%	100	10%) is based on a bi-lateral	
Cambridge Journal of Education	51	0.93%			
British Journal of Educational Studies	45	0.82%		relationship. All other	
International Journal of Educational Development	35	0.64%	e 08	research has no systemic route	
Educational Review	34	0.62%	ssion	through to policy makers. It is	
EDUCATIONAL REVIEW	34	0.62%	imdi	often presented better than	
Educational Studies in Mathematics	32	0.58%	୍ଥି 60 -	academic work but it still	
International Journal of Inclusive Education	31	0.56%	Š.	, Number of	Submissions per er REF Period
Journal of Philosophy of Education	31	0.56%		policy makers to identify,	
International Journal of Science Education	31	0.56%	40 -		
Higher Education	28	0.51%		access and navigate research.	
Discourse: Studies in the Cultural Politics of Education	28	0.51%			
Gender and Education	28	0.51%	20 -	1	
Journal of Computer Assisted Learning	28	0.51%			
Curriculum Journal	26	0.47%		**************************************	
Journal of Education for Teaching	25	0.45%	0 -		
Teaching and Teacher Education	24	0.44%	0	, & 4 x x x x x x x x x x x x x x x x x x	
Professional Development in Education	24	0.44%			
Total	1061	19.29%		1,268 Journals →	

Top 20 Education Journals by Submissions over REF Period

Total of 5,499 submissions across approx. 1,250 Journal -* Approximation due to duplicates in REF data

Variable quality of research and discriminating between good and bad

The REF analysis for academic work uses a relatively narrow and contested measure of quality, mostly dependent on output and academic recognition. Even so, over a third of Universities have 40% of their research at the low threshold of 2*. Criticism of large areas of research is commonly made (see below) and therefore, it is difficult to understand the quality of a particular pieces of work.

Only 11 universities, out of the 92 funded, received higher than a 40% share for the REF's 4* rating. This suggests that quality research is focused on a small number of institutions. The understandable response is for individuals and organisations to seek out bi-lateral relationships, with certain institutions and individuals.

Common criticisms of some academic research

- Poor quantitative capability
- Poor qualitative capability
- Lack of relevance and impact
- Narrow and noninterdisciplinary perspective
- Failure to understand context
- Poor appreciation of holistic picture
- Political bias

Universities with >40% REF 4* rating 2014

- Birmingham
- Bristol
- Cambridge
- Cardiff



- Edingburgh
- Exeter
- Kings College London
- UCL/IOE
- Nottingham
- Oxford
- York

Logical response:

- Favour certain institutions for funding
- Build relationships with certain departments and academics
- Deepen these bilateral relationships

Institute for Government response to research navigation issues

The IfG's 2018 work in this areas supports closer ties between policy makers and research providers. While some of these suggestions will be helpful, the lack of a formal structure to engage with research can lead to arbitrary selection; bias confirmation; little attempt to reconcile opposing views; lack of synthesis and no contribution to a long-term, even handed process.

Institute for government 2018: How Government can work with Academia

- Every department should create an 'expert network' to help officials find relevant academics.
- Departments should work with universities and research funders to develop 'induction schemes' for policy officials new to a policy area to enable them to get up to speed quickly.
- Working with ministers and senior officials, permanent secretaries should assess where their departments **face gaps in expert advice**, which could be tackled through **new advisory committees**, the sponsorship of external bodies such as 'what works centres' or other methods we highlight.
- Every department should set up a **secondment programme** for bringing in academics, of a scale and nature that best fits the department's needs.
- Departments should enable officials to use **standing contracts** with approved researchers to **commission research and evidence reviews quickly**.
- Chief scientific advisers, chief analysts and departmental heads of the Policy Profession should have joint responsibility for **drafting 'Areas of Research Interest'** and ensuring that these are the starting point for discussions with academia.
- The Policy Profession Board, the Analytical Functions Board and the new government chief scientific adviser should review government's use of tools for bringing insights from diverse academic disciplines into policy making.

Fragmentation, relevance and quality: the need for synthesis

The Royal Society and Royal Academy's work with Oxford's Education Department addresses the quality issues: "validity, applicability, significance and reliability". They also identify the need for research strategies through a proposed Office for Education Research, for synthesis and mediation. This should be extended to international work (now in the DfE 's ARIs), so that all relevant research and experience can be gathered around the fundamental questions – those which constantly challenge policy makers.

Harnessing Educational Research: views from Royal Society and Oxford University 2018

Summary: We need a new organisational structure with an **Office for Education Research** at its heart. This Office would bring together governments, governmental organisations, researchers, teachers and other funders. This structure must enable the actors to discuss and debate together their research priorities, and to codevelop research strategies for addressing these priorities

- 5.11 Assessing evidence. **Policymakers need to assess research for its validity, applicability, significance and reliability.** To an untrained eye, it can be easy to mistake a popular, well-written piece of pseudo-science as a ground-breaking piece of research, and overlook the significant findings of another study that is buried in an academic journal.
- 5.12 The role of evidence synthesis. Evidence syntheses for policymakers are few and far between, and there are limited drivers in the research environment for researchers to produce such syntheses.

If research is communicated to policymakers in a synthesised way, by a trusted body that has already undertaken the painstaking exercise of trawling through numerous studies with differing and often contradictory findings, it can be used most effectively. Evidence syntheses have been a key part of the work of the **Evidence for Policy and Practice Information and Coordinating Centre at** the UCL Institute of Education, which specialises in providing systematic reviews with clear methodologies and explanations of how the evidence can inform policy and practice. The EEF also provide similar analyses of studies which aim to raise attainment, but there is scope for more activity in this area.

Mediation for policy makers as well as practitioners

EEF and supporting institutions (below) provide good examples of evidence mediation <u>but these are aimed at practitioners rather than policy makers.</u>

Policy makers are not supported by the same independent, national institutions. They can look to NFER and EPI, IfG, IOE and Durham's DECE, but each has limited scope and all are forced to be somewhat tactical. As a consequence, decision makers often rely on Think Tanks and special interest groups. These have their own agendas and do not necessarily take an objective and holistic view.







* Nottingham – see UPEN for policy interaction with government

Conclusions and suggestions

Only a very small proportion of England's education research attempts to address long-term, national policy making questions. The small amount available is difficult to locate, accesses and navigate. The current governance and structure of research make this hard to address. Education research is:

- Institutionally fragmented, by source and destination
- Not following a long term plan, vision or structure
- Typically atomised and disconnected
- Of widely varying quality

As a result, fundamental questions of education policy are not adequality supported by research and evaluation.

A collection of IfG*, Royal Academy and Royal Society recommendations to strengthen bi-lateral relationships between policy makers and researchers may be helpful, but could deepen biased behaviour.

Structural issues in England's education research requires a systematic response:

- Better strategic and long-term coordination (see EPI review of other nations' research organisation)
- Areas of Research Interest (ARIs) should be based around long term fundamental questions in education (page 28)
- There is a need for high level synthesis of national and international research
- There should be a mediating capability, that can address these needs for all policy makers**

^{*}Institute for Government

^{**} See edpol paper on Centre for Evidence in Education Policy

6. Postscript: REF impact measurement

REF Impact

- · REF impact is one of three measures REF2014 observed, alongside Outputs and Environment.
- REF impact was introduced when the Research Assessment Exercise became REF (2014 is the first REF output).
- . It has continued to be controversial, often due to being perceived as an attack on academic freedoms.
- · "In the REF, impact is defined as an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia."
- · "REF impact was assessed in the form of impact case studies and impact templates, where HEIs provided further information about their approach to supporting and enabling impact."
- The REF impact case studies were analysed by REF and categorised into PESTLECH: Political, Economic, Societal, Technological, Legal, Environmental, Cultural, and Health.

Source: REF 2014

REF Impact Case Studies – PESTLE (+CH)

Education research's "impact" is generally classified as having "societal" impact. This is "Impact on societal attitudes to and impacts of education, government directives and employment opportunities, lifestyle changes, changes in populations, distributions and demographics, the societal impact of different cultures". "Political" impact is defined as impact on worldwide, European and UK national and local Government directives, public body policies, national and local organizations' requirements, and institutional policy. The numbers here are very low.

	Unit of Assessment: Education	Subject Area: Education
Political	2	5
Economic	3	6
Societal	206	317
Technological	0	6
Legal	0	0
Environmental	0	2
Cultural	2	31
Health	2	2
TOTAL	215	369

N.B. Subject area designates work relating to Education (and up to two more subjects) by any University department, including the Education department.

REF Impact Case Studies by Unit of Assessment – PESTLECH

Other departments have a far wider distribution of impact category.

	UoA: Education	UoA: Public Health, Health Services, and Primary Care	UoA: Psychology	UoA: Architecture, Built Environment, and Planning	UoA: Philosophy	All UoAs
Political	2	40	14	24	7	509
Economic	3	3	5	11	0	381
Societal	206	14	207	43	55	1723
Technological	0	3	28	32	1	1397
Legal	0	0	29	2	2	212
Environmental	0	2	2	15	2	459
Cultural	2	0	48	12	27	1099
Health	2	101	57	1	4	857
TOTAL	215	163	390	140	98	6637

Source: REF 2014

REF impact for education department – breakdown

A breakdown of the impact of Education's submissions highlights that only a small number are related to "education systems". The majority relate to "specialist studies". Only one had a system impact in the UK

	Education Systems	Curriculum and Pedagogy	Specialist Studies in Education	Other Education	Total
All	10*	214	343	2	369
Of which had impact in UK	1	107	157	1	159

^{*&#}x27;Education Systems' Submissions:

- 1. Development approaches that stimulate knowledge, acquisition and growth in small and medium-sized enterprises: influencing practice and policy
- 2. 14-19 education and training: the case for a unified and inclusive system
- 3. Apprenticeship and work-related learning: a tool for assessing quality
- 4. Strategic communication capability development
- 5. Leadership of learning impact in further and higher education
- 6. Improving progression routes from short cycle higher education to bachelor degree programmes.
- 7. Early Years Pedagogy and Practice
- 8. Improving leaders' and practitioners' ability to develop collaborative initiatives and learn from each other
- 9. Understanding the Impact of Pupil Exclusion, Vulnerability and Risk An Exploration of Children and Young Peoples' Perspectives
- 10. Establishing the conceptual, methodological and adaptive capabilities for sustainable societies

Source: REF 2014, N.B. These subject breakdowns are generated by an internal REF analysis of the submissions, they are not specified by the submitting institution.

Appendix

Page 5 related: Education-related papers submitted to REF not filed under 'Education' (estimated additional education spend 2012 to 2014)

N.B. This is edpol's analysis: these are all papers with any of the wordstubs "school, educat, student, teacher, universit" found in the title.

	Sociology	Economics and Econometrics	Psychology, Psychiatry and Neuroscience	Politics and International Studies	Total
Total Number of REF Submissions	2464	2600	7865	4365	17294
Total Submissions Relating to Education	69	72	122	46	309
5-Year Average spend in total £m	31	25	262	28	£346m
Percentage Relating to Education	2.80%	2.77%	1.55%	1.05%	
Education Research £m (5 –year average)	0.88	0.69	4.07	0.29	£5.94m

Page 5 related: Sample of 20 titles relating to Education per subject investigated

Sociology

Family SES and emergent social capital in college student Facebook networks

Fees, Funding and Overseas Study: Mobile UK Students and Educational Inequalities

Age and first destination employment from UK universities: are mature students disadvantaged?

Individual Choice and Risk: The Case of Higher Education

Heteronormativity in the University Classroom: Novelty Attachment and Content Substitution among Gay-friendly Students Network-based ambivalence and educational decision-making: a case study of 'non-participation' in higher education

'A broadcasting university': educated citizenship and civil prudence

Drinking With and Without Fun: Female Students' Accounts of Pre-Drinking and Club-Drinking

Pedagogies of participation in higher education: a case for research-based learning

"Give me a Website and I'll Wipe Out a Rainforest": Student Constructions of Technology and Learning

Multicultural desires? Parental negotiation of multiculture and difference in choosing secondary schools for their children

The Second Generation in Western Europe: Education, Unemployment and Occupational Attainment

When chefs adopt a school? An evaluation of a cooking intervention in English primary schools

Initial teacher training: Understanding 'race', diversity and inclusion

Elite Higher Education Admissions in the Arts and Sciences: Is Cultural Capital the Key?

A Second Chance at 'Success': UK Students and Global Circuits of Higher Education

White noise: a critical evaluation of social work education's engagement with whiteness studies

Hidden Contradictions and Conditionality: Conceptualisations of Inclusive Education in International Law

Schooling effects on degree performance: a comparison of the predictive validity of aptitude testing and secondary school grades at Oxford Indergraduate Students

University

Discontinuous Intersections: Second-generation Immigrant Girls in Transition from School to Work

Economics and Econometrics

MUST TRY HARDER: EVALUATING THE ROLE OF FEFORT IN EDUCATIONAL ATTAINMENT

Education, growth, and income inequality

Overeducation and skill-biased technical change

The College Wage Premium and the Expansion of Higher Education in the UK

Education and Taxation Policies in the Presence of Countervailing Incentives

Heterogeneous class size effects: new evidence from a panel of university students

Performance pay and teachers' effort, productivity, and grading ethics

Family income and higher education choices: The importance of accounting for college quality

The contribution of schooling in development accounting: results from a nonparametric upper bound

Overgualification, Job Dissatisfaction, and Increasing Dispersion in the Returns to Graduate Education

Must try harder: evaluating the role of effort in educational attainment

Peer Effects in European Primary Schools: Evidence from the Progress in International Reading Literacy Study

Compulsory language educational policies and identity formation

If You Pay Peanuts Do You Get Monkeys? A Cross Country Analysis of Teacher Pay and Pupil Performance

Educational mismatch and self-employment

Misclassified Treatment Status and Treatment Effects: An Application to Returns to Education in the United Kingdom

Heterogeneous Class Size Effects: New Evidence from a Panel of University Students

School Meal Crowd Out in the 1980s

Childhood determinants of risk aversion: The long shadow of compulsory education

Herding cats? Management and university performance

Identifying the roles of race-based choice and chance in high school friendship network formation.

Psychology, Psychiatry and Neuroscience

Claiming and displaying national identity: Irish Travellers' and students' strategic use of 'banal' and 'hot' national identity in talk

An investigation of the expressive and representational drawing development in National Curriculum. Steiner and Montessori schools

A comparison of the general public's, forensic professionals' and students' attitudes towards female sex offenders

Cognitive flexibility in preschoolers: the role of representation activation and maintenance

Maternal scaffolding behavior: Links with parenting style and maternal education

Associations between a one-shot delay discounting measure and age, income, education and real-world impulsive behavior.

University students' strong experiences of music; Pleasure, engagement, and meaning

Specific Language Difficulties and School Achievement in Children Born at 25 Weeks of Gestation or Less

Parental and school effects on children's political attitudes in Northern Ireland

A randomized controlled trial of internet-based cognitive-behavioural therapy for bulimia nervosa or related disorders in a student population

Genetic and environmental transactions underlying educational attainment

Predicting successful introduction of novel fruit to preschool children

Peer-Group and Price Influence Students Drinking along with Planned Behaviour

A longitudinal analysis of estimation, counting skills, and mathematical ability across the first school year

Artificial grammar learning in primary school children with and without developmental dyslexia

Academic resourcefulness, coping strategies and doubting in university undergraduates

Interpretation bias in preschool children at risk for anxiety: a prospective study

The effect of cleft lip on cognitive development in school-aged children: a paradigm for examining sensitive period effects

Underpinnings of the Costs of Flexibility in Preschool Children: The Roles of Inhibition and Working Memory

Happiness as Stable Extraversion: Internal Consistency Reliability and Construct Validity of the Oxford Happiness Questionnaire Among

Reduced looming sensitivity in primary school children with Developmental Co-ordination Disorder

Politics and International Studies

Teaching Democracy: the Role of Political Science Education

Reclaiming the Vision Thing: Constructivists as Students of the Future1

Building localized interactions between universities and cities through university spatial development

The English School meets the Chicago School: the case for a grounded theory of international institutions

Hate in the classroom: Free expression, Holocaust denial, and liberal education

Spillover in a soft policy era? Evidence from the Open Method of Co-ordination in education and training

Structure, norms and normative theory in a re-defined English school; accepting Buzan's challenge.

University Challenges: Explaining Institutional Change in Higher Education

Putting Educational Equality in its Place

The Political Origins of Primary Education Systems: Ideology, Institutions, and Interdenominational Conflict in an Era of Nation-Building

Educational internationalism, universal human rights, and international organisation; International Relations in the thought and practice of Robert Owen

The English School and British Historians

Citizenship, democracy and education in the UK; towards a common framework for citizenship lessons in the four home nations Intrahousehold Allocation of Education Expenditure: The Case of Sri Lanka

'Making Politics Matter': Political Education in a 'Knowledge-Exchange' Context

Competitive religious entrepreneurs: Christian missionaries and female education in colonial and post-colonial India

University-industry collaboration : a CoPs approach to KTPs

Charting the ethics of the English school; what 'Good' is there in a middle-ground ethics?

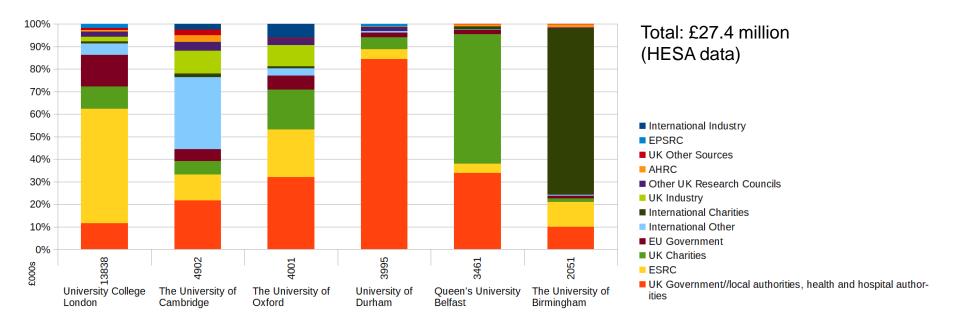
The Rise of 'The Market' in Political Thinking about Universities

Educating parliamentarians about intelligence: the role of the British Intelligence and Security Committee

Do comprehensive schools reduce social mobility?

A1. Top six Universities Education Research by Funding Provider Proportional Breakout

The ESRC and UK government are the two largest funders



Source: HESA 2018/19

Research Grants and Contracts for Education and Continuing Education research

https://www.hesa.ac.uk/data-and-analysis/finances/table-5.csv

Page 11 related - UK longitudinal studies relating to Education

Millennium Cohort Study

Youth Cohort Study

European Union Statistics on Income and Living Conditions

Growing Up in Scotland

Scottish Household Survey

Integrated Household Survey

British Social Attitudes Survey

National Survey for Wales

Understanding Society

General Lifestyle Survey (General Household Survey)

Living in Wales

CLOSER

Continuous Household Survey

National Child Development Study

National Pupil Database

National Reference Test (not cohort based)

1970 British Cohort Study

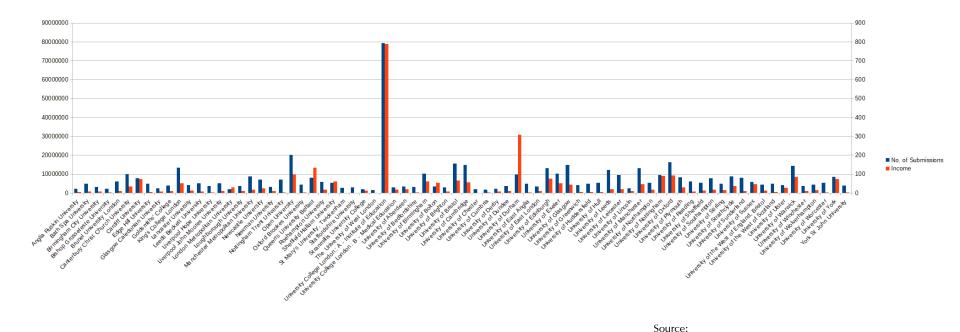
Our Future (also known as the Longitudinal Study of Young People in England (LSYPE2))

Opinions and Lifestyle Survey

Next Steps (previously the Longitudinal Study of Young People in England (LSYPE1))

Young Lives: an International Study of Childhood Poverty

A2. No. of Submissions over REF period versus income over REF period



Edpol analysis of REF 2014 submissions found on ref.ac.uk

A3. Examples of research projects in categories for analysis of 24.2 million

Early Years and Schools - Equality and Diversity Targeted Support	Disadvantage
Early Years and Schools - MAT Development	Child Develop
Early Years and Schools - Graduate Careers	Child Develop
Early Years and Schools - Graduate Careers	Child Develop
Early Years and Schools - School Business Professionals	Child Develop
Early Years and Schools - Alternative Provision - Workforce	Child Develop
Higher and Further Education - Female Uptake of STEM A-Levels	Curriculum
Early Years and Schools - Curriculum Programme Pilots	Curriculum
Early Years and Schools - RSE and Health Education	Curriculum
Early Years and Schools - Schools Use of KS4 & KS3	Curriculum
Early Years and Schools - Phased Maths Bursary Evaluation	Disadvantage
Social Care, Mobility and Disadvantage - Research Audit for Communications	Disadvantage
Social Care, Mobility and Disadvantage - Cost of Open Children's Home Placements	Disadvantage
Social Care, Mobility and Disadvantage - Qualitative Comms Call-off	Disadvantage
Social Care, Mobility and Disadvantage - Qualitative Communications Proposition Testing	Disadvantage
Social Care, Mobility and Disadvantage - Care Leavers Social Impact Bonds Evaluation	Disadvantage
Social Care, Mobility and Disadvantage - LA & PiP Support on Sector Improvement Evaluation	Disadvantage
Early Years and Schools - LA Monitoring and Broking Grants	Disadvantage
Social Care, Mobility and Disadvantage - Children Joining Family in England Under Dublin iii Regs	Disadvantage
Social Care, Mobility and Disadvantage - LA Child and Family Social Workers	Disadvantage
Social Care, Mobility and Disadvantage - Secure Children's Homes Placement Practice	Disadvantage
Social Care, Mobility and Disadvantage - Use of Provision for Children-in-Care and Care Leavers	Disadvantage
Social Care, Mobility and Disadvantage - Quantitative Comms Call-off	Disadvantage
Social Care, Mobility and Disadvantage - Qualitative Communications Message Testing	Disadvantage
Social Care, Mobility and Disadvantage - Children's Homes Workforce	Disadvantage
Higher and Further Education - Student Finance Choice and Disadvantaged Backgrounds	Disadvantage
Early Years and Schools - HE Prevent Referrals	Inter-cultural
Higher and Further Education - ESOL International Approaches to Teaching Home Language	Language lear
Early Years and Schools - Nature and Management of Out-of-School Settings	Mental health
Early Years and Schools - Holiday Activities and Food Programmes Evaluation	Mental health
Early Years and Schools - Period Products School Scheme Guidance	Mental health
Early Years and Schools - School and Colleges Senior Lead Mental Health Training	Mental health
Early Years and Schools - Understanding Children and Young People's Wellbeing	Mental health
Higher and Further Education - Student Mental Health Measurement Needs	Mental health
Social Care, Mobility and Disadvantage - Multiagency Safeguarding	Mental health
Central Analysis - Eurocohort Childhood Wellbeing	Mental health
Social Care, Mobility and Disadvantage - Looked After Children's Mental Health Assessment Pilots	Mental health
Higher and Further Education - LSYPE(2) - HE Mental Health and Wellbeing	Mental health
Social Care, Mobility and Disadvantage - Costs of Health & Social Care	Mental health
	Mental health
Early Years and Schools - Governor Development	Other
Higher and Further Education - Student Income and Expenditure	Other
Higher and Further Education - HE Employability and Work Programmes	Other
Early Years and Schools - Leadership Coaching Pledge Evaluation	Pedagogy
Early Years and Schools - Stimulating Physics Network	Pedagogy
Central Analysis - School Snapshot	Performance
Early Years and Schools - Governance Investigations	Performance
Higher and Further Education - Progress in International Reading Literacy (PIRLS)	Performance
Higher and Further Education - Post-16 Omnibus	Policy formati
Early Years and Schools - International Comparisons of School Improvement Systems	Policy formati
Early Years and Schools - School to School Improvement Support	Policy formati
Higher and Further Education - International Comparisons of Post-compulsory Systems	Policy formati
Central Analysis - Pupils, Parents, Carers Omnibus	Policy formati
Central Analysis - Young People in England (LSYPE2)	Policy formati

Higher and Further Education - Programme for International Student Assessment (PISA)	Policy format
Higher and Further Education - Post-18 Review	Policy format
Higher and Further Education - International Progression Good Practice	Policy format
Early Years and Schools - Funding Policy	Policy format
Higher and Further Education - Career Choices	Policy format
Higher and Further Education - Larbour Market Information for All	Policy format
Higher and Further Education - Post-18 Choices	Policy format
Higher and Further Education - Wider Benefits of Post-18 Education	Policy format
Early Years and Schools - Pupil Exclusions	School syster
Early Years and Schools - Local Government Programme Evaluation	School syster
Early Years and Schools - Exclusions	School syster
Early Years and Schools - School Capacity and Demand Forecast	School syster
Early Years and Schools - Alternative Provision - Funding & Commissioning	School syster
Early Years and Schools - Academy Propensity	School syster
Early Years and Schools - Pupil Registration Regulations Amendments	School syster
Early Years and Schools - School Improvement Offer Evaluation	School syster
Early Years and Schools - MAT Development and Improvement Fund Evaluation	School syster
Early Years and Schools - Visiting Teachers Programme and Demand from Schools	School syster
Early Years and Schools - Undergraduates Career in Teaching Intentions	School syster
Early Years and Schools - EHCP Journeys	SEND
Social Care, Mobility and Disadvantage - Social Work Teaching Partnerships Evaluation	SEND
Social Care, Mobility and Disadvantage - Qualitative Behavioural / Communications Research	SEND
Social Care, Mobility and Disadvantage - Review of SEND Assistive Technologies	SEND
Early Years and Schools - SEND Futures Discovery	SEND
Early Years and Schools - Tailored Support Programme Evaluation	SEND
Social Care, Mobility and Disadvantage - Costs of Childrens Social Care	SEND
Social Care, Mobility and Disadvantage - SEND Schools Workforce Project	SEND
Social Care, Mobility and Disadvantage - Quantitative Communications Evaluation	SEND
Early Years and Schools - Teaching Assistants School Deployment	Teacher
Early Years and Schools - Teachers Student Loan Reimbursement Evaluation	Teacher
Early Years and Schools - Flexible Working in Schools	Teacher
Early Years and Schools - School and College Staff Wellbeing	Teacher
Early Years and Schools - Target Setting & Teacher Workload	Teacher
Early Years and Schools - Teaching Assistants' Appetite to Become Teachers	Teacher
Early Years and Schools - EY Professiobal Development Programme Evaluation	Teacher
Higher and Further Education - Taking Teaching Further Evaluation	Teacher
Early Years and Schools - Longitudinal Study of Teachers Feasibility	Teacher
Higher and Further Education - Career Learning Pilot Evaluations	Teacher
Early Years and Schools - ITT Recruitment Campaign Market Research (Various Call-Offs)	Teacher
Early Years and Schools - Home Learning Environment Apps Evaluation	Tech/games
Higher and Further Education - Public Sector Apprenticeships	Vocational
Early Years and Schools - T-Levels Professional Development Evaluation	Vocational
Higher and Further Education - Supported Internships	Vocational
Higher and Further Education - Skills Advisory Board	Vocational
Higher and Further Education - T-Levels Employer Support Fund Evaluation	Vocational
Higher and Further Education - Employer Skills Survey (2 Waves)	Vocational
Higher and Further Education - FE Providers Workforce	Vocational
Higher and Further Education - Costs of FE International Comparisons	Vocational
Higher and Further Education - Costs of FE International Companisons Higher and Further Education - Industry Placement Funding and Support Evaluation	Vocational
Higher and Further Education - FE Choices Learner Satisfaction	Vocational
Higher and Further Education - T-Levels Transition	Vocational
Higher and Further Education - T-Levels Fransition	Vocational
Higher and Further Education - 1-Levels Funding Higher and Further Education - Technical Education	Vocational
Higher and Further Education - Technical Education Higher and Further Education - TEF Independent Review	Vocational

Sources:

UKRI Competitive Funding Decisions in 2018-19

Nuffield Foundation – Annual Report 2019

DfE – Fol Request Made 29 October 2020, data covering 2018/19

A4. DfE organisations and research areas for 2018/19.

Anwen Page Research	Early Years and Schools - Equality and Diversity Targeted Support	£8,050
ASK Research	Early Years and Schools - EHCP Journeys	£5,933
ASK Research	Early Years and Schools - Nature and Management of Out-of-School Settings	£55,275
ASK Research	Early Years and Schools - Teaching Assistants School Deployment	£15,985
Behavioural Insights Team (BIT)	Higher and Further Education - Female Uptake of STEM A-Levels	£188,220
BMG Research LTD	Early Years and Schools - Leadership Coaching Pledge Evaluation	£14,300
BMG Research LTD	Higher and Further Education - Public Sector Apprenticeships	£16,350
Cathy Street and Associates	Early Years and Schools - Pupil Exclusions	£15,875
CFE (Research And Consulting) LTD	Early Years and Schools - Phased Maths Bursary Evaluation	£198,385
CFE (Research And Consulting) LTD	Early Years and Schools - Teachers Student Loan Reimbursement Evaluation	£193,136
CFE (Research And Consulting) LTD	Social Care, Mobility and Disadvantage - Research Audit for Communications	£15,000
CooperGibson Research	Early Years and Schools - Curriculum Programme Pilots	£93,205
CooperGibson Research	Early Years and Schools - Flexible Working in Schools	£147,212
CooperGibson Research	Early Years and Schools - Teaching Assistants' Appetite to Become Teachers	£14,500
CooperGibson Research	Early Years and Schools - MAT Development	£15,000
Cordis Bright LTD	Social Care, Mobility and Disadvantage - Cost of Open Children's Home Placements	£24,362
Define Research & Insight	Social Care, Mobility and Disadvantage - Qualitative Communications Proposition Testing	£40,000
Ecorys UK LTD	Early Years and Schools - Holiday Activities and Food Programmes Evaluation	£199,675
Ecorys UK LTD	Social Care, Mobility and Disadvantage - Care Leavers Social Impact Bonds Evaluation	£155,000
Ecorys UK LTD	Social Care, Mobility and Disadvantage - LA & PiP Support on Sector Improvement Evaluation	£554,460
Education Unlimited/AHC LTD	Early Years and Schools - LA Monitoring and Broking Grants	£6,825
High Fliers	Early Years and Schools - Graduate Careers	£32,100
IFF Research LTD	Higher and Further Education - Employer Skills Survey (2 Waves)	£4,127,379
IFF Research LTD	Higher and Further Education - FE Providers Workforce	£283,946
IFF Research LTD	Social Care, Mobility and Disadvantage - Children Joining Family in England Under Dublin iii Regs	£139,792
IFF Research LTD	Social Care, Mobility and Disadvantage - LA Child and Family Social Workers	£539,346
Independent Researcher	Early Years and Schools - International Comparisons of School Improvement Systems	£10,000
Independent Researcher	Early Years and Schools - School and Colleges Senior Lead Mental Health Training	£10,500
Independent Researcher	Early Years and Schools - School to School Improvement Support	£7,875
Independent Researcher	Early Years and Schools - Understanding Children and Young People's Wellbeing	£14,950
Independent Researcher	Higher and Further Education - Costs of FE International Comparisons	£13,950
Independent Researcher	Higher and Further Education - ESOL International Approaches to Teaching Home Language	£16,425

Independent Researcher	Higher and Further Education - International Comparisons of Post-compulsory Systems	£13,950
Institute for Employment Studies (IES)	Higher and Further Education - Industry Placement Funding and Support Evaluation	£66,112
Institute for Employment Studies (IES)	Higher and Further Education - Student Mental Health Measurement Needs	£44,959
Interface	Social Care, Mobility and Disadvantage - Social Work Teaching Partnerships Evaluation	£86,623
Ipsos MORI	Social Care, Mobility and Disadvantage - Research Audit for Communications	£18,100
Isos Partnership	Early Years and Schools - Alternative Provision - Funding & Commissioning	£31,950
Kantar UK LTD	Early Years and Schools - Longitudinal Study of Teachers Feasibility	£70,000
Kantar UK LTD	Higher and Further Education - Career Learning Pilot Evaluations	£250,000
Kindling	Social Care, Mobility and Disadvantage - Qualitative Communications Message Testing	£33,600
Manchester Metropolitan University	Central Analysis - Eurocohort Childhood Wellbeing	£200,000
National Foundation for Educational Research (Nf	Early Years and Schools - Tailored Support Programme Evaluation	£289,440
Oxford Analytics	Early Years and Schools - Academy Propensity	£3,793
Oxford University Innovation LTD	Social Care, Mobility and Disadvantage - Costs of Childrens Social Care	£17,500
Pye Tait Consulting	Higher and Further Education - Post-18 Review	£17,250
Pye Tait Consulting	Higher and Further Education - T-Levels Funding	£16,710
Sara Bubbs Associates LTD	Early Years and Schools - Pupil Registration Regulations Amendments	£17,450
SQW LTD	Social Care, Mobility and Disadvantage - Looked After Children's Mental Health Assessment Pilots	£149,946
The Institute for Employment Studies	Higher and Further Education - Student Finance Choice and Disadvantaged Backgrounds	£19,695
UCL Institute of Education	Early Years and Schools - Stimulating Physics Network	£53,000
University College London (UCL) & National		
Association for Special Educational Needs		
(NASEN)	Social Care, Mobility and Disadvantage - SEND Schools Workforce Project	£83,000
University of Kent	Social Care, Mobility and Disadvantage - Costs of Health & Social Care	£34,893
University of Warwick	Higher and Further Education - HE Employability and Work Programmes	£16,717
Warwick Institute for Employment Research	Early Years and Schools - Funding Policy	£12,656
Warwick Institute for Employment Research	Higher and Further Education - Career Choices	£14,171
Warwick Institute for Employment Research	Higher and Further Education - Larbour Market Information for All	£585,229
Warwick Institute for Employment Research	Higher and Further Education - Post-18 Choices	£14,277
Warwick Institute for Employment Research	Higher and Further Education - Wider Benefits of Post-18 Education	£12,630
York Consulting	Early Years and Schools - Visiting Teachers Programme and Demand from Schools	£8,100
York Consulting	Higher and Further Education - TEF Independent Review	£16,125
York Consulting	Higher and Further Education - T-Levels Content Events	£10,635
YouGov	Social Care, Mobility and Disadvantage - Quantitative Communications Evaluation	£9,975
		00 204 400

A5. Most Frequent 350 words (lemmatised) in titles submitted to REF under 'Education'

education	1020	community	118	national		64	schooling	47	diversity	37	effectiveness	32	со	26
learn	810	understanding	118	narrative			text	47	tool	37	non	32	help	26
school	715	develop	113	training			scotland	47	comparative	37		32	century	26
teacher	511	leadership	107	view			old	46	literature	37	mapping	31	longitudinal	26
child	497	curriculum	107	strategy			lesson	45	disorder	37	researcher	31	governance	26
research	388	challenge	105	time		33	project	45	labour	37	dialogue	31	ethical	26
student	369	secondary	103	issue			career	45	woman	37	evaluate	31	get	26
social	328	explore	103	engagement		31	post	44	qualitative	37	inquiry	31	feedback	26
study	310	assessment	101	citizenship			inclusion	44	subject	37	professionalism	31	three	26
practice	297	effect	100	international			play	43	beyond	36		30	take	26
development	282	pupil	100	future			representation	43	music	36		30	second	26
teach	262	pedagogy	99	intervention		50 50	place	43	level	36		30	eguality	25
high	261	critical	98	interaction			report	43	politic	36		30	adolescent	25
use	233	design	97	ireland			choice	43	multi	36		30	story	25
educational	232	make	96	voice		59	talk	42	urban	36		30		25
	232	evidence	96	network			first	42	home	36		30	key standard	25
young	231		94	reflection		59 59	capital	42	word	36		29	trial	25
work policy	213	read model	92	difference		58	justice	42		36		29	disadvantage	25
									personal					
english	202	space	91	history			public	42	risk	35		29	africa	25
language	194	perception	86	disability			girl	41	possibility	35		29	pedagogical	25
england	182	learner	85	systematic		6	cognitive	41	become	35		29	kingdom	25
identity	176	write	85	method		66	initial	41	creativity	35		29	motivation	25
professional	173	towards	83	activity			effective	41	parent	35		29	management	25
change	164	adult	83	implication			framework	41	attainment	35		29	race	25
experience	162	participation	82	action			build	41	creative	35		29	goal	25
perspective	158	gender	82	problem			engage	40	mathematical	34		29	conception	24
uk	158	self	82	live			pre	40	practitioner	34		29	partnership	24
science	156	think	80	outcome			autism	40	е	34		29	decision	24
primary	156	class	80	collaborative			among	40	resource	34		29	graduate	24
new	156	childhood	77	within			mean	40	test	34		29	faith	24
people	155	discourse	76	british			task	40	undergraduate	34		29	dyslexia	24
classroom	153	need	75	religious			datum	39	contemporary	34		29	conceptual	24
year	147	transition	74	achievement			difficulty	39	centre	34		28	mobility	24
analysis	145	cultural	74	emotional			measure	39	middle	33		28	europe	24
approach	142	service	73	age		52	youth	39	country	33		28	lifelong	24
technology	140	culture	73	health		52	linguistic	39	relation	33		28	good	24
early	135	process	72	environment			question	39	aspiration	33		28	private	24
impact	134	digital	71	improve			across	39	well	33		28	cohort	24
role	134	performance	71	group			mobile	39	local	33		28	de	24
university	134	skill	70	inclusive		50	promote	38	setting	33		28	dilemma	23
base	133	programme	69	care			exploration	38	cross	33		28	web	23
literacy	132	quality	69	construction			medical	38	virtual	33		28	boy	23
case	132	family	68	reform		19	power	38	ethnic	33	workplace	27	transformation	23
context	130	value	68	european	4	18	agency	38	vocational	32	britain	27	london	23
knowledge	130	system	68	special			state	38	construct	32		27	investigate	23
review	127	relationship	67	influence	4	18	two	38	game	32		27	mental	23
support	125	world	67	control		18	response	38	opportunity	32		27	field	23
mathematic	120	global	67	northern	4	17	enhance	38	economic	32		27	black	23
academic	120	life	67	right	4	17	concept	38	structure	32	negotiate	26	behaviour	23
theory	120	evaluation	66	online		17	conflict	38	communication	32	collaboration	26	dynamic	23

A6. REF submissions under Education with "assessment" in the title

The identification of special educational needs and the month of birth: differential effects of category of need and level of assessment

Formative assessment at the crossroads: conformative, deformative and transformative assessment

Learning design and assessment with e-tivities

Investigating access to educational assessment for students with disabilities

The economic record of the 1997?2010 Labour government: an assessment

Getting to the heart of authentic Assessment for Learning

Research quality assessment: Objectives, approaches, responses and consequences

Transforming Formative Assessment in Lifelong Learning

Exploring formative e-assessment : using case stories and design patterns

Children s perceptions of primary science assessment in England and Wales

Assessment Literacy for the Language Classroom

Mark my words: the role of assessment criteria in UK higher education grading practices

Student perception of workplace-based assessment

'Producing' the Global Knowledge Economy: The World Bank, the Knowledge Assessment Methodology and Education

An investigation of the confidence levels of course/subject coordinators in undertaking aspects of their assessment responsibilities

Socialising young literacy learners into a discourse of failure: Dominant discourses in literacy teaching and assessment and their impact on the progression of young literacy learners into employment

Assessment of maternally reported life events in children and adolescents : a comparison of interview and checklist methods

Embedding and Sustaining Developments in Teacher Assessment

Epistemology, pedagogy, assessment and learning analytics

Development of workplace-based assessments of non-technical skills in anaesthesia.

Peer assessment without assessment criteria

Threshold Concepts and Troublesome Knowledge (5): Dynamics of Assessment

Educational assessment policy and practice - a matter of ethics

A systematic rapid evidence assessment of late diagnosis

Student teacher assessment feedback preferences: The influence of cognitive styles and gender

Psychosocial predictors, assessment and outcomes of cosmetic interventions: a systematic rapid evidence review

The organisation and assessment of composing at Key Stage 4 in English secondary schools

Musical styles as communities of practice: challenges for learning, teaching and assessment of music in higher education

Assessment and Student Learning 🋊 a fundamental relationship and the role of information and communication technologies

Investigating the curriculum through assessment practice in higher education; the value of a 'learning cultures' approach

Exploring Formative Assessment Using Cultural Historical Activity Theory

The relative reliability of actively participating and passively observing raters in a simulation-based assessment for selection to specialty training in anaesthesia.

Can teachers' summative assessments produce dependable results and also enhance classroom learning?

Improving a tutor s feedback assessment tool: transforming Open Mentor following two recent deployments

Developing the theory of formative assessment

Conceptualizing the Science Curriculum: 40 Years of Developing Assessment Frameworks in Three Large-Scale Assessments.

Establishing Assessment Scales Using a Novel Disciplinary Rationale for Scientific Reasoning.

Revisioning assessment through a children às rights approach; implications for policy, process and practice

Exploring alternative approaches to child outcome assessments in Children's Centres

Pedagogy in Theory and in Practice: Formative and Summative Assessments in Classrooms and in Systems

Towards a personal best: a case for introducing ipsative assessment in higher education

Two Concepts of Assessment

Assessor training: its effects on criterion-based assessment in a medical context

Fit for purpose: traditional assessment is failing undergraduates with learning difficulties. Might eAssessment help?

Reciprocal peer coaching and its use as a formative assessment strategy for first-year students

A designer speaks: designing assessment of performance in mathematics

Investigating Conceptions and Practice of Formative Assessment in Higher Education

Curriculum, assessment and reporting in special educational needs and disability: A thematic overview of recent literature

Understanding early years inequality: policy, assessment and young children's identities

Students' perceptions of assessment in undergraduate mathematics

A7. DfE research interests – early years and schools

For all questions we are interested in international perspectives and what has worked, or not, in other countries. For all our questions we are interested in how results differ for relevant sub-groups such as **Free School Meal** pupils, **Pupil Premium** pupils, **Special Educational Needs** and **Disability** (SEND) pupils, **Black and Minority Ethnic** pupils, and **gender**.

Early Years

- 1. What is the prevalence of different **pedagogical** approaches in different early years settings, including maintained **nurseries** and nursery provision in primary schools? How does this vary across the workforce? Which of these approaches have the greatest impact on development?
- 2. How can schools best manage the **transition** from early years to school and minimise any negative effects on children, especially those from disadvantaged backgrounds?

Schools

- 3. What types of approaches lead to better outcomes for condition-specific learning needs in mainstream schooling? What works for SEND outreach work, for example from **special schools** to support learners in mainstream schools?
- 4. Which interventions are most effective at **recruiting** and **retaining** good teachers within a constrained funding envelope particularly in shortage subjects such as Science, Technology, Engineering and Mathematics and Modern Foreign Languages, and in the most challenging schools/areas?
- 5. What can **cognitive science** and **neuroscientific** developments tell us about effective teaching approaches?
- 6. Amongst poor performing schools, is it possible accurately to **predict** which will improve and which will remain poor or deteriorate?
- 7. What are the underlying drivers of **geographical** differences in educational attainment?
- 8. How can schools best identify children's mild to moderate **mental health** needs, and what role can early **intervention** play in preventing escalation?
- 9. What are the factors associated with teacher and pupil **wellbeing**, and what interventions and approaches are effective in supporting and promoting wellbeing of all in schools and colleges?

Source: DfE 2018

A8. DfE research interests – FE and Higher, Social Care, Cross-Cutting

Further and Higher Education

- 10. What impact do **further education**, **technical education** and **apprenticeships** have on improving earnings and **career** progression for learners? What is the best way to assess the **longevity/durability** of impact and how does it vary by qualification and learner **demography**?
- 11. What are the influences on young people's **decision making** at key education transition points, including subject and qualification choice at **key stage** 4 and 5? How do these choices influence their later economic outcomes?
- 12. How can we understand the differences in participation in further and higher education and **training** routes in particular how do issues of **access** or choice affect disadvantaged pupils?
- 13. How do **skills** needs in the national and local economy and qualifications of our labour force match up? Can careers advice policies, the **Teaching Excellence Framework** and spending decisions improve effectiveness?
- 14. What role should government play in encouraging upskilling or reskilling for those in the labour market to make skills supply more responsive to local economic needs? What barriers do working individuals face when **retraining**?
- 15. How do England's general, technical and academic education systems compare to systems in other developed economies in terms of **status**, structure, **operation** and **performance**? How can the performance of England's systems be monitored relative to systems in these other countries?

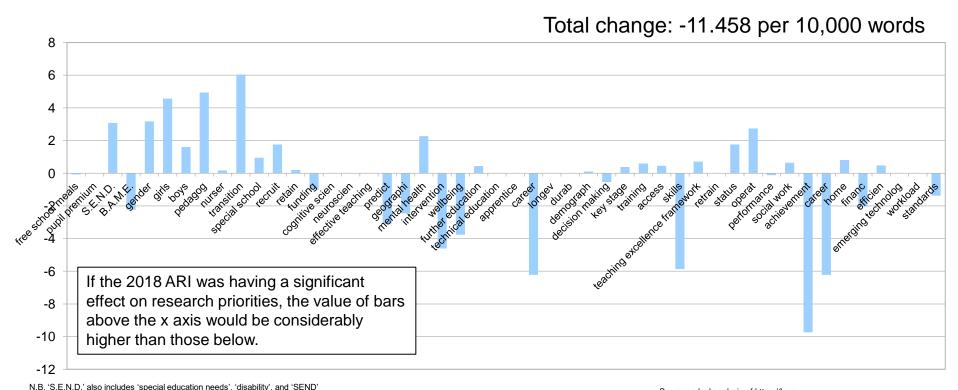
Children's Social Care

- 16. How can we better quantify and measure the benefits of **social work** assessment, training and development in terms of child outcomes such as wellbeing and educational **achievement**?
- 17. What are children's end-to-end routes through the **care** system, and how does this impact on later life outcomes, such as educational achievement, wellbeing and labour market outcomes?

Cross-cutting

- 18. What is known about drivers and barriers to parental engagement in their children's education in the **home**? How can improvements in the home-learning environment mitigate the effect of disadvantage on pupils' attainment?
- 19. How do schools and colleges become more **financially efficient** over time? What are the drivers of that behaviour and how can it best be stimulated, supported and replicated?
- 20. How can emerging technology be deployed to improve school and college financial efficiency and reduce teacher workload whilst maintaining standards?

A8a - Change of frequency of DfE ARI keywords from 2015-17 to 2018-20 in titles and abstracts of B.E.R.J. articles



N.B. S.E.N.D. also includes special education needs, disability, and SEND 'BA.M.E.' also includes 'black', 'asian', 'minority', 'BAME', 'BME' and 'B.M.E.' 'teaching excellence framework' also includes 'T.E.F.', 'TEF'

Source: edpol analysis of https://berajournals.onlinelibrary.wiley.com/loi/14693518/

A9. ESRC Funding Criteria

"The ESRC funds excellent research. The primary criterion is scientific quality. The ESRC expects its portfolio to include a diverse range of research encompassing, amongst other things, work based on single disciplines, research which combines disciplinary approaches, research focused on advancing scientific theory, and research aimed principally at developing practical applications [...] we encourage research proposals which demonstrate one or more of the following: innovation, interdisciplinarity and impact."

"Opportunities for making an impact may arise, and should be taken, at any stage during or after the life-course of the research. It is important that researchers have in place a robust strategy for *maximising the likelihood of impact opportunities* arising and their own capacity for taking advantage of these."

A10. Nuffield Research Criteria

- Relevance an interesting question/issue that fits the Nuffield Foundation's mission and is relevant to the questions in our three domains. There should be a clear articulation of what you intend to do, why it matters, and what difference it will make.
- Rigour for analysis and drawing conclusions as well as design/data collection. Methods need to be right for the question (and many of our questions need some quantitative analysis).
- Engagement with policy and/or practice, as well as public dissemination through the media and other channels. Engagement needs to be end-to-end, not just at dissemination stage.
- Impact explanation of the potential for impact: clarity of outputs and outcomes and the relationship between the two.
- Resources strong team and appropriate budget.
- Our goal is to find ways to improve educational outcomes through policy change and interventions that are grounded in robust evidence.
- We fund research and development projects relating to education across all life stages from early years through school, to further and higher education and vocational learning. We want to understand young people's pathways as they move through these stages, and how they acquire skills and capabilities.
- Many young people are disadvantaged in the education system, by factors such as special educational needs, disability, socio-economic background and location. Through the research we fund, we help to understand and address these disadvantages. We also aim to improve the quality of teaching and learning, and to understand and support teachers.
- We recognise that education is not just what happens in the classroom we also want to understand the wider influences on people's education and chances in life, such as the role of families and informal learning.

Source: https://www.nuffieldfoundation.org

A11. Nuffield Education Research Interests

- Skills and capabilities that equip children and young people for life and work, both within and beyond educational institutions.
- Teaching quality, particularly projects that improve practice through evidence-based interventions and those that harness digital technologies to improve teaching, learning, parental engagement and child development.
- Young people's pathways, with an increased focus on young people following non-HE routes.
- Educational disadvantage, including special educational needs, physical disabilities, mental health issues, socio-economic disadvantage, geographical disadvantage and looked after children.
- Direct interventions that improve young people's lives and align with the four priorities identified above and which are grounded in evidence.

Source: https://www.nuffieldfoundation.org

A12. No. of REF Submissions by Submission Type under Education



A13. No. of REF Submissions by year under Education

University	2007	2008	2009	2010	2011	2012	2013 Total	
Anglia Ruskin University	0	3	3	2	4	5	4	2
Bath Spa University	0	6 5	3	12	9	7 6	11 2	4
Birmingham City University Bishop Grosseteste University	0	5	4	2	5	4	1	
Brunel University London	o	13	4	10	16	8	10	É
Canterbury Christ Church University	o	13	15	12	15	16	27	9
Cardiff University	0	9	15	14	10	11	19	7
Edge Hill University	0	3	7	7	12	9	10	4
Glasgow Caledonian University Goldsmiths' College	0	4	3	2 5	3 8	4 9	7	4
King's College London	0	12	20	23	26	26	25	13
Lancaster University	0	2	10	5	7	9	8	4
Leeds Beckett University	0	3	7	13	6	12	9	Ę
Liverpool Hope University	0	1	4	3	6	16	5	
Liverpool John Moores University London Metropolitan University	0	4	11 4	11 3	6 2	8	10 4	
Loughborough University	0	5	4	5	3	8	10	- 3
Manchester Metropolitan University	0	6	10	10	11	23	28	8
Newcastle University	0	7	4	15	9	19	15	6
Newman University	0	2	4	5	7	7	5	3
Nottingham Trent University	0	11 24	8 27	10 34	10 34	21 46	10 37	20
Open University Oxford Brookes University	0	5	5	8	7	11	7	20
Queen's University Belfast	o	9	8	13	13	23	13	7
Roehampton University	0	9	7	5	11	13	13	
Sheffield Hallam University	0	7	10	6	10	7	12	Ę
St Mary's University, Twickenham	0	2	7	3 5	4 6	7 2	6	2
Staffordshire University Stranmillis University College	0	3	3	3	4	2	5	2
The University of West London	o	3	4	1	2	3	0	1
University College London : A - Institute of Education	0	83	118	132	141	153	166	79
University College London : B - Medical Education	0	5	4	5	4	6	5	2
University of Aberdeen	0	3	2	5	5	9	9	3
University of Bedfordshire University of Birmingham	0	2 11	4 16	5 18	9 21	7 21	5 15	10
University of Bolton	0	4	4	5	7	7	7	3
University of Brighton	0	1	4	5	5	6	8	- 2
University of Bristol	0	19	27	28	29	27	24	15
University of Cambridge	0	11	27	37	28	29	15	14
University of Chester University of Cumbria	0	3	4 5	1	3	2	5 4	1
University of Derby	0	4	2	3	4	4	4	
University of Dundee	0	5	5	6	6	7	8	3
University of Durham	0	16	15	11	18	17	19	5
University of East Anglia	0	10	6	7	13	6	7	4
University of East London University of Edinburgh	0	11	6 16	5 22	5 23	11 31	28	13
University of Exeter	1	8	16	20	12	16	28	10
University of Glasgow	ō	16	20	24	24	29	35	14
University of Greenwich	0	6	5	6	7	7	10	4
University of Huddersfield	0	2	7	8	8	11	12	4
University of Hull	0	8 16	8 17	11 25	8 25	11 21	6 15	12
University of Leeds University of Leicester	0	10	19	15	22	20	7	14
University of Lincoln	o	1	6	2	6	7	2	- 2
University of Manchester	0	8	17	20	34	19	33	13
University of Northampton	0	10	11	11	7	5	9	
University of Nottingham	0	6	12	16	15	17	27	9
University of Oxford University of Plymouth	0	24	21 10	29 17	35 17	24 17	29 20	16
University of Reading	0	11	7	8	11	9	15	6
University of Sheffield	0	3	9	6	15	12	8	
University of Southampton	0	11	8	13	16	14	16	7
University of Stirling	0	2	8	11	10	8	9	- 4
University of Strathclyde University of Sunderland	0	6 8	16 14	22 8	10 14	12 13	22 22	
University of Sussex	0	6	10	11	15	8	7	- 1
University of the West of England, Bristol	o	7	4	8	10	7	7	4
University of the West of Scotland	0	1	5	9	9	11	12	4
University of Ulster	0	4	6	6	7	8	10	4
University of Warwick	0	13	17	18	35	32	27	14
University of Wolverhampton	0	5 5	5 7	7	9	7	11 11	3
University of Wolverhampton University of Worcester	0	13	3	12	7	9	8	,
University of York	0	15	11	15	12	13	18	8
York St John University	0	4	7	7	8	5	7	3
Total	3	605	793	913	1008	1075	1102	549

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296 The Crisis in Educational Research: a pragmatic approach

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ABSTRACT This article first identifies and discusses four main causes of the crisis in educational research. These are summarized as false dualism, false primacy, false certainty and false expectations. False dualism is the apartheid that divides positivist and constructivist researchers with positivists believing in an objective reality and constructivists arguing that reality is a social construction. False primacy is the view that the positivist paradigm has come to dominate research to the detriment of more open, pluralistic and critically reflective approaches. False certainty is the argument that in an increasingly complex and uncertain world researchers have retreated to a reactionary position in order to shore up the dominant paradigm. False expectations is the case that governments, especially, are demanding more evidence-based research in order to provide urgent solutions to educational problems. The second part of the article shows how taking a pragmatic approach may help us resolve some of the difficulties identified. For example pragmatists would not privilege any one paradigm or methodology over another but would argue that both science and constructivism offer different sets of tools for investigating different aspects of the world. This also means that pragmatists see inquiry not as discovering what is really out there but as offering more or less useful descriptions to meet our particular needs and purposes. The third part of the article argues that pragmatism is not an alternative model of research but is more a working point of view or a perspective which is admittedly modest and, so pragmatists think, appropriately fuzzy. What a pragmatic approach to research actually leads to, through reflection, is a kind of useful if temporary equilibrium amongst the community of inquirers. Part of this approach is the rejection of the idea that scientific research can be used with certainty to specify educational practice. All it can provide is possible lines of action.

Appendix: other financial data

Case study: University College Income over REF period

Source	2008-09	2009-10	2010-11	2011-12	2012-13
BIS Research Councils, Royal Society, British Academy and Royal Society of Edinburgh	£8,263,000	£6,313,000	£5,049,000	£5,550,000	£6,527,122
BIS Research Councils income-in-kind	£0	£0	£0	£0	£0
UK-based charities (open competitive process)	£865,000	£1,036,000	£845,000	£652,000	£460,087
UK-based charities (other)	£361,000	£210,000	£940,000	£526,000	£712,957
UK central government bodies, local authorities, health and hospital authorities	£10,845,000	£7,364,000	£5,633,000	£5,101,000	£3,508,658
UK industry, commerce and public corporations	£16,000	£19,000	£0	£28,000	£11,188
EU government bodies	£537,000	£613,000	£722,000	£794,000	£1,444,952
EU-based charities (open competitive process)	£80,000	£129,000	£97,000	£139,000	£78,113
EU industry, commerce and public corporations	£0	£0	£0	£0	£0
EU other	£29,000	£39,000	£44,000	£35,000	-£681
Non-EU based charities (open competitive process)	£276,000	£145,000	£81,000	£0	£18,358
Non-EU industry, commerce and public corporations	£0	£0	£0	£0	£0
Non-EU other	£27,000	£195,000	£414,000	£448,000	£448,880
Other sources	£611,000	£224,000	£111,000	£163,000	£95,603

Education Department Income by year

University	2008-09 2	009-10 20	010-11 2	011-12 20	012-13 T	otal	University	2008-09 200			1-12 201	2-13 Tot	
Anglia Ruskin University	87742	62808	15877	146058	90342	402827	University of Cambridge	1832903	1376233	785931	564145	1073130	5632342
Bath Spa University	64237	60513	168497	85389	211662	590298	University of Chester	0	265	14659	15418	18832	49174
Birmingham City University	266241	206464	119044	1699	161637	755085	University of Cumbria	28000	42000	6000	14000	100000	190000
Bishop Grosseteste University	0	0	0	0	88000	88000	University of Derby	4868	0	156545	212325	234338	608076
Brunel University London	314070	276024	55461	37195	133160	815910	University of Dundee	129078	203549	158693	250655	258156	1000131
Canterbury Christ Church University	1125348	1065405	671300	231554	197102	3290709	University of Durham	5647077	5967737	6402395	6164161	6689400	30870770
Cardiff University	990410	1062797	1363374	1650054	2170534	7237169	University of East Anglia	63401	42138	45907	76744	84555	312745
Edge Hill University	172513	94680	39682	52602	19028	378505	University of East London	54947	223554	164278	240301	197244	880324
Glasgow Caledonian University	83558	205843	88692	108207	154474	640774	University of Edinburgh	2050582	1508073	1693924	1324463	965884	7542926
Goldsmiths' College	71649	252700	207329	228298	99406	859382	University of Exeter	789774	817676	1126237	1078966	1137936	4950589
King's College London	1025888	1095454	867612	864545	1078021	4931520	University of Glasgow	1372685	1165293	954794	553561	261710	4308043
Lancaster University	435354	363229	283602	95600	58039	1235824	University of Greenwich	83776	98300	58160	50085	71195	361516
Leeds Beckett University	118580	226326	153125	63734	88256	650021	University of Huddersfield	73705	87449	102153	74115	125053	462475
Liverpool Hope University	18759	30744	34809	100898	128856	314066	University of Hull	55530	115526	79886	82119	119482	452543
Liverpool John Moores University	146670	67021	451277	86058	268633	1019659	University of Leeds	614722	385017	397538	202377	179046	1778700
London Metropolitan University	904996	494131	601667	441631	397505	2839930	University of Leicester	435552	468225	311796	289094	323976	1828643
Loughborough University	45297	88251	125721	280974	321769	862012	University of Lincoln	4573	29209	190303	378482	323790	926357
Manchester Metropolitan University	485587	214027	366686	433704	254483	1754487	University of Manchester	1023923	1460316	880856	547383	572728	4485206
Newcastle University	717232	507906	366276	438720	395588	2425722	University of Northampton	379776	262305	350354	353619	228834	1574888
Newman University	210000	179000	275000	105000	54388	823388	University of Nottingham	2099000	2272000	1864000	1322000	1441000	8998000
Nottingham Trent University	7612	39386	37759	26346	58642	169745	University of Oxford	1859369	2049209	1472930	1885269	1984281	9251058
Open University	2255397	2293326	1678442	1528499	1930342	9686006	University of Plymouth	807407	799337	344958	182423	637608	2771733
Oxford Brookes University	43573	22076	27438	22003	23950	139040	University of Reading	106373	116447	192836	158578	178685	752919
Queen's University Belfast	2693327	4024523	1772562	2254403	2460313	13205128	University of Sheffield	399328	293869	226090	216474	80013	1215774
Roehampton University	547476	184761	417529	438759	120180	1708705	University of Southampton	439671	294872	319841	394880	319074	1768338
Sheffield Hallam University	2088055	1960949	836906	481816	707049	6074775	University of Stirling	402299	323957	271831	180125	307811	1486023
St Mary's University, Twickenham	0	0	0	1881	2552	4433	University of Strathclyde	921276	842560	779484	574456	409634	3527410
Staffordshire University	10161	48641	10000	673	0	69475	University of Sunderland	209558	168166	156118	148759	233931	916532
Stranmillis University College	329000	229000	213000	138000	188000	1097000	University of Sussex	747050	1291886	1268020	766708	592898	4666562
The University of West London	4000	3000	27000	24000	3750	61750	University of the West of England, Bristol	82421	280101	381516	243348	279042	1266428
University College London : A - Institute of Education	21910000	16287000	13936000	13436000	13305237	78874237	University of the West of Scotland	60000	68000	140000	38000	42000	348000
University College London : B - Medical Education	13000	305000	387000	466000	414000	1585000	University of Ulster	443257	269932	571268	664707	658454	2607618
University of Aberdeen	1012937	571559	237967	46955	91932	1961350	University of Warwick	2048203	1908485	1935854	1344258	1314518	8551318
University of Bedfordshire	39013	77461	132960	28791	24489	302714	University of Winchester	178853	137194	181692	152061	249978	899778
University of Birmingham	1428758	1220265	745987	637599	2103984	6136593	University of Wolverhampton	426767	416607	258437	241443	49959	1393213
University of Bolton	1104774	1110439	985479	1229717	911826	5342235	University of Worcester	22973	49729	13092	43124	42337	171255
University of Brighton	144787	215706	106890	33776	178507	679666	University of York	1976917	2178918	1176437	933754	848668	7114694
University of Bristol	1456742	1777150	1243155	1141108	856235	6474390	York St John University	0	0	0	15972	79618	95590

EEF Financial Statement 2018/19

		Unrestricted funds	Restricted funds	Total 2019	Total 2018
	Notes	£	£	2019 £	2018 £
Income from:	Hotes	L	-	~	~
Donations and legacies	3	574,706	3,736,889	4,311,595	2,854,844
Income from other trading activities	4	219,888	-	219,888	121,748
Investments	5	2,148,943		2,148,943	2,356,990
Total income		2.943.537	3.736.889	6,680,426	5.333.582
Expenditure on: Raising funds					
Fundraising expenditure	6	195,376	11,118	206,494	212,770
Trading costs	6	7,065	-	7,065	64,917
Investment management	6	670,315	-	670,315	651,243
		872,756	11,118	883,874	928,930
Charitable activities	7	17,000,917	4,605,214	21,606,131	13,244,031
Total resources expended		17,873,673	4,616,332	22,490,005	14,172,961
Net gains/(losses) on investments		1,231,793	-	1,231,793	(661,687)
Net movement in funds		(13,698,343)	(879,443)	(14,577,786)	(9,501,066)
Total funds brought forward		85,764,602	1,519,336	87,283,938	96,785,004
Total funds carried forward		72,066,259	639,893	72,706,152	87,283,938

EEF spent 22.5 million in 2018/19

National Foundation for Educational Research Financial Statement 2018/19

	Notes	2018-19 £'000	2017-18 £'000
Income from:			
Charitable activities	4(a)	19,738	17,106
Investments	4(b)	621	607
Other	4(c)	6	7
Total income		20,365	17,720
Expenditure on:			
Investment Management		(74)	(95)
Charitable activities	5	(18,049)	(16,308)
Mortgage Interest		(148)	(165)
Net interest and admin expenses on defined pension liability	18(d)	(605)	(689)
Total expenditure		(18,876)	(17,257)
Net income before gains on investments		1,489	463
Net gains on investments		982	81
Net income		2,471	544
Other recognised gains/(losses):			
Actuarial gains/(losses) on defined benefit pension schemes	18(g)	2,137	2,017
Net movement in funds		4,608	2,561
Reconciliation of funds:			
Total funds brought forward		8,047	5,486
Total funds carried forward	_	12,655	8,047

NFER spent 18.9 million in 2018/19

Education Policy Institute Financial Statement 2018/19

INCOME FROM:	Note	Restricted funds 2019 £	Unrestricted funds 2019 £	Total funds 2019 £	Total funds 2018 £
Donations and legacies	2	125,185	750,000	875,185	819,871
Charitable activities	3	-	276,756	276,756	328,174
Corporate support	4	-	1,671	1,671	22,030
Investments	5	-	939	939	193
TOTAL INCOME		125,185	1,029,366	1,154,551	1,170,268
EXPENDITURE ON:					
Raising funds: Management operations, fundraising and	•		100.050	400.050	440 500
communications Charitable activities	6 7	77,335	129,652 1,016,010	129,652 1,093,345	119,509 970,734
TOTAL EXPENDITURE		77,335	1,145,662	1,222,997	1,090,243
NET INCOME / (EXPENDITURE) BEFORE OTHER RECOGNISED GAINS AND					
LOSSES		47,850	(116,296)	(68,446)	80,025
NET MOVEMENT IN FUNDS		47,850	(116,296)	(68,446)	80,025
RECONCILIATION OF FUNDS:					
Total funds brought forward		23,523	803,242	826,765	746,740
TOTAL FUNDS CARRIED FORWARD		71,373	686,946	758,319	826,765
IOIALI UNDO CARRILLO I CIRTARD					

EPI spent 1.2 million in 2018/19