

<b>Institution:</b> University of Huddersfield		
<b>Unit of Assessment:</b> 23 Education		
<b>Title of case study:</b> Improving Curriculum and Pedagogy in Initial Teacher Education and Influencing the Policy Debate in the English Further Education Sector		
<b>Period when the underpinning research was undertaken:</b> 2006 to 2019		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
1. Kevin Orr	1. Professor	1. 2006-to date
2. James Avis	2. Professor	2. 2004-2019
3. Roy Fisher	3. Professor	3. 1995-2019
4. Ron Thompson	4. Principal Research Fellow	4. 1987-2020
5. Pam Hanley	5. Senior Research Fellow	5. 2016-2019
6. Jonathan Hepworth	6. Senior Lecturer	6. 2016-2018
7. Keith Webb	7. Consortium Director	7. 2001-2007
<b>Period when the claimed impact occurred:</b> June 2015 - November 2020		
<b>Is this case study continued from a case study submitted in 2014? No</b>		
<p><b>1. Summary of the impact</b></p> <p>Policymakers frequently argue that the English Further Education (FE) sector is critical for social mobility and economic performance. However, Initial Teacher Education (ITE) for FE teachers has been very under-researched, particularly in comparison to ITE for school teachers. Professor Orr and colleagues at the University of Huddersfield have researched the professional development of FE teachers and the best approach to pedagogical training, which is essential for quality education. This has led directly to improvements in ITE provision for over 1,000 trainee teachers each year (around 15% of the national total). The research has also informed and significantly influenced the activities of policy stakeholders such as the <i>Gatsby Charitable Foundation</i>, the <i>Education and Training Foundation</i>, Ofsted and ITE providers, leading to improved support for subject-specific pedagogy in FE. Furthermore, the research outputs are being used in courses for teachers of Vocational Education and Training at the School of Education, Charles Sturt University, Australia.</p>		
<p><b>2. Underpinning research</b></p> <p>By providing Vocational Education and Training (VET) and 'second chance' general education, FE can potentially improve economic productivity, social inclusion and social mobility. Within this context, ITE is particularly significant because training in the method and practice of teaching (i.e. pedagogy) is essential for quality education and has an enduring influence on teachers and their students. However, the social and economic potential of FE is compromised by long-standing problems such as frequent changes of policy direction and weaknesses in teacher professional development. These problems are compounded by a lack of research on which to base evidence-informed policy and practice. In particular, the preparation of trainees to teach their own specialist subjects (known as subject-specific pedagogy) is a contested area in ITE for FE. A lack of conceptual and empirical research has resulted in largely intuitive curricular approaches and inspection frameworks based on untested assumptions. Indeed, many ITE curricula nationally have had little explicit engagement with subject-specific pedagogy.</p> <p>In 2004, an Ofsted report on the Initial Training of FE teachers highlighted the lack of opportunities for trainees to learn how to teach their specialist subjects. In direct response to this, Fisher and Webb undertook research into subject specialist pedagogy, effectively establishing this as an area of inquiry [3.1]. Subsequently Orr, Thompson, Avis, Hanley, and Hepworth of the <i>Huddersfield Centre for Research in Education and Society</i> (HudCRES) (2006-19) have produced a substantial body of knowledge providing important insights for policymakers and practitioners into the relationship between the professional practice of FE teachers and two intersecting areas: the ITE curriculum and pedagogy, and the policy context.</p>		
<p><b>ITE curriculum and pedagogy</b></p> <p>In 2014, Thompson was commissioned by the <i>Gatsby Charitable Foundation</i> to review the system of teaching qualifications for FE, with particular reference to its potential for the development of subject-specific pedagogy within vocational science, engineering and technology (SET). It</p>		

identified a serious lack of research and knowledge about the teaching and learning of subject-specific pedagogy within ITE for FE [3.2].

Subsequently, *Gatsby* commissioned a three-year, national-scale research project (2015-2018; £364,340) led by Orr to implement an ITE intervention for subject-specific pedagogy building on the research from Thompson's ITE review [3.2]. The three-year project provided a conceptual framework for evaluating and improving subject-specific pedagogy. This framework was developed by Hanley, Hepworth, Orr and Thompson in a critical review of the literature on subject-specific pedagogy that re-conceptualised pedagogical context knowledge [3.3]. The literature review also developed new approaches to the empirical investigation of FE teachers' subject-specific pedagogical knowledge and practice. This laid the foundations for a model of pedagogy as 'situated decision-making': understood as teachers making decision based on the body of knowledge they are teaching, and the students they are teaching, in specific contexts. This research informed the development of learning materials and activities for trainee teachers, teacher educators and experienced teachers from which much of the impact described in Section four derived.

### The policy context of FE

The ITE research is part of a broader body of work in HudCRES on government FE policy and its underlying assumptions. As well as situating the problems with the development of subject-specialist pedagogy in the context of historical and contemporary policy decisions, this research has important implications for understanding the nature of FE teaching as a profession. Avis and Orr critiqued the concept of FE professionalism, finding that its use in discourses of 'reforming' FE teaching has obscured the precarious position of many FE teachers following severe cuts in funding [3.4-3.5]. Research by Hanley and Orr on the recruitment of SET teachers by FE colleges revealed a national crisis in the SET workforce [3.6]. Avis and Orr also challenge policymakers' claims concerning the relationship between further education, social justice and economic development. They used data on FE college graduates' outcomes and earnings to demonstrate the limited impact of widening participation on social mobility and show that, contrary to popular belief, there is not a necessary connection between patterns of achievement in FE and social mobility [3.7]. The transformative potential of the FE sector is impacted by factors such as underfunding and the current system of governance.

### 3. References to the research

Evidence of the quality of the research: This body of work has been published in international peer-reviewed journals, in book form by respected academic publishers, or as research reports published by key stakeholders such as the *Gatsby Charitable Foundation*. Item 3.3 has had 1,315 views on Researchgate as of 16 October 2020

3.1. Fisher, R. and Webb, K. (2006) 'Subject specialist pedagogy and initial teacher training for the learning and skills sector in England: the context, a response and some critical issues', *Journal of Further and Higher Education*, 30:4, 337-349.

<https://doi.org/10.1080/03098770600965367>

3.2. Thompson, R. (2014) *Initial Teacher Education for the Education and Training Sector In England: Development and change in generic and subject-specialist provision*. London, Gatsby Foundation. (Research report) <http://www.gatsby.org.uk/uploads/education/reports/pdf/initial-teacher-education-for-the-education-and-training-sector.pdf>

3.3. Hanley, P, Hepworth, J., Orr, K. and Thompson, R. (2018) *A literature review of subject specialist pedagogy*. London: Gatsby Foundation (Research report).

<http://www.gatsby.org.uk/uploads/education/literature-review-of-subject-specialist-pedagogy.pdf>

3.4. Avis, J. (2016) *Social Justice, Transformation and Knowledge: policy, workplace learning and skills*. London, Routledge (Book). [can be supplied by the HEI on request].

3.5. Avis, J. and Orr, K. (2014) 'The New Professionalism: An Exploration of Vocational Education and Training Teachers in England', In Billett, S., Harteis, C. and Gruber, H. (Eds) *International Handbook of Research in Professional and Practice-based Learning*, Dordrecht: Springer, 1099-1024. (Chapter in a book [https://doi.org/10.1007/978-94-017-8902-8\\_40](https://doi.org/10.1007/978-94-017-8902-8_40) ). [can be supplied by the HEI on request].

3.6. Hanley, P. and Orr, K. (2019) 'The recruitment of VET teachers and the failure of policy in England's further education sector', *Journal of Education and Work*, 32(2), 103-114.

<https://doi.org/10.1080/13639080.2019.1617842>

3.7. Avis, J. and Orr, K. (2016) 'HE in FE: Vocationalism, class and social justice', *Research in Post-Compulsory Education*, 21 (1–2): 49–65. <https://doi.org/10.1080/13596748.2015.1125666>

#### 4. Details of the impact

Within the context of developing the potential of FE provision, ITE is particularly significant and the focus for the activities detailed below has been to develop explicit engagement with subject-specific pedagogy within policy and practice arenas. The impact arising from this body of research is categorised into two intersecting spheres: i) curriculum and pedagogy ii) FE policy.

##### **Improving the ITE curriculum and the training of trainee teachers in the UK**

The Director of Programmes (Education) at the *Gatsby Charitable Foundation* commented on Thompson's project [3.2] that: "*findings from this project informed a substantial programme of research and curriculum development to design, implement and evaluate interventions to improve the subject-specialist initial teacher education for teachers in FE*" [5.1]. The *Gatsby Charitable Foundation* is a body with exceptionally strong influence and reach in the field of English education policy, particularly in relation to technical education. This is evidenced by their significant role in the development of 'T-levels' following the *Review of Technical Education* chaired by David Sainsbury, founder of *Gatsby*, and the adoption by the DfE of the so-called 'Gatsby Benchmarks' for careers education. The Director of Programmes (Education) also emphasised that the subsequent research led by Orr has "*informed Gatsby's thinking on subject-specialist pedagogy and has helped us to develop a sharper focus to our dialogue on this concept with a range of stakeholders*" [5.1].

The *Education and Training Foundation* (ETF) is the expert body for professional development and standards in FE and Training in England. ETF's National Head of Higher Level Education and T-Level Design stated that: "*...the resources developed from the Gatsby project has informed and shaped the curriculum design for work force development in T-levels. We directly refer to the Gatsby work in several of the T-level courses that are live for the sector right now [December 2020]. They are used as exemplars and we recommend them to teachers*" [5.2]. The importance of the research in terms of shaping the work of the ETF and funding within the sector is highlighted by them as well. "*...the ETF alignment of our methodology to what Prof Orr was doing was one of the reasons that we received grant funding of over ten million pounds to carry out the first phase of the T-level work and subsequent funding worth up to eighty million pounds to support work-force development in the sector. The research has played a critical part in this development of the ETF's work*" [5.2].

The ITE intervention (2016-2018 - part of the Gatsby project) identified concepts and approaches which enabled SET teachers to analyse pedagogical issues more effectively, benefiting their own students [5.3]. The *intervention helped trainees think about sequencing topics, knowing what questions to ask and prompted them to think about the way they were using their subject knowledge to lead the lesson*. Follow-up evaluation research by Thompson, Hepworth, Hanley and Orr involved 16 participants 6-12 months after the initial event. This showed a range of benefits for teacher educators and their trainees in participating English institutions, including new subject-specialist curriculum planning activities, improved feedback in teaching observations, and more effective reflective practice [5.3]. One trainee teacher commented: "*I went through the course, so I said, 'What do students need to learn? What is important?..'When I laid this out, I actually gave myself a much clearer idea of what I was doing. I actually enjoy doing now...It just made everything clearer for me, and I just felt I had a better direction in what I was doing*" (Trainee teacher) [5.3].

*The Gatsby funded project findings have led directly to improved curricula (including more specific content concerning subject-specialist pedagogy) for over 1,000 trainee teachers each year, around 15% of the national total. They also informed ITE pedagogy through the production of learning materials for trainee teachers, which help to improve trainees' pedagogical decision making (see below). This took place mainly in the two largest ITE for FE courses in England,*

offered through FE-HE partnerships led by Huddersfield University and Canterbury Christ Church University respectively, but also involved teacher education programmes in other universities and colleges. Two project events (for 15 teacher educators in September 2017 and 13 in November 2017) introduced the conceptual framework, together with examples of learning activities and materials. Following this event, the courses at Huddersfield and Canterbury now incorporate distinct subject-specific elements arising from the project and its underpinning research [5.3].

Huddersfield researchers created a set of open-access, online resources including videos for *Gatsby*, to underpin subject-specialist pedagogy aimed specifically at teacher educators and trainees. The website with these resources developed by researchers at Huddersfield was promoted by the *University Council for the Education of Teachers* (a national forum concerned with the education of teachers and professional educators and with developing policy in this field) and *Teacher Education in Lifelong Learning* (a national group that facilitates practice-led networks concerned with research and the use of evidence). Statistics provided by *Gatsby* show that, from 1 January 2019 to 14 October 2020, the 10 most visited webpages had been accessed around 5,100 times, with a further 2000 downloads of the Huddersfield designed purpose-built video clips that analyse subject-specialist teaching in FE [5.4]. A 2019 survey of teacher education managers in 11 FE colleges, conducted by Thompson, shows that the resources were already being used in six of these colleges (which together trained over 150 teachers each year) [5.5]. Follow up interviews with two subject centre managers (November 2020), demonstrated how they use the resources. One used them to develop the teacher trainees as professionals: *“the teacher training course is targeted around the outcomes to develop them as a teaching professional, and being able to plan, and that is where it [the Gatsby website with content developed by Huddersfield] links in. It is about planning, it is about them as a professional person, that is how I use the resources.”* And the other incorporated the *Gatsby* videos into the curriculum to benefit the trainee teachers’ developing practice: *“using the videos as stimulus for prompting discussion in class has been a good resource... We have used the videos and resources to bring in the whole concept of teaching vocational subjects. It [the Gatsby website] helps with that interrogation of their own practice... it can aid that reflection in an informal way, thinking about their own practice and how they can develop it”* [5.5].

Prof Orr was invited to give two presentations in 2018 about the *Gatsby* research [3.3] at Charles Sturt University, Wagga Wagga, Australia. As a result, a Senior Lecturer in Adult and Vocational Education used the website resources with Bachelor and Masters level students. They recommend the resources *“to inform their teaching, to inform their assignment tasks, and to share with their colleagues. The videos are of value for practising Vocational Education and Training (VET) teachers because they are of actual teachers addressing some of the same issues that they themselves might be encountering”* [5.6].

The ITE intervention also led to Orr and Thompson being invited to contribute to the *SET for Teaching Success* programme developed by the ETF. Director of Teaching, Learning and Assessment, HE and Teacher Training at Derby College commented *‘Involvement in the programme has allowed teachers to broaden their horizons, share ways of improving practice, and focused them to reflect on specific vocational and technical pedagogies’* [5.7]. Orr and Thompson worked directly with 50 new Science, Engineering and Technology teachers from across the UK at residential workshops in Nottingham and York (on 15 December 2017, 9 April 2018, 13 December 2018), developing their understanding of concepts related to subject-specific pedagogy and their ability to apply these concepts in practical teaching situations. Programme evaluation by the ETF found that these sessions had a positive impact on the reflective practice and lesson planning of participants [5.8]. *“A clip that we saw stuck in my mind, a learner was unsure about [X], teacher had a brief pause and decided this learner was probably not the only learner not sure. Teacher got the group to listen and double checked the understanding of the whole group. I often do this now, if 1 learner is stuck or unsure, I ensure the whole group are made aware of a key point”* [Participant in residential workshop]. [5.8].

**Influencing policy debate on FE, skills and social mobility**



The research has had national-level influence with policy organisations as well as at grassroot levels with FE practitioners. Evidence that the research has changed ways of thinking in FE – particularly about subject-specialist pedagogy – is captured by the wide coverage in FE and education news media. In a November 2019 *TES* article, Sam Jones, FE Lecturer of the Year and the founder of *FE Research Meet* (a UK practitioner-led, network for building and supporting engagement with research in Further Education), said: “Last week, I watched Dr Kevin Orr’s lecture on subject-specific pedagogy. He...with his colleagues at the University of Huddersfield, now leads the development of thought around pedagogy in the sector...He builds strong arguments that subject-specialism is the way to develop pedagogical practice in the sector, but offers a balanced perspective by looking at the way in which policy change often undermines pedagogical development.” [5.9]

Impact on policy debate is evidenced by invitations to Orr from Department for Education and Ofsted to discuss the implications of the findings for ITE policy, including a ‘Chatham House rules’ meeting with senior civil servants (2018). Orr and Avis are drawing on the research in their roles as members of the *Ofsted FE Research Group* (since April 2019) and Orr is member of the *Advisory Panel for the Ofsted FE Reliability Study*, an initiative to improve the inspection process through more effective observations of teaching (since January 2020).

The National Head of Higher Level Education at *ETF* detailed how the *Gatsby* research has addressed the evidence gap in FE regarding effective practice: “Professor Orr’s work on the *Gatsby* project resolved these issues in a way that, to date, no one else has ever done. As a consequence, the FE sector now has a model and guidance to follow that is based... [on] robust evidence and informed by pedagogical research and in this way the research has contributed to a wider cultural change towards evidence informed teaching” [5.2]. He further commented that: “the Department for Education has considered the *Gatsby* research as part of exploring what their policy should be around technical teaching at T-levels” [5.2]. Also arising from the *Gatsby* research, Orr is (from 2019) a member of the *DfE Technical Education Research Reference Group*, and from 2020 Chair of the *ETF Teaching Expert Panel* which supports professional development for T levels. Further contributions by Orr to the national policy context of FE include evidence to the *House of Lords Select Committee on Social Mobility* in the 2015-2016 session. This evidence, based on his research on FE and social mobility, is widely cited in the Committee’s final report (2016). Referring to the forthcoming Area Reviews of FE, the report stated: “There is an opportunity to define the major purposes of further education colleges as one of the main drivers of social mobility, as stated by Professor Baroness Wolf and Professor Kevin Orr” [5.10].

## 5. Sources to corroborate the impact

5.1 Testimonial from Director of Programmes (Education) *Gatsby Charitable Foundation*

5.2 Testimonial from National Head of Higher Level Education and T-Level Design, *ETF*

5.3 *Gatsby Project Report* by Orr, Hanley, Hepworth and Thompson (May 2019)

5.4 Usage statistics for the *Gatsby* website

<https://www.improvingtechnicaleducation.org.uk/teacher-education>

5.5 Evidence from University of Huddersfield online survey of teacher educators, December 2019 and follow up interviews November 2020.

5.6 Testimonial from Senior Lecturer, Charles Sturt University, Australia.

5.7 SET for Teaching Success Programme webpage.

5.8 SET for Success Evaluation Data from Residential, 2018

5.9 ‘Why are we so afraid of our own knowledge in FE?’, Sam Jones (*TES*, 2019)

5.10 House of Lords Social Mobility Committee. *Overlooked and left behind: improving the transition from school to work for the majority of young people*. See para 185 (July 2016). Prof Orr also cited on pages 7, 27, 44, 61, 66, 67, 93 and 95.