

# *Teaching and Educational Research in Wales: How Does Teachers' Engagement with Educational Research Differ in Wales from those in England?*

DR KEVIN SMITH AND DR KIMBERLEY HORTON  
*Cardiff University*

## ABSTRACT

The purpose of this study was to better understand how teachers in Wales differ from their counterparts in England in regard to their engagement with educational research. In 2010, the National Foundation for Educational Research (NFER) conducted a study of over 4,000 teachers in England. Many of the questions referred to their engagement in forms of educational research. In 2013, the same questions were posed to 216 teachers in Wales. A comparison of the findings indicate teachers in Wales were more likely to have recently undertaken action research than the England teachers. They also found others' research findings more useful in their teaching. Additionally, the teachers in Wales were more likely than England teachers to agree that they know where to find relevant research to inform their teaching and that they are able to understand and use the research. With recent concerns over educational research and initial teacher education (ITE) in Wales, these findings provide insight into how teachers in Wales perceive and engage with education research and may help to inform policies enabling teachers to produce and implement evidence-based practices into their pedagogy.

**Key words:** Wales, educational research, devolution, England, teaching.

---

<https://doi.org/10.16922/wje.19.1.7>

*Introduction*

The purpose of educational research and its value as a component in educating teachers and improving their professional practice continues to be debated and discussed by researchers, policy makers and members of the teaching profession (Edwards, 2000; Hammersley, 2002). Often, discussions focus on teachers' engagement with research, including not only academically produced evidence, but also formalised action research and informal approaches to inquiry including lesson study, reflective and narrative practices and the mobilisation of teachers' practical knowledge as part of their work in attaining school management objectives, self-evaluation and continuing professional development (Levin and Rock, 2003; Niemi and Nevgi, 2014; van den Bergh et al., 2015). In the UK, much of the literature regarding educational research focuses on innovations in research design and analysis, although calls for the empirical examination of how educational research is conceptualised, conducted and organised further add dimension and depth to the debate (Rees and Power, 2007). Concerns regarding educational research and teaching can also highlight ideological tensions within the political landscape of teaching, with discussions framed within discourses of teacher accountability (Cochran-Smith and Fries, 2001) and counter-discourses for developing the professionalism of teachers (Darling-Hammond, 1998; Darling-Hammond and McLaughlin, 1999). These perspectives call into question how research activity and evidence influence the development and implementation of educational policies (Hargreaves, 1996) and, by extension, classroom practice (Whitty, 2006). Irrespective of the discourses at play, the value and impact of research activity and evidence on teaching continues to be an important subject of academic inquiry and discussion.

In larger, theoretical terms, our study is situated within a general discussion of the relationship between educational research and teachers' classroom practice, but our investigation becomes much more discrete as it takes into consideration the distinctive context of schooling in Wales and its devolved educational system. This characteristic, to a degree, accommodates alternatives to established approaches to education and schooling in the UK. Since devolution, the Welsh Government has claimed to have made radical departures from English policies (Rees, 2007), with many of those distinctions taking form in educational strategies and programmes (Egan and James, 2003; Phillips, 2003; Rees, 2002). As a distinctive, national education system for Wales continues to coalesce,

deficiencies in the capacity to undertake educational research in Wales have been revealed (Furlong et al., 2006; Furlong and White, 2002; Rees and Power, 2007). With a dearth of research capacity, the ability to establish a national educational system that is not only distinctive, but also efficacious, is seriously compromised. While interventions have been made to increase the capacity for educational research in Wales, this dilemma calls into question teachers' levels of research literacy, their attitudes towards research evidence and their active engagement in utilising others' and their own educational research in improving their pedagogy. While Wales strives for distinction in its educational policies and teachers' practice, education policy in England, largely rationalised under concerns over teacher education and classroom practice, has also been challenged with a new approach to the organisation of schooling that threatens to transform the landscape of teacher education and the very nature of schooling overall. Early in 2016, the English conservative government published *Education Excellence Everywhere*, a policy paper that, in addition to the controversial intention to make all schools in England academy schools, also prominently situates 'evidence-based practices' as a foundational concept for teachers' pedagogy.

With the tension between common concerns for teachers and the desire to establish a distinctive educational system in Wales as the background for our inquiry, we sought out to better understand how teachers in Wales and England differ in regard to their engagement with educational research. The literature regarding education research and its potential impact on teachers' professional practice and efficacy in the classroom is both nuanced and vast. In what follows, we approach the intricacies, tensions and varied perspectives regarding the role of educational research and how discourses of what teachers 'are' and 'do' interact with narratives of what constitutes research activity in regard to their professional profile and performance. From this position, we present our findings and organise our discussion through three themes emerging from our data: orientation, capacity and context.

### *Educational research and teaching in Wales*

In the UK, as in other countries, a gap exists between teachers conducting research and their everyday practice (Greenwood and Mabeady, 2001). Recommendations for narrowing the gap between teaching and research

Kevin Smith and Kimberley Horton 127

continue to be put forward (BERA, 2014), including calls for schools and colleges to become research-rich environments where, for example, collaborations between schools and universities take place. These recommendations also call for teacher educators and academics to challenge assumptions that higher education and school-based approaches to ITE are mutually exclusive. In the case of Wales, while some similarities to English approaches to education still remain, the course towards educational distinctiveness is set through the exercise of devolved powers in educational policy and planning and sets an orientation to teaching and learning that varies greatly from the other home nations. The Foundation Phase, an approach to early years schooling that 'encourages children to be creative, imaginative and makes learning more enjoyable and more effective' (Welsh Government, 2015), is an example of such a variation. Another distinctive element of schooling in Wales is found in the newly redesigned Welsh Baccalaureate qualification. This qualification is organised around a set of 'essential skills', including literacy, numeracy, critical thinking and problem solving, personal effectiveness, creativity, planning and organisation (Welsh Government, 2014). The keystone feature of the Welsh Baccalaureate is the 'Individual Project Challenge'. This challenge is a student-led research project that is intended to demonstrate students' mastery of the essential skills described above.

While curricular innovations in Wales continue to evolve, a recent report of teacher education in Wales (Furlong, 2015) has noted that ITE gives little explicit recognition of research. While there is little research regarding teachers' research capacity in Wales, previous studies have shown that in other countries, irrespective of their preparation for the classroom, many teachers are not confident in their ability to conduct action research (Christenson et al., 2002; Magos, 2011; Reis-Jorge, 2007).

Unfortunately, the distinctiveness of education in Wales does not seem to apply to preparing teachers to better engage in educational research. Positive steps were taken with the Best Practice Research Scholarship programme (BPRS), one of a series of initiatives introduced by the English Department for Education and Skills (DfES) between 2000 and 2003 that supported teachers' continuing professional development. The BPRS programme was initially intended as a means to support funded 'action research' (Furlong and Salisbury, 2007) based on the rationale that research conducted by teachers *in situ* would inform the improvement of their pedagogical practice. In 2003, the DfES commissioned Cardiff University School of Social Sciences to conduct an evaluation of the BPRS programme.

The evaluation noted participants in the BPRS programme felt it had a positive impact overall on their teaching. Head teachers reported their staff had ‘developed their repertoires and learned better ways to scaffold pupils’ learning’ (Furlong and Salisbury, 2007: 63). They also noted positive impacts on parents, the pupils and the overall institution of the school. However, because participants undertook the BPRS scheme primarily with the intent to improve their practice, there was not as strong of an emphasis, or desire, to conduct research with the aim of contributing new knowledge into the teaching. While the BPRS programme brought about positive outcomes in teachers’ personal practice and the school at large, there were challenges with the dissemination of their research findings into the broader field of educational research (Furlong and Salisbury, 2007).

Even with positive interactions with research in local settings, new advances in curriculum and instruction, reorganisations in teacher education provision in Wales, an evidence-based review of the national curriculum for Wales (Donaldson, 2015) and a recent report of the state of teacher education in Wales (Furlong, 2015), a comprehensive, onto-epistemological shift in conceptualising how teaching is to effectively accommodate both pedagogical endeavours and research activity has yet to be achieved.

### *Improving pedagogy through education research*

The body of literature regarding educational research is vast and represents a multiplicity of ontological and epistemological approaches to teaching and learning. These approaches encompass a myriad of social, political and cultural concerns set within a variety of environments and contexts. However, in light of this diversity, certain themes tend to dominate the discussion of educational research and its relationship to educating teachers, their continued professional development and the shaping of educational policy (Bulterman-Bos, 2008; Everton et al., 2002; Munthe and Rogne, 2015). Although these dimensions are far too numerous to address in this article, we can discuss approaches germane to a Welsh context. The research emerging within these themes emphasises the value and impact educational research can have on preparing pre-service teachers for the classroom and in improving teachers’ pedagogical practices. In addition, this research continues to extend the boundaries of perceptions and

*Kevin Smith and Kimberley Horton* 129

approaches to educational research, allowing for further growth and development within the field.

Because of the benefits educational research can have on the production of teachers' knowledge (Cain, 2010; Mitchell et al., 2009; Moran, 2007; O'Sullivan, 2002; Price and Valli, 2005; Somekh, 2006), a considerable amount of work has focused on teachers' attitudes towards conducting research (Beycioglu et al., 2010; Chen et al., 2012; Everton et al., 2000; Magos, 2011; Ohi, 2008). Important findings within this research indicate teachers' value conducting research and the evidence it provides. The literature also stresses research is not a homogeneous concept, and teachers' interpretations of action research and inquiry vary greatly, as do their methods of research and the implementation of their findings in improving their practice (Everton et al., 2002; McLeskey and Waldron, 2004; Niemi and Nevgi, 2014; Reis-Jorge, 2007; Vanassche and Kelchtermans, 2014; Christenson et al., 2002; Craig, 2010; Hagevik et al., 2012; Junor Clarke and Fournillier, 2012; Magos, 2011; Mitchell et al., 2009; O'Sullivan, 2002; Price and Valli, 2005; Smith et al., 2009).

The emphasis on teachers' attitudes towards, and engagement in, educational research reveals the intricacies and tensions that exist between the role and nature of educational research and people's conceptions of who teachers are (in terms of their professional profile), what duties they are expected to undertake (both in and out of the classroom) and the outcomes they are to achieve (both in regard to pupils' attainment and contributions to the school as members of staff). While we, as researchers and teachers in higher education, recognise the diversity of approaches to research and academic inquiry mobilised in teachers' pedagogical practices, education policy in both England and Wales narrows the scope of such activity and privileges a more 'traditionally' focused view of education research.

With new directions in privileging research as a curricular activity for students, and an emerging emphasis on bridging the gap between teacher's pedagogy and research engagement, concerns over the nature and role of education research are poignantly situated in concepts of schooling in Wales. In consideration of the existing body of research, and in acknowledging the distinctive dimensions of education and schooling in Wales, we chose to explore teachers' engagement with research and their perspective on its usefulness in improving their practice. We then compare the findings from our teachers in Wales to teachers in England, as published by the NFER in 2010. Through a comparison between these two samples,

we hope to highlight potential distinctions between teaching practices in these two countries, as well as gaining a better understanding of teachers' relationship to educational research in Wales. Additionally, we hope to recognise areas of strength and deficiency in their research literacy, use of evidence and their own personal research activity. From the improved understanding of these characteristics, we hope to provide a foundation for further research that can inform new strategies for improving teachers' capacity and involvement with educational research in Wales.

### *Method*

The data for this study were derived from a longitudinal study of approximately 1,500 pupils, their parents and teachers throughout Wales conducted by the Wales Institute of Social & Economic Research Data & Methods (WISERD). While the wider focus of the WISERD longitudinal study is on pupils, the data presented and analysed here were obtained from self-completion questionnaires distributed to teaching staff at the schools participating in the project. For clarity, when discussing these teachers, we use the term Wales teachers, and when discussing the NFER data, we use the term England teachers. Purposeful sampling was used in an attempt to create a sample representing the geographical, social, cultural and linguistic diversity of Wales. The schools were selected in consideration of the ethnic and racial diversity of their pupils and teachers, geographic location, language of instruction, community language use and socio-economic data. A total of 216 teachers volunteered to participate in the study. However, not all of the teachers responded to every item in our survey. To indicate when this occurs, the findings below will be preceded by the N value of teachers responding to that particular query.

The demographic profile of our 216 respondents is as follows: (gender N=215) 71 (33 per cent) are male and 144 (67 per cent) are female (one teacher opted not to disclose gender). We do not have data on our teachers' ethnicity. In regard to primary and secondary education (primary/secondary N = 214), 55 (25.7 per cent) of the respondents work in primary schools and 159 (74.3 per cent) work in secondary schools. The designation for the linguistic medium of instruction for schools in Wales is set within a spectrum ranging from Welsh-medium to English-medium forms of instruction. Of the teachers in our sample, 49 (22.9 per cent) teach at Welsh-medium schools, 54 (25.2 per cent) teach at schools with some form

*Kevin Smith and Kimberley Horton 131*

of bilingual instruction and 111 (51.9 per cent) teach at English-medium schools (two teachers opted not to include the name of the school where they taught).

The schools where the teachers worked are located in the rural, mountainous areas of north Wales, the pastoral countryside of mid and west Wales, the 'valleys', an area primarily identified with its industrial history and associated levels of high social deprivation, located in the south-east and large cities in the south and south-east. In regard to teaching experience (experience  $N = 209$ ), 38 (18.2 per cent) have taught six years or less, 87 (41.6 per cent) 7–16 years, 58 (27.8 per cent) 17–26 years and 26 (12.4 per cent) 27 years or more. Many Wales teachers surveyed had additional responsibilities or leadership roles within the school (roles  $N = 213$ ), with 102 (47.9 per cent) being classroom teachers with no additional responsibilities (which we call Staff), 84 (39.4 per cent) being classroom teachers with additional roles (which we call StaffPlus), such as curriculum coordinator or head of year and 27 (12.7 per cent) being members of the school's senior management team (which we call SMT). While we do not compare the types of additional duties between the NFER and Wales teachers, we do discuss later the importance of identifying these roles among the Wales teachers in our analysis.

### *Instrumentation and analysis*

In this study, we focus on a series of questions relating specifically to teachers' orientations to education research, their engagement with education research evidence and experience in undertaking action research. The questions were taken from the NFER survey of teachers 2004–10. The data were analysed using statistical analysis software. Descriptive analysis, such as frequencies and cross-tabulation, were primarily used in analysing the data. In some cases, participants were asked to choose responses as part of a five-point Likert scale, with the values on this scale ranging from 'Strongly agree' to 'Strongly disagree'. However, in our analysis, the distinction between 'strongly agree' and 'agree' was not substantially informative. Additionally, the NFER survey included an 'I don't know' option for some of the questions, while the WISERD survey did not. Therefore, the 'I don't know' responses from the England teachers are not included in our analysis.

*Results and discussion*

Over 99 per cent of both Wales and England teachers reported that they regularly engaged in self-reflection as an approach to improving their teaching, with the majority of them saying these activities were useful in improving their pedagogy. There were also similarities in their responses regarding the 'usefulness of reflecting on my own practice to improve my teaching' and the 'usefulness of doing my own enquiry or research' with Wales teachers viewing these activities as slightly more useful than England teachers. The responses demonstrate the status of reflection as a valued tool for improving a teacher's pedagogy shared, but the data fail to reveal how teachers interpret reflection and implement it in their practice. Nor do the data tell us how teachers are trained in reflective practices or how they evaluate (or are evaluated in) their reflective experiences.

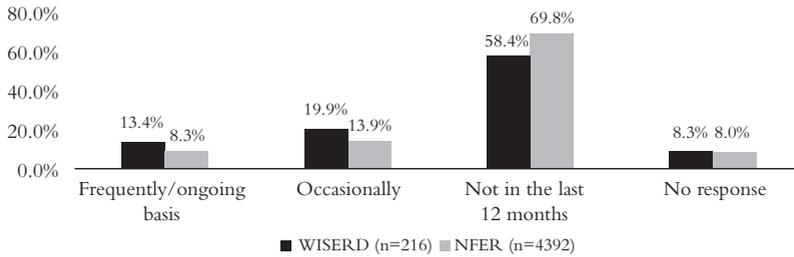
Reflection has been shown to promote more nuanced understandings of a teacher's own practice and professional profile, the socio-cultural ecology of the school and a greater understanding of and connection to their pupils (Parkison, 2009), yet similar to other home nations in the UK (Harford and MacRuairc, 2008), there is a lack of a coherent, formalised discussion of reflectivity for teachers in teacher education programmes in Wales. Arguments for frameworks for reflective practices have been put forward by researchers and practitioners (Hatton and Smith, 1995), but these arguments have not persuaded policy makers and teacher education programmes in Wales to adopt or promote such frameworks as part of the programmes for preparing teachers for the classroom. While the purpose of our study did not include an evaluation of the promotion of reflective practices in teacher education programmes in Wales, the chorus of positive responses regarding the usefulness of reflection among the teachers in our study underscores the importance for further research in how teacher training programmes prepare teachers for their engagement with reflection and its actual impact on their pedagogical practice.

*Undertaking action research in the past 12 months*

Of the teachers reporting that they had undertaken action research in the past twelve months, 13.4 per cent were Wales teachers compared to 8.3 per cent England teachers. Wales teachers were also more likely to say they 'occasionally' engaged in action research (19.9 per cent to 13.9 per cent of England teachers). Irrespective of these differences, the majority of both

*Kevin Smith and Kimberley Horton 133*

**Figure 1. Undertaking Action Research in last twelve months**



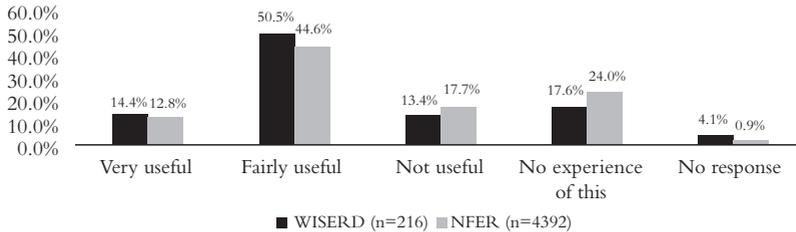
Wales and England teachers had not engaged in action research within the last twelve months. Similar trends can be found in other countries. For example, (Beycioglu et al., 2010) reported one-third of teachers surveyed in Turkey had no linkage to education research, although they valued it and wanted to be involved in it. Beycioglu also reported teachers' research inactivity was well below 'Western' levels of action research, which calls into question the level of research activity of teachers in other European countries and if those levels of activity have had measurable, positive results on educational outcomes and teachers' professional profiles.

Although we do not know the additional roles and responsibilities of the teachers in the NFER study, we do know the added levels of responsibility for Wales teachers. As mentioned above, we organised the Wales teachers into Staff, StaffPlus and SMT depending on their roles within the school. Of the teacher categorised as Staff, 15 (14.7 per cent) hold a higher degree (e.g. MA, MSc or PhD), while 21 (25 per cent) of StaffPlus teachers and 11 (40.7 per cent) of the SMT teachers hold these qualifications. The findings indicate that the majority of action research among the Wales teachers is conducted by those we have identified as the StaffPlus group, a minority of our overall sample. Interestingly, nearly half the SMT group indicated that they were involved in action research. While we cannot provide a causal relationship between higher qualifications and teachers' research activity, our findings do suggest qualifications held by the StaffPlus and SMT Wales teachers may have an influence on their research activity.

#### *Usefulness of research to improve teaching*

As noted in Figure 2, Wales teachers were more likely than England teachers to find using other people's research findings in the improvement

**Figure 2. Usefulness of other people's research in improving my teaching**



of their teaching. However, undermining this difference is the difficulty in identifying what teachers and researchers 'mean' when talking about education research. According to Bulterman-Bos (2008), researchers hold a dualistic view separating knowledge from skill, while teachers possess a more multi-dimensional approach to interpreting the concept of research. Additionally, Cain (2010) writes that knowledge produced through action research can sometimes be treated as less beneficial than evidence gained through traditional, academic models of research.

However, teachers may regard the evidence produced by their action research to be equally as valid, rigorous and efficacious as academic findings because it takes into account their teaching context and the particular elements of their interpretation of the data, self-reflection and implementation in the classroom. Determining if teachers conduct action research can be difficult. Many of the research activities teachers employ as part of their pedagogical practice are embedded within their 'regular' professional duties. Without a clear and concise concept of what constitutes research activity in the classroom, many teachers may under-report research activity or simply disregard their forms of inquiry as research. Alternatively they may over-report their research activity.

In regard to comparing research activity among teachers in England and Wales, more research is needed in providing a concise and coherent approach to educational inquiry and research. While Wales teachers said they were more research active than the England teachers, it is impossible to quantify what research activities have been conducted, what results were produced and what potential outcome they had on teachers' pedagogical practices. Further research into the learning activities and research engagement of teachers is needed, one that distinctly differentiates between various approaches to research and which incorporates teachers'

professional practice and capacity for engaging in educational research in ways most advantageous to them and their pupils.

*Finding and using relevant research*

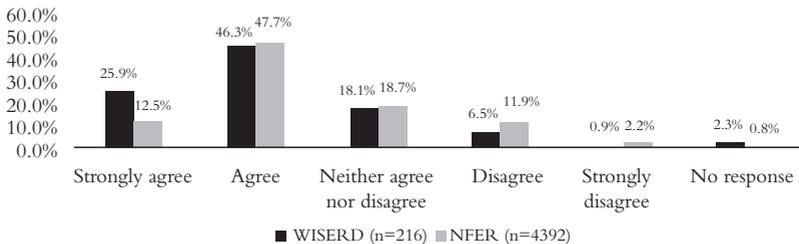
Complementing their attitudes towards personal enquiry and reflection, Wales teachers were also more likely to have positive perceptions of using other people’s research to improve their teaching, as shown in Figure 3.

The majority of teachers in both the Wales and England groups indicated that they knew how to find educational research and that they could understand the evidence of those studies once they were located. Yet, irrespective of this position, the majority of Wales and England teachers are not research active.

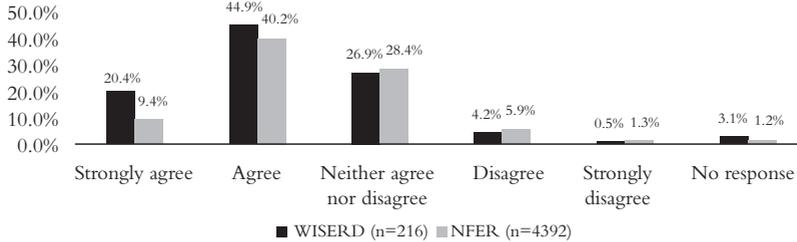
Possible reasons for the gap between knowing and doing that emerge from our study are teachers’ confidence about their ability to engage in research without actually engaging in it. Or, in reference to discussions of forms of inquiry above, perhaps they are confident in the ways in which they practically engage in forms of inquiry, but they do not regard these informal experiences as ‘real’ education research. Unfortunately, our data do not describe the gap. While our data cannot specifically describe the disconnect between teachers’ confidence in research and active participation in it, the results do identify the need to better understand teachers’ confidence and capacity for research (Figure 4), as well as barriers to their engagement with it in their day-to-day practice.

The differences between Wales and England teachers’ beliefs that they know how to find relevant research and use it in their practice is stark, with 25.9 per cent of Wales teachers saying that they ‘strongly agree’ they know where to find relevant research compared to just 12.5 per cent of England

**Figure 3. I know where I can find relevant research to help inform my teaching**



**Figure 4. I have been able to understand and use research to improve my teaching**



teachers. Additionally, 20.4 per cent of Wales teachers ‘strongly agree’ that they have been able to understand and use this evidence compared to just 9.4 per cent of England teachers. The reasons for this disparity are unclear. However, recent announcements by the Welsh and UK governments may provide clues as to how political and ideological orientations to teacher education might promote use of educational research among teachers and better prepare them for finding and using research evidence in their practice.

For example, the recent White papers (Education Excellence Everywhere) published by the Conservative government in England in March 2016 clearly outline a number of initiatives paving the way for ITE in England to be separated from higher education and placed in the hands of academy school head teachers. These methods already exist in programmes like ‘School Direct’ and ‘School-centred initial teacher training’ (SCITT). Such approaches disconnect training teachers from research-rich environments and established experts in educational research.

However, in Wales, with the recommendations put forward by the Furlong Report (*Teaching Tomorrow’s Teachers*) on ITE published in March 2015, the Welsh Government has decidedly maintained ITE remain in the purview of universities. The differences between how ITE in England and Wales is to be carried out suggests ideological differences regarding the academic and professional quality of the teaching profession and the value associated with university-based teacher educators; educators associated with higher education institutions undertaking a myriad of academic inquiries and educational research. At surface level, at least, it seems political support for a university-led approach to initial teacher education could possibly create a positive climate for training teachers and their engagement with educational research. As new developments in initial

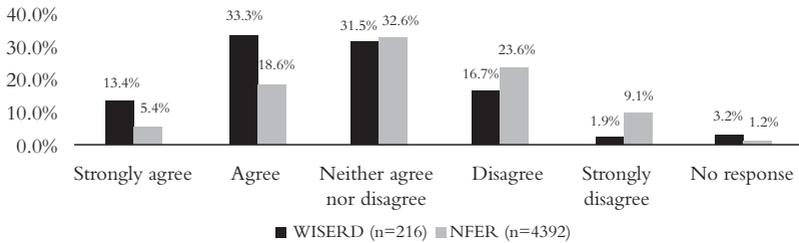
teacher education in Wales unfold, careful considerations of the theoretical and practical positioning of educational research in ITE provision in Wales must be undertaken to better understand its potential in not only improving teachers' pedagogies but in increasing academic outcomes and raising the overall quality of education in Wales.

*School encouragement and discussing research with colleagues*

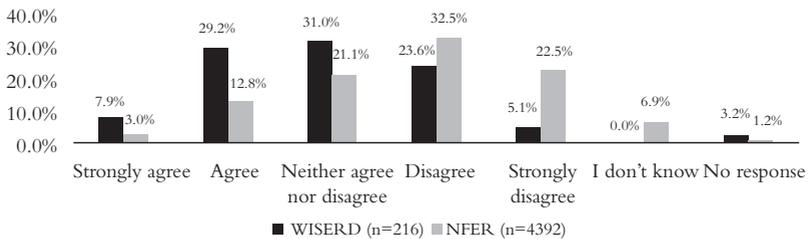
In regard to institutional support for research use, Figures 5 and 6 show teachers in Wales are more likely than those in England to feel supported by their school to use research findings, and that they have more opportunities to discuss education research with their colleagues.

Our findings suggest both teachers in Wales and England value research evidence and believe in its potential in improving their practice, but this positive orientation is not enough to counteract possible barriers to its inclusion as part of their pedagogical practice. A number of factors that are common in many forms of schooling can interfere with how teachers

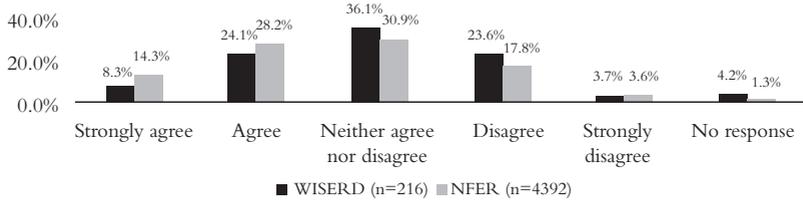
**Figure 5. My school encourages me to use research findings to improve my practice**



**Figure 6. I have frequent opportunities to discuss relevant research findings with colleagues**



**Figure 7. I do not have time to use research findings to improve my teaching**



engage in research activity. Wales teachers are more likely to report that their schools encourage them to use research to improve their teaching and that they have frequent opportunities to discuss this research with colleagues. However, the number of teachers disagreeing to both of the survey items in both countries suggests that teachers need more support from their respective educational systems in integrating the use of research in their practice. Figure 7 demonstrates that England teachers are more likely than Wales teachers to agree that they do not have time to use research findings to improve their teaching. Additionally, Wales teachers are more likely to disagree with this statement, suggesting that for our sample, teachers in Wales are making time, or being provided with more opportunities, to use research to improve their teaching.

In both England and Wales, many of the expectations of senior management teams, pupils and parents are fixed on academic outcomes measured and established by inspectorate bodies (such as Estyn, in the case of Wales and Ofsted in England) and governing bodies such as boards of governors. Many of these concerns are accompanied by formal policies and informal adjustments in schools that increase the number of non-teaching duties for teachers, as well as instructional and curricular changes emphasising pupils' potential exam performance and qualification achievements. With recent uproar over Wales's performance with PISA tests and the consistent lagging behind other home nations in academic attainment since the introduction of devolution, expectations for teachers in Wales may not explicitly privilege teacher engagement with research, and as a result, teachers' focus is shifted from their own approaches to inquiry and becomes centred on the mandates and requirements offered by those outside the classroom.

*Conclusion*

In addition to teachers' preparation for engaging in research during their initial teacher education, evidence shows teacher educators' attitudes, capacities and orientations to their responsibilities of teaching and research are intricately tied to the experiences, expectations and potentialities of pre-service teachers (Chauvot, 2009; Goodwin and Kosnik, 2013; Greenwood and Mabeady, 2001). For example, Niemi and Nevgi (2014) describe how student teachers came to value research as part of the teacher education experiences, and how these forms of research and enquiry led to promoted levels of professional competence and individual growth. As referenced above, the ambiguity regarding the expectation of research activity contributes to the gap that exists between research and practitioners in the UK (Greenwood and Mabeady, 2001). This, along with recent changes in the delivery of teacher education in England and the unsettling plans for its excision from university-led provision creates an atmosphere of uncertainty and confusion for teachers and teacher educators alike. This uncertainty, along with an apparent lack of research capacity, resources and engagement can also be found in teacher education programmes in Wales (BERA, 2014; Furlong, 2015; Furlong et al., 2006; Rees and Power, 2007). Existing evidence and the recent recommendations in the Furlong Report, coupled with the findings of our study, suggest further research into teacher educators' engagements with research and research evidence in Wales is necessary if Wales is to exert its political and philosophical will in delivering innovative and effective university-led initial teacher training.

The Wales teachers' responses provide an interesting insight into their engagement with educational research, but there are limitations to our study. Terms such as research, action research and even self-reflection were not adequately resolved when presented to teachers. As a result, teachers may interpret these concepts differently and we do not have a way to determine how they come to conceptualise these terms. Additionally, we have no forms of qualitative data that could help us deepen our understanding of teachers' daily activities, reflections and engagement with research. Also, our question regarding research activity limited teachers' responses to a twelve-month timeframe. It is possible teachers may have conducted research outside this timeframe, but could not report this activity. While these factors do limit the extent to which we can come to understand teacher engagement with educational research, they also

suggest new approaches and avenues of inquiry for future educational research in Wales.

As evidenced through this study, concerns about teachers' engagement with educational research are not an issue specific to Wales, but they do highlight potential threats to claims regarding the distinctiveness of Welsh education. With pedagogical innovation being introduced through the development of the Foundation Phase and redesigning of the Welsh Baccalaureate, as well as the embracing of creative approaches to curriculum theorising and design suggested by the results of the Donaldson Report, *Successful Futures* (Welsh Government, 2015), educational policy makers and stakeholders have expressed a desire for educational distinction. However, while the results of this study indicate some teachers in Wales are more confident and actively engaged in educational research than their counterparts in England, they do not contravene the findings of the Furlong Report (Furlong, 2015) and the call for a more robust and efficacious approach to preparing teachers to engage in relevant, evidence-based practices apropos to their pedagogical orientation and teaching/learning environment. In fact, this study underscores claims teachers' engagement with educational research in Wales, particularly as it relates to the development of their practice and pedagogical expertise, is inconsistent with other areas of educational development and innovation in Wales.

### *Acknowledgements*

This paper is based on research supported by the Wales Institute of Social & Economic Research, Data & Methods (WISERD). WISERD is a collaborative venture between the universities of Aberystwyth, Bangor, Cardiff, South Wales and Swansea. The research that this publication relates to was undertaken through WISERD Education and was funded by HEFCW (Higher Education Funding Council for Wales). Kimberley Horton, Kathryn Sharp and Kevin Smith assisted in the collection of data. The analysis was supported by a volunteer work placement with WISERD Education.

*Kevin Smith and Kimberley Horton* 141

References

- Aspfors, J., and Fransson, G. (2015). 'Research on mentor education for mentors of newly qualified teachers: A qualitative meta-synthesis'. *Teaching and Teacher Education*, 48 (1), 75–86.
- Bensimon, E. M., Polkinghorne, D. E., Bauman G. L., and Vallejo, E. (2004). 'Doing Research That Makes a Difference'. *The Journal of Higher Education*, 75 (1), 104–26.
- BERA (2014). *Research and the Teaching Profession: Building the Capacity for a Self-improving Education System*. London: BERA.
- Beycioglu, K., Ozer, N., and Ugurlu, C. T. (2010). 'Teachers' views on educational research'. *Teaching and Teacher Education*, 26 (4), 1088–93.
- Bulterman-Bos, J. A. (2008). 'Will a Clinical Approach Make Education Research More Relevant for Practice?'. *Educational Researcher*, 37 (7), 412–20.
- Cain, T. (2010). 'Music teachers' action research and the development of Big K knowledge'. *International Journal of Music Education*, 28 (2), 159–75.
- Chauvot, J. (2009). 'Grounding practice in scholarship, grounding scholarship in practice: Knowledge of a mathematics teacher educator-researcher'. *Teaching and Teacher Education*, 5 (2), 357–70.
- Chen, J., Brown, G. T. L., Hattie, J. A. C., and Millward, P. (2012). 'Teachers' conceptions of excellent teaching and its relationships to self-reported teaching practices'. *Teaching and Teacher Education*, 28 (1), 936–47.
- Christenson, M., Slutsky, R., Bendau, S., Covert, J., Dyer, J., Risko, G., and Johnston, M. (2002). 'The rocky road of teachers becoming action researchers'. *Teaching and Teacher Education*, 18 (3), 259–72.
- Cochran-Smith, M., and Fries, M. K. (2001). 'Sticks, Stones, and Ideology: The Discourse of Reform in Teacher Education'. *Educational Researcher*, 30 (8), 3–15.
- Craig, C. (2010). 'Coming full circle: from teacher reflection to classroom action and places in-between'. *Teachers and Teaching*, 16 (4), 423–35.
- Darling-Hammond, L. (1998). 'Teacher learning that supports student learning'. *Educational Leadership*, 55 (5), 6–11.
- Darling-Hammond, L., and McLaughlin, M. (1999). 'Investing in teaching as a learning profession: Policy, problems, and prospects', in L. Darling-Hammond (ed.), *Teaching as the learning profession: Handbook of policy and practice*. San Francisco, CA: Jossey Bass, pp. 376–412.
- Donaldson, G. (2015). *Successful Futures: Independent Review of Curriculum and Assessment Arrangements in Wales*. Available at: <http://gov.wales/docs/dcells/publications/150317-successful-futures-en.pdf> (accessed on 15 June 2015).
- Edwards, T. (2000). *Some Reasonable Expectations of Educational Research*. London: UCET.
- Egan, D., and James, R. (2003). 'Education', in J. Osmond and B. Jones (eds), *Birth of Welsh Democracy: The First Term of the National Assembly for Wales*. Cardiff: Institute of Welsh Affairs and Welsh Governance Centre.

- Everton, T., Galton, M., and Pell, T. (2000). 'Teachers' Perspectives on Educational Research: Knowledge and context'. *Journal of Education for Teaching*, 26 (2), 167–82.
- Everton, T., Galton, M., and Pell, T. (2002). 'Educational research and the teacher'. *Research Papers in Education*, 17 (4), 373–401.
- Furlong, J. (2015). *Teaching Tomorrow's Teachers: Options for the Future of Initial Teacher Education in Wales*. Oxford: University of Oxford.
- Furlong, J., and White, P. (2002). *Educational Research Capacity in Wales: A review*. Cardiff: Cardiff University School of Social Sciences.
- Furlong, J., Hagger, H., and Butcher, C. (2006). *Review of Initial Teacher Training Provision in Wales: Final Report*. Oxford: University of Oxford.
- Furlong, J., and Salisbury, J. (2007). 'Best practice research scholarships: An evaluation'. *Research papers in Education*, 20 (1), 45–83.
- Goodwin, A. and Kosnik, C. (2013). 'Quality teacher educators = quality teachers? Conceptualizing essential domains of knowledge for those who teach teachers'. *Teacher Development*, 17 (3), 334–46.
- Greenwood, C. R., and Mabeady, L. (2001). 'Are Future Teachers Aware of the Gap Between Research and Practice and What Should They Know?'. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 24 (4), 333–47.
- Hagevik, R., Aydeniz, M., and Rowell, C. G. (2012). 'Using action research in middle level teacher education to evaluate and deepen reflective practice'. *Teaching and Teacher Education*, 28 (5), 675–84.
- Hammersley, M. (2002). *Educational Research, Policymaking and Practice*. London: Paul Chapman Publishing.
- Harford, J., and MacRuairc, G. (2008). 'Engaging student teachers in meaningful reflective practice'. *Teaching and Teacher Education*, 24 (7), 1884–92.
- Hargreaves, D. H. (1996). *Teaching as a Research-based Profession: Possibilities and Prospects*. London: Teacher Training Agency.
- Hatton, N., and Smith, D. (1995). 'Reflection in teacher education: Towards definition and implementation'. *Teaching and Teacher Education*, 11 (1), 33–49.
- Junor Clarke, P. A., and Fournillier, J. B. (2012). 'Action research, pedagogy, and activity theory: Tools facilitating two instructors' interpretations of the professional development of four preservice teachers'. *Teaching and Teacher Education*, 28 (1), 649–60.
- Levin, B. B., and Rock, T. C. (2003). 'The Effects of Collaborative Action Research On Preservice and Experienced Teacher Partners in Professional Development Schools'. *Journal of Teacher Education*, 54 (2), 135–49.
- McLeskey, J., and Waldron, N. L. (2004). 'Three Conceptions of Teacher Learning: Exploring the Relationship Between Knowledge and the Practice of Teaching'. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 27 (1), 3–14.

- Magos, K. (2011). “... But I cannot do research”: action-research and early childhood teachers. A case study from Greece’. *Teachers and Teaching*, 18 (3), 331–43.
- Mitchell, S. N., Reilly, R. C., and Logue, M. E. (2009). ‘Benefits of collaborative action research for the beginning teacher’. *Teaching and Teacher Education*, 25 (2) 344–9.
- Moran, M. J. (2007). ‘Collaborative action research and project work: Promising practices for developing collaborative inquiry among early childhood preservice teachers’. *Teaching and Teacher Education*, 23 (4), 418–31.
- Munthe, E., and Rogne, M. (2015). ‘Research based teacher education’. *Teaching and Teacher Education*, 46 (1), 17–24.
- Niemi, H., and Nevgi, A. (2014). ‘Research studies and active learning promoting professional competences in Finnish teacher education’. *Teaching and Teacher Education*, 43 (1), 131–42.
- Ohi, S. (2008). ‘The Teacher’s Role in the Research-Policy-Praxis Nexus’. *Australian Journal of Education*, 52 (1), 95–109.
- O’Sullivan, M.C. (2002). ‘Action research and the transfer of reflective approaches to inservice education and training (INSET) for unqualified and underqualified primary teachers in Namibia’. *Teaching and Teacher Education*, 18, 523–39.
- Parkison, P. T. (2009). ‘Field-based preservice teacher research: Facilitating reflective professional practice’. *Teaching and Teacher Education*, 25 (6), 798–804.
- Phillips, R. (2003). ‘Education Policy, Comprehensive Schooling and Devolution in the disUnited Kingdom: An historical “home international” analysis’. *Journal of Education Policy*, 18 (1), 1–17.
- Price, J. N., and Valli, L. (2005). ‘Preservice Teachers Becoming Agents of Change: Pedagogical Implications for Action Research’. *Journal of Teacher Education*, 56 (1), 57–72.
- Rees, G. (2002). ‘Devolution and the restructuring of post-16 education and training in the UK’, in J. Adams and P. Robinson (eds), *Devolution in Practice: Public Policy Differences within the UK*. London: IPPR.
- Rees, G. (2007). ‘The Impacts of Parliamentary Devolution on Education Policy in Wales’. *The University of Wales Journal of Education*, 14 (1), 8–20.
- Rees, G., and Power, S. (2007). ‘Educational Research and the Restructuring of the State: The Impacts of Parliamentary Devolution in Wales’. *European Educational Research Journal*, 6 (1), 87–100.
- Reis-Jorge, J. (2007). ‘Teachers’ conceptions of teacher-research and self-perceptions as enquiring practitioners – A longitudinal case study’. *Teaching and Teacher Education*, 23 (4), 402–17.
- Smith, C., Blake, A., Curwen, K., Dodds, D., Easton, L., McNally, J., Swierczek, P., and Walker, L. (2009). ‘Teachers as researchers in a major research project: Experience of input and output’. *Teaching and Teacher Education*, 25 (7), 959–65.
- Somekh, B. (2006). ‘Constructing intercultural knowledge and understanding through collaborative action research’. *Teachers and Teaching*, 12 (1), 87–106.

- van den Bergh, L., Ros, A., and Beijgaard, D. (2015). 'Teacher learning in the context of a continuing professional development programme: A case study'. *Teaching and Teacher Education*, 47 (1), 142–50.
- Vanassche, E., and Kelchtermans, G. (2014). 'Teacher educators' professionalism in practice: Positioning theory and personal interpretative framework'. *Teaching and Teacher Education*, 44 (1), 117–27.
- Welsh Government (2014). Design Principles for the Welsh Baccalaureate. Cardiff: Welsh Government.
- Welsh Government (2015). *Foundation Phase*. Available at: <http://gov.wales/topics/educationandskills/earlyyears/home/foundation-phase/?lang=en> (accessed 15 June 2015).
- Whitty, G. (2006). 'Education(al) research and education policy making: is conflict inevitable?'. *British Educational Research Journal*, 32 (2), 159–76.