

Teachers' Perceptions and Practices of Research Literacy in Professional Development

*This paper is the last of three reflections on how teacher research literacy is understood and enacted in the English policy context, with a view to developing the literature base and informing policy. The final BERA-RSA (2014) report into 'Research and the Teaching Profession' proposes that all teachers should be 'research literate', which is defined as being able to access and assess existing research. This document also calls for teacher education to provide teachers with the agency to engage in their own research in addition to engaging with external research. It is the understandings and practices of research literacy in teachers' professional development that are here presented. A survey of in-service teachers (n=66), semi-structured interviews with survey respondents (n=4) and two case studies of primary and secondary teaching schools show convergent understandings and practices of research literacy in professional development depending upon school context and involvement of higher education.*

**Keywords:** research literacy, teacher professional development, teaching school, higher education

### Introduction

Research literacy can be identified in professional development (PD) initiatives that enable to teachers to be:

1. 'equipped to engage with and
2. discerning consumers of research' (BERA-RSA, 2014: 5)
3. 'equipped to conduct their own research' (ibid).

England's Department for Education's (DfE) policy documentation pertaining to teachers' PD focuses upon the first 'level', teachers using research, with little mention of the ability to critique existing research or create new evidence. Although Goldacre (2013: 13) advised the DfE that teachers should have a basic knowledge of how research is conducted and be taught to be 'critical consumers' of existing research, there is no mention of criticality in the 'evidence-informed teaching profession' envisaged in the white paper, Educational Excellence Everywhere (DfE, March 2016: 37). Similarly, the Standard for Teachers' Professional Development states that PD should be 'underpinned by robust evidence' (DfE, July 2016:1) but implies that teachers are merely the passive consumers of this evidence. In this way, England differs from the other jurisdictions of the UK, for example Scotland, where professional enquiry is required of all in-service teachers (Beauchamp et al., 2013).

By focusing PD on engaging *with* evidence only, the DfE fails to recognise the work of prominent figures in the field of education research. Stenhouse (1981) believed that 'using research means doing research' (110) and recommended that teachers evaluate anything developed by researchers to contextualise the evidence, therefore creating new knowledge, not merely taking existing knowledge for granted. More recently, Cochran-Smith and Lytle (2009) have called for 'inquiry as stance' in the teaching profession, which they define as 'the capacity to generate and critique knowledge' (124), again, with teachers *producing* as well as judiciously *using* existing research (see also Petty, 2014; Orchard and Winch, 2015). From a more contemporary view, Arthur et al. (2012) noted how new communications technologies mean that academics' work can be easily and cheaply accessed and assessed by practitioners, with the only drawback being that this research cannot be easily built on. Again, there is the intention for teachers not only to *use* research but also *produce* knowledge for their own development, albeit with the former being easier for practitioners – but only if they are able to adequately assess the quality of the research that is more readily available through open access. Taking Creswell's (2012) concept of practitioners being 'producers' and

'consumers' of research, the same language is adopted here to explore the literature on PD and initiatives in which teachers are:

1. Passive consumers of research
2. Discerning consumers of research
3. Active producers of research

### *Passive consumers*

The process of 'knowledge mobilisation' (Nelson and O'Bierne's, 2014), whereby researchers translate evidence into interventions for teachers to implement, is apparent in PD programmes such as the 'Research Champion' pilot project evaluated by the Education Endowment Foundation (EEF). Also known as 'translational' research, it has been identified in other professions such as nursing but an equivalent infrastructure enabling practitioners to utilise developments in research is necessary in teaching (Whitty et al., 2016). Such an infrastructure can be seen in the 'Research Champion' project which consisted of a senior leader of a teaching school alliance (TSA) appointing 'Research Leads' in other alliance schools to help participating teachers to engage with research (Griggs et al., 2016). Seminars and workshops were delivered by educational researchers in PD sessions after school and during whole-day symposia and were found to be valuable. Teachers and researchers meeting regularly has been found in other countries to be a solution to the main barrier preventing educational research contributing to PD i.e. access to existing research (Drakenberg, 2001). This passive role as consumers of ready-made research can, however, lead to a disenfranchised profession (Kincheloe, 1991; Cochran-Smith and Lytle, 2009).

In analysing the 'Research Champion' project further, it appears that the participating teachers were arguably more than just passive consumers. For example, the choice of researchers invited to the PD sessions was influenced by the interests of the teachers involved. Furthermore, the additional references in the pack of materials issued at each symposium were found to have been used by some teachers and it was noted that 'research leads had been empowered and enthused by the programme to independently seek out research evidence beyond that disseminated as part of the programme' (Griggs et al.:30). Further to being more independent in accessing existing research, the Research Champion's school and one other school moved into the 'producing' level of research engagement by assigning dedicated time to research leads so they could conduct their own investigations and make changes accordingly. This PD project did not pass the pilot stage, however, due to the commissioning EEF deeming the evaluation limited on the grounds that there was no comparison group.

### *Discerning consumers*

The importance of teachers evaluating information from research before using that information in their PD has been noted recently (Orchard and Winch, 2015) but this is an element of research literacy that remains a challenge, not least because it is overlooked in policy. Out of the teachers surveyed by Williams and Coles (2007), 41% reported low confidence in evaluating research information. Whilst this does not seem alarming, it must be acknowledged, as the authors themselves point out, that the respondents were atypically predisposed to research than is usual in the teaching profession. From these findings, it can be surmised that even when teachers are engaging with research, some do not feel that they are able to evaluate findings, therefore remain passive consumers of research. Williams and Coles' (2007) interviewees, constituting of teachers with a range of past research engagement, also emphasised the difficulty of evaluating the research they use as part of their PD. Menter and Hulme (2010:113) also found that 'information literacy' was

an issue for some participants of the research engagement programme they were studying and this, they found, reinforced perceptions of research being burdensome. Williams and Coles (2007) concluded that academics are doing more to present their work in more accessible formats for practitioners but stressed that there is no substitute for teachers having the criticality to engage fully with original research. The promotion of criticality as a skill that teachers should have is, however, is diminishing. For example, the National College for Teaching and Leadership (NCTL) now only asks newly qualified teachers (NQTs) how well their teacher education prepared them to stay up-to-date with educational research rather than asking them about how prepared they feel to access, assess and apply findings from research as in previous years (NCTL, October 2015; August 2016). This privileging of passive utility over judicial utility is also present in the DfE's (2016) Standard for Professional Development, resulting in the criticality element of research literacy being absent from many teachers' education, both initial and continuing.

PD that incorporates research findings but does not offer opportunities for teachers to evaluate proposed developments in relation to their own tacit knowledge can be seen as de-professionalising teaching. Lingard and Renshaw (2010:26) envisaged teachers' PD as 'research informed' rather than 'research based' as the former allows for what they called 'teacher knowledge in action' (32), which combines the intuition of a teacher with the knowledge presented in research. Without criticality, according to Winch, Oancea and Orchard (2013), the teacher is a technician or, at best, an 'executive technician' (6) but 'the professional teacher exercises discretion and judgment to evaluate educational research' (2).

### *Active producers*

Professional development programmes that enable teachers to conduct their own research have been adopted in various guises in the English policy context. In 1997, the School-based Research Consortia Initiative facilitated school-university partnerships to research interventions chosen by participating teachers (Kushner et al., 2001). The participants in this PD programme believed that it allowed them to reject homogeneity and 're-engage their professional judgement' (45), although they felt that this autonomy was not ordinarily possible in their workplaces. A similar programme in the United States was similarly found to increase teachers' confidence and autonomy, leading to more analytical and happier teachers (Zeichner 2003). In England, the next PD initiative which enabled teachers to produce their own research was the Best Practice Research Scholarships (BPRS), which were awarded by the Department for Education and Schools (DfES) to some practising teachers between 2000 and 2003 (Lambert and Hollinshead, 2004). This programme had a wider remit than its predecessor as it was the intention for teachers to be supported by researchers in HE not only to develop their own practice but to disseminate their findings to other practitioners via a 5000 word report to be deposited on the BPRS website. Similarly, the MTL, briefly funded by the government in 2010, enabled participants (mainly newly qualified teachers (NQTs) working in challenging circumstances) to disseminate the research they had generated to colleagues (TDA, 2009) but on a more local level (Castle and Peiser, 2012). Participating teachers were also required to 'draw on and critique a knowledge base' (TDA, 2009:12), therefore the MTL, embodied all three elements of research literacy.

Despite Master's research for teachers no longer being funded by central Government, teachers engaging in their own research is still seen as an important part of PD (Campbell, McNamara and Gilroy, 2010) and is encouraged in teaching schools (TSs) where, until recently, research and development (R&D) had been a discrete element of their remit. For example, the NCTL had funded and facilitated research projects of teachers (NCTL, Spring 2015). R&D is now intended to permeate throughout the new tri-focal remit of initial teacher education (ITE), continuing

professional development (CPD) and school-to-school support (Teaching Schools Council, 2017). This development would allow for Lingard and Renshaw's (2010) vision of initial and continuing education that would replace 'a model of teachers as simply translators or interpreters of educational research done elsewhere' (27). It is well documented that teachers actively producing their own research is standard in other countries (see, for example, Jyrhama (2008) on Finland; Groundwater-Smith, Mitchell and Mockler (2016) on Australia). Producing one's own research has also been found to motivate teachers to engage with existing research (McLaughlin, 2010) and if this is done critically and not passively, all three elements of research literacy can, theoretically, be activated.

### Research questions

1. What role can research literacy realistically have in teachers' PD?
2. How do teachers feel about the role of research literacy in their PD?

### Methods

To answer these question, mixed methods were employed whilst maintaining a broadly interpretive ontology on the premise that 'the combination of quantitative and qualitative data provides a more complete understanding of the research problem than either approach by itself' (Creswell and Plano-Clark, 2011:8). To provide a general picture of the research problem, quantitative data from a survey of teachers (n=66) were gathered and in order to refine, extend and explain the general picture, themes were elicited from qualitative data from interviews with survey respondents (n=4) and two case studies. Rather than placing priority on quantitative data in an explanatory sequential mixed methods model which, according to Creswell (2012), is the most common mixed-methods design in educational research, a more synergistic design was chosen to achieve 'generative insights' (Greene, 2007:79) with a back and forth dialogic (Robson, 2005; Fielding, 2012) between findings from different methods.

#### *Survey*

The survey was intended to elicit understandings, not truths, therefore the primary purpose of the survey, should be regarded as 'mapping the territory' for the rest of the research (inspired by Day, Sammons and Gu, 2008) as it is a feasible and efficient means of gathering data from a wide research population. Whilst it was not deemed necessary or even possible to achieve a representative sample, what the survey does present is a cross-section of the teaching profession via dimensional sampling (Robson, 2005) which sought at least one member of each teaching category (as in Day, Sammons and Gu, 2008). The research population, therefore, consisted of student teachers, teachers, middle leaders, senior leaders and support staff from the early years, primary, secondary and tertiary sectors working in urban, suburban, rural, coastal and island locations. For the purpose of this paper, it is only data from in-service teaching staff that are presented here. It is acknowledged that respondents to the survey are likely to be atypically interested in research by virtue of their interest in the researcher's study (e.g. Williams and Coles, 2007) but this outlier view is not necessarily a limitation as the perceptions of those involved in research-rich PD and the practices of research literacy that are possible in their contexts are valuable to this study. Questions for the survey were based upon the researcher's experiences and review of literature (Day, Sammons and Gu, 2008).

## Teachers' Perceptions and Practices of Research Literacy in Professional Development

### *Interviews*

To expand upon these initial survey findings, qualitative data were also collected vis-a-vis semi-structured interviews with self-selecting survey respondents (n=4). As with the survey, it is realised that volunteers for the semi-structured interviews might have strong points of view as ambivalent people are not likely to want to discuss the survey topic any further. As it is just an understanding of the potential of research literacy that is intended, this 'outlier' perspective will, again, be valuable.

### *Case studies*

For the recruitment of the two case study schools, purposive sampling was used in order to attract schools where elements of research literacy were present in their PD programmes, which was achieved by contacting local schools with TS status due to R&D once being part of their remit. Ethnographic methods (participant observations, semi-structured and unstructured interviews and analysis of online documentation) were employed in case study where full access was granted. The other case study consisted of field notes, survey data, a semi-structured interview and online documentation pertaining to just one PD programme.

### *Ethical considerations*

Approval from the university's Research Ethics Committee (REC) was granted for all research phases (16/EHC/003; 16/TPL/004) and the ethical code developed during this process was adhered to throughout the research. For example, as ethnography can provoke stress and create pressure if participants feel their work is being evaluated (Hammersley and Atkinson, 2003) it was made clear to the participants that the researcher will not be judging individuals and that anonymity via the use of pseudonyms is guaranteed as far as is possible (Creswell, 2012). There was always an awareness that the presence of a teacher-turned researcher, in the case study schools in particular, could have caused conflicts but as self-proclaimed 'returning native', Perryman (2011) stated 'the advantages in the resulting rich data outweigh the disadvantages' (867) and only a slight sense of apprehension was detected.

### *Analysis*

A 'template' (Robson, 2005:458) approach to qualitative analysis has been taken whereby key categories were determined by the literature and survey responses but emerging themes within these categories were then found inductively (Cain, 2015). The literature initially used to conceptualise areas for investigation was returned to (as suggested by Creswell, 2012) in light of new insights (as in Day, Sammons and Gu, 2008), which have been summarised below.

### **Findings**

Data from the survey, semi-structured interviews and two case studies report on how research literacy can be practised in PD and the perceptions that participants have of these practices. The findings from all data sources are broken down into the elements of research literacy as defined by BERA-RSA (2014):

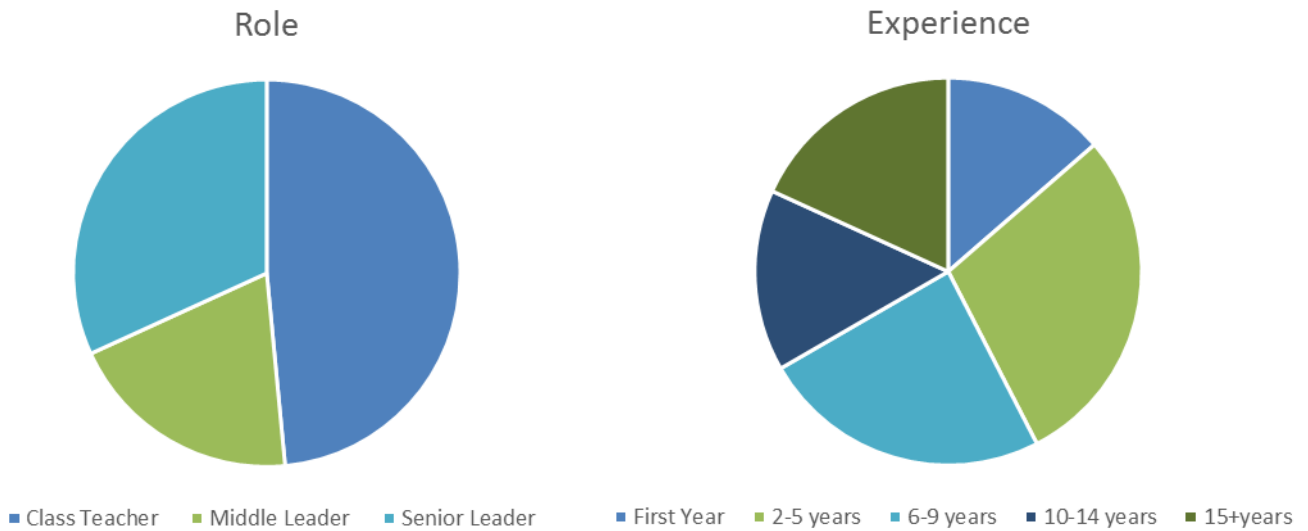
1. Engaging *with* research
2. Engaging *critically* with research
3. Engaging *in* research

Additional interpretations of research literacy practised in PD are also reported here under the heading 'values' as it was found that how some teachers define 'research' does not necessarily fit

## Teachers' Perceptions and Practices of Research Literacy in Professional Development

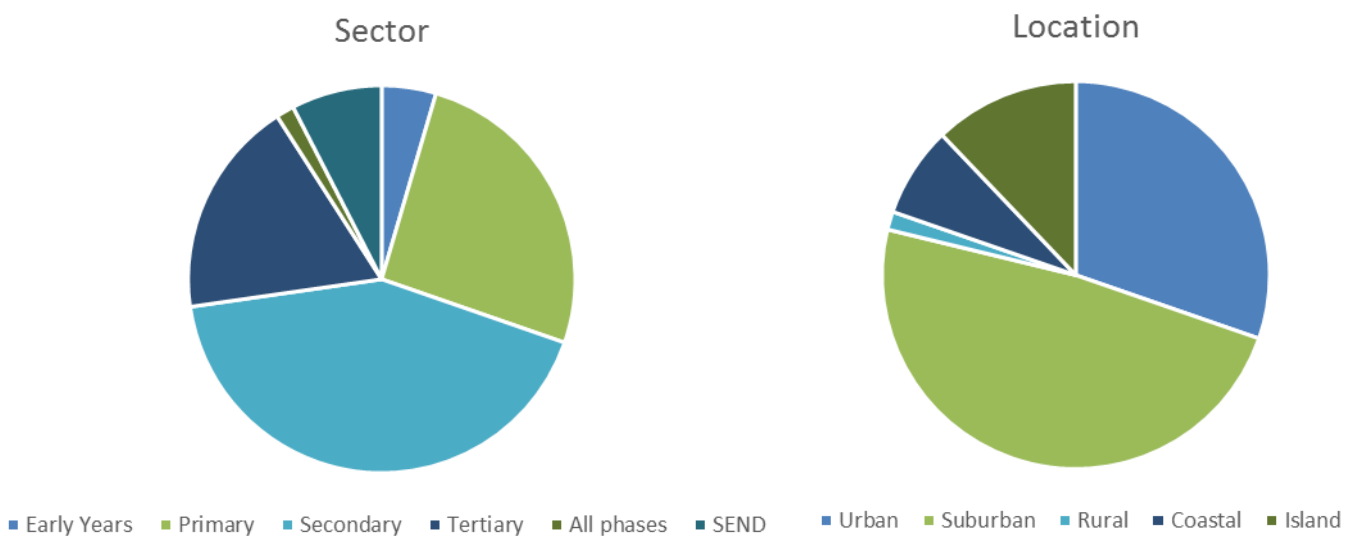
into this pre-existing model of research literacy. Information about the teachers and schools who contributed to these interpretations are presented below.

Fig. 1: Survey respondents



A limitation of an online questionnaire is that it relies on access and it transpired part way through the survey round (2016-17) that some senior leaders were following the weblink emailed to them but did not or could not forward this link to classroom practitioners. There are, therefore, more respondents with a senior role than might be expected. To overcome the absence of a staff mailing list, paper surveys were issued to some primary schools that had not responded to the email invitation containing the weblink to the online survey. Although response rate was not high using this method, a range of roles was acquired from those schools that did participate, which would not have been possible with the online approach due to some smaller primary schools not having an internal mailing list to distribute an online link.

Fig. 2: Survey respondent school information



## Teachers' Perceptions and Practices of Research Literacy in Professional Development

Table 1. Interviewees

Interviewee Pseudonym	Role	School Pseudonym	School Context
Mr Pearson	Middle leader	Kings' Independent High School for Boys	Independent single-sex secondary school.
Mr Phillotson	Middle leader	Mount Carmel Specialist High School	SEND secondary school aiming for teaching school status.
Ms Smyth	Middle leader	Liverton Secondary Academy	Secondary school that have recently joined a multi-academy chain.
Mr Harrison	Head teacher	Castlebay Primary	Island primary school.

Table. 2: case study schools

	'Grange Primary Academy'	'Hill Top High'
<b>Context</b>	Primary teaching school with research school status in a rural area with a high proportion of pupils from disadvantaged backgrounds.	Secondary teaching school which achieved research school status part way through the study. Located in an affluent coastal town.
<b>Research literacy in PD</b>	A very research-engaged school but the researcher was only allowed access to a voluntary after-school programme of research seminars delivered by academics.	Researcher granted access to all research-engagement, which consisted of: Before-school journal clubs and seminars voluntarily attended by teachers. After-school meetings between groups of teachers led by a designated 'Research Lead'. Research Lead training. Individual research projects being part of teachers' appraisal.
<b>Key participants and their pseudonyms</b>	Ms Maguire, deputy and director of research for the multi-academy trust. Voluntary attendees of research seminars from host school and neighbouring schools.	Mr Langton – deputy responsible for research. Ms Egerton – deputy in charge of learning and teaching. Ms Blyth – Research Lead Dr Cartwright – head of science

### Values

One of the principle findings from the survey was that practitioners did not seem to conceptualise teacher research literacy – or its value – in the same way as the British Educational Research Association (2014). This was anticipated by the university's research ethics committee, which suggested that other definitions of research literacy should be included in the survey to avoid alienating teachers who might see more informal research engagement as more important than more academic research. Statements from other literature and the researchers own experience were, therefore, presented in the survey for respondents to rate via a Likert scale ranging from 1 - 'not important' to 4 - 'very important'. Rank ordering was then employed post hoc (Arthur et al. 2012) using mean scores to present the importance placed on each element of what could be considered 'research'. Table 3 presents how this order mirrors the three layers of research literacy.

Table. 3. The statements of research engagement in order of importance

	<b>Q. 'How do you rate the following items in terms of relevance and importance to your job?'</b>	<b>Mean</b>
	<b>Values</b>	
1	Being critically reflective	3.59
2	Sharing experinces e.g. Joint Practice Development	3.53
3	Working in a development group e.g to address part of the school's development plan	3.14
	<b>Engaging with research</b>	
4	Understanding why research is important	3.06
5	Understanding what can be learnt from research	3.05
6	Knowing the implications of research for your day-to-day practice	3.02
7	Knowing the implications of research for education generally	3
8	Combining information gained from your own practice with academic theories	2.88
9	Using the results of evidence gathered from strategies trialled elsewhere	2.88
10	Familiarity with the latest research findings	2.86
11	Using the web-based materials to research issues related to education	2.86
	<b>Engaging critically with research</b>	
12	Being able to critique or review research	2.83
	<b>Engaging in research</b>	
13	Being actively involved in the research process rather than the subject of research	2.74
14	Having the ability to analyse data gathered through research	2.67
15	Familiarity with a range of research methods	2.62

The highest valued definition of what could be deemed part of 'research literacy' is 'critical reflection'. Although Menter (2016:28) has recently argued that 'reflective teaching does not in itself imply a research orientation', reflection has been associated with teacher research (e.g. Calderhead and Gates 1993:1). Furthermore, Winch et al. (2013) have theorised that 'critical reflection' is one of the three aspects of the professional knowledge of teachers which consists of not only reflective practice but also scholarly sourcing of evidence and systematic enquiry, which, assuming that the scholarly sourcing of evidence includes criticality, embodies all elements of research literacy.

Interestingly, the next two valued PD initiatives (that may or may not involve research literacy) are both collaborative in nature. Joint practice development is (JPD) similar to the Japanese model of 'Lesson Study' in that teachers collaboratively plan, teach and evaluate a lesson, thus generating and sharing their own evidence Hargreaves (2012). Whilst collaborating with peers does not necessarily involve the production of research, it is interesting that it is ranked close to JPD as this would suggest that it is working with peers and not particularly producing evidence that it is important, especially when it is noted that 'actively researching' only received a mean score of 2.74. The secondary case study school, 'Hill Top High' (HTH), had used the Lesson Study model by the National Teacher Enquiry Network, now subsumed by the Teacher Development Trust but during the period of data collection (2016-17 academic year) favoured the use of individual research projects that all teaching staff had to conduct as part of their appraisal. Even though teachers researched their own topic individually, PD time was allocated to allow teachers to meet up and discuss progress. From interviewee, Ms Smyth, it appears that teachers having time to 'exchang[e] information about the research they were doing' is beneficial but no examples were found of collaborative practitioner enquiries, which researchers in the UK (e.g. Menter et al., 2011) and intranational research (Hardy et al., 2010; Barrera-Pedemonte, 2016) suggest are successful PD programmes.



### *Engaging with research*

After the top three PD activities, which do not necessarily fit into the research literacy model of engaging (critically) *with* and *in* research, the next seven are relatable to the first of these three layers. Beauchamp et al. (2013:8) detected 'a seeming devaluation of the overall place of research in teacher learning' and these survey data appear to corroborate this. Nelson and O'Beirn (2014:7) have proposed that 'a focus on the role of evidence should be strengthened amongst initial teacher training and CPD providers' and as TSs should 'spread high quality evidence' via their CPD courses (DfE, March 2016:39), it is interesting that the two case studies, both of teaching schools, illuminate different ways of enabling teachers to engage with research through their PD courses.

In HTH, it was witnessed that senior leaders engaged with research that was then cascaded to staff at their first INSET day of the 2016-17 academic year and through a voluntary fortnightly Journal Club hosted by Ms Egerton before school. This research engagement was not the case amongst other teachers, however. For example, at one research group, a teacher was exasperated at being encouraged, by Research Lead Ms Blyth, to find existing evidence on the topic she had already started her own trial on. There were, however, several other teachers who demonstrated their engagement with existing evidence when they volunteered to disseminate their research projects with colleagues at before-school seminars.

The Grange Primary Academy (GPA) hosted voluntary after-school research seminars delivered by academics and attended by teachers from surrounding schools. Evaluation surveys were issued at each session, from which 45 responses were obtained and analysed to provide an insight into the effect of attending seminars. The data indicate that engaging with research in this way was only having 'some impact' (67.4%) on practice even though 52.3% strongly agreed that the seminars were interesting. Ms Maguire revealed that she would like participating teachers to have the confidence to critique, with reference to their own experiences in the field, the evidence that is presented to them but this has not yet been achieved.

### *Engaging critically with research*

In addition to enquiring about the importance of being able to critique or review research (which only scored 2.83), the survey also asked respondents to rate their training and CPD in accessing, assessing and applying research findings (as on the former Newly Qualified Teachers Survey (NCTL, October 2015). Only 15.15% rate their training in assessing research to be 'very good', all of whom gave the same rating for their training in accessing research, suggesting that some teachers are not only enabled to engage with research but do so critically. This is not the case for all teachers, however, with almost a quarter of teachers surveyed believing their training in criticality to be 'poor'.

## Teachers' Perceptions and Practices of Research Literacy in Professional Development

Table 4. Cross-tabulation of training in accessing and assessing research

How would you rate your training/ Continuing Professional Development (CPD) in preparing you to access educational research to support your teaching?	How would you rate your training/ CPD in preparing you to assess the robustness of educational research?					No answer	Totals
	Very good	Good	Satisfactory	Poor	N/A		
Very good	15.15%	12.12%	1.52%	0.00%	0.00%	0.00%	28.79%
Good	0.00%	16.67%	13.64%	1.52%	1.52%	0.00%	33.33%
Satisfactory	0.00%	0.00%	13.64%	10.61%	1.52%	0.00%	25.76%
Poor	0.00%	0.00%	0.00%	12.12%	0.00%	0.00%	12.12%
N/A	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
No answer	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>Totals</b>	<b>15.15%</b>	<b>28.79%</b>	<b>28.79%</b>	<b>24.24%</b>	<b>3.03%</b>	<b>0.00%</b>	<b>100.00%</b>

What these data also show is that teachers find their training in how to access research better than their training in how to assess research, thus the goal of PD that enables teachers to be 'discerning consumers' (BERA-RSA, 2014:5) of research has not been achieved everywhere. At HTH's Research Lead training, Mr Langton was keen to emphasise the importance of criticality and repeated the need for a control group to 'prove' results, leading to participating teachers dismissing evidence not from randomised control trials (RCTs).

The only interviewee from the primary sector, Mr Harrison, told of how research is cascaded to schools from the local authority but that he is critical of their choices and supplements their suggestions with evidence that he has sourced. As head teacher, he cites the found evidence in documentation for staff and parents. It is his affiliations with universities, he believes, that has enabled him not only to access the research that is often behind a 'paywall' but also to be able to be discerning about the research sourced.

### *Engaging in research*

From the survey, it appears that engaging in (rather than being the subject of) research is not highly valued but the interview responses highlight a different perspective that could relate to school context. The perceptions of research in PD that were offered by the interviewees without being led by the researcher referred to *engaging in* research, in one case with the absence of any engagement *with* existing research. Whilst 'Ms Smyth' and 'Mr Pearson' had completed Master's degrees and spoke highly of the research support and opportunities that HE courses offered in both enabling the use of research and the production of their own research, 'Mr Phillotson' spoke proudly of the action research that all staff at his school practise and reiterated that it is not facilitated by HE. Rather than conducting research in an academic way, 'Mr Phillotson' emphasised that at his school, "no-one is expecting 50 pages" and it was more about personal development. There was no mention of this research being built upon existing theories or empirical work done elsewhere, which omits the first two 'foundation' layers of research literacy, which is condemned by Carter (2015) who noted that it is often seen in teacher education.

The current policy discourse in England favours RCTs (Goldacre, 2013), which implies teachers as consumers rather than producers of research despite Musset (2010) finding that, globally, teachers conducting their own enquiries is considered one of the three most effective

activities that could form PD. The Research Lead programme offered by HTH to teachers at alliance schools combined enquiry-based PD with the use of trials by training participants in the use of quantitative data gathered through their own trials using a control group. This can be seen as the privileging of positivism in research methods courses for teachers that was warned by Kincheloe (1991).

### **Discussion**

#### *Higher Education*

With research funding from the Education Endowment Foundation (EEF) being received by schools directly (Whitty et al., 2016), the role of academia in school research, seen in the past is diminishing. Mr Langton identified this opportunity for teachers to subvert university-based educational researchers, emphasising during HTH's first INSET day of the 2016-17 academic year that the EEF is funding schools directly rather than universities. This is in opposition to the School-based Research Consortium Initiative that did not 'merely transfer the locus of research to schools' (Simons et al. 2003:350) but fostered collaboration. Cordingley (2013) also concluded that collaboration with HE is key in her review on how research can contribute to CPD in teaching. She found that teachers collaborating not only with researchers but also with other teachers is evident in effective models. Punch and Oancea (2014) have also identified HE as an enabler of teacher research for professional development, advocating partnerships between researchers and practitioners as the starting point of educational research is often a problem or topic relating to practice. They also stated that even to understand and apply research findings requires training in research methods, which could come from HE. Interview data, however, reveal mixed views about the role of HE in research engagement. Whilst praising his own Master's course, 'Mr Pearson' acknowledged that HE input can actually be a barrier to teachers researching and told of a group of colleagues who spent a day in academia learning about research practices and "came back even more puzzled".

Rather than utilising HE for research facilitation, Mr Harrison told of how he is engaging in the research of academics, which he believes has helped him to be more research aware. Despite the island location of the school meaning there is no university in the vicinity, Mr Harrison has connections with three universities, which corroborates Cochran-Smith's (2016) assertion that when the university connection is strong, there is a 'researching disposition' (229) as Mr Harrison not only uses evidence but enables his teachers to conduct their own enquiries, an initiative that he attributes to his own experience of academic research at Master's level.

#### *School status*

The elements of research literacy can be possible in PD when there is the capacity for teachers to work autonomously on their own development (see, for example, Hulme and Cracknell, 2010) and this capacity is present in TSs which are said to benefit from HE involvement (NCTL, April 2014). Although the way in which teachers in HTH research their own practice is tightly controlled, they are free to be innovative with their chosen focus, which is something that other schools are not encouraged to do. For example, during an inter-school meeting chaired by Dr Wainwright about rolling out an intervention that had been trialled at HTH, a teacher from a local school mentioned that it is easier for a school like HTH to try something new as they are not 'under the cosh' of Ofsted, the regulatory body for education in England and Wales. Being a TS, too appears to enable PD programmes that incorporate elements of research literacy as demonstrated in an evaluation of the impact of TSs (NCTL, March 2014). Whilst the evaluation gave little attention to R&D as a separate endeavour, it applauded R&D in ITE, CPD and school-to-school support. One case study in the report

exemplified how R&D can form part of the PD of teachers within the TSA by enabling classroom-based action research to be conducted by teachers from different schools and the findings shared at conference. A similar scheme was present at HTH, although the findings shared at conference were just from their own teachers, with the exception of a collaborative project between Dr Wainwright and the head of science at the other lead TS in the TSA.

Similarly, a more detailed mixed-methods research report of TSAs drawing upon data from a national survey, case studies and secondary data from national performance and inspection results (NCTL, April 2014) found that the R&D element of the remit was not being fulfilled as a separate entity but was ubiquitous in ITE and CPD. This report only refers to teachers engaging *in* their own research projects rather than *with* existing research, though, meaning the evidence used to inform ITE and CPD is not peer reviewed etc.. As Brown and Zhang (2016) have noted, improvement strategies formulated by external others, rather than by evidence-informed teachers at TSs, are preferred by accountability bodies, making school leaders reluctant to subscribe to the teaching and learning developments formulated by teachers, even if they are, arguably, more 'contextually relevant' (783). The accountability framework, then can be seen as a barrier to the collaborative capabilities of TSs envisaged by Hargreaves (2012).

### Conclusions

This paper has presented data pertaining to PD that enables teachers to engage *with* research (whether critically or not) and/ or *in* research as proposed by the BERA-RSA 2014 enquiry but what has also emerged are the other valued practices that could enhance the use of research literacy for PD. Musset (2010) has asserted that it is teachers' perceptions of the impact of PD activities that influence their participation in them, so it is important to take these values into account. Similarly, Brown and Zhang (2016) assert that an evidence-informed practice (EIP) in teaching will only be achieved when 'practitioners both fundamentally believe in and engage in EIP' (794). The data indicate that collaboration is valued by teachers but there are no examples of teacher-researcher collaborations like that envisaged by Stenhouse (1975) whereby teachers are enabled to investigate their own practice by working with researchers as even Mr Harrison admitted that he is more of a participant than a co-researcher. The model of teacher-researcher collaborations could be mutually beneficial, too, according to Cochran-Smith and Lytle (1990). Though opportunities are now few, Winch et al. (2013) have looked further ahead and have proposed that the next step from partnerships in educational research would be for teachers to progress eventually to simultaneously teaching and researching. This goal is alluded to by Goldacre (2013), who saw one outcome of a 'two-way exchange between researchers and teachers' (14) being that teachers will learn acquire the skills to conduct their own research, which he narrow-mindedly refers to as a 'trial'.

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