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The challenge to professionals of using social media: teachers in England negotiating personal-professional identities

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Abstract

Social media are a group of technologies such as Twitter, Facebook and LinkedIn which offer people chances to interact with one another in new ways. Teachers, like other members of society, do not all use social media. Some avoid, some experiment with and others embrace social media enthusiastically. As a means of communication available to everyone in modern society, social media is challenging teachers, as other professionals in society, to decide whether to engage with these tools and, if so, on what basis – as an individual (personally), or as a teacher (professionally). Although teachers are guided by schools and codes of practice, teachers as individuals are left to decide whether and how to explore social media for either their own or their students' learning. This paper analyses evidence from interviews with 12 teachers from England about their use of social media as to the challenges they experience in relation to using the media as professional teachers. . Teachers are in society's spotlight in terms of examples of inappropriate use of social media but also under peer pressure to connect. This paper explores their agency in responding. The paper focuses on how teachers deal with tensions between their personal and professional use of social media. These tensions are not always perceived as negative and some teachers' accounts revealed a unity in their identities when using social media. The paper reflects on the implications of such teachers' identities in relation to the future of social media use in education.

Social media use; Teacher identity; Professionalism

1.0 Context and purpose

1.1 Teachers as members of society

Social media have come to pervade modern society. 'Social media', sometimes referred to as web 2.0 technologies, are a suite of tools and platforms which are "participatory, characterised by user-generated content and peer critiquing" (Conole, 2010, p142). These commonly include discussion forums, blogs, wikis, microblogging, podcasting and video sharing sites. Social media have been growing in prevalence and diversity since 1978 when the first bulletin board system was introduced in the United States, with an escalation of forms since the millennium (Page, 2012; Standage, 2013). Not all members of society engage with these media and those who do, engage to different degrees and for different purposes. There are reported generational differences in engagement with technology, more generally, and with social media, more specifically (Coupland, 1996; Hamblett & Deverson, 1964), which might be evidenced in a teaching population. This paper explores the impact of social media on the identity of English teachers.

1.2 Teachers and social media engagement

Social media offer members of society opportunities to interact with one another in new ways. Teachers, as other members of society, can engage in the online interactivity these tools afford either personally and/or professionally. They can use these tools to benefit them personally (growing a greater network of friends and connections) or professionally (as teachers for their own professional learning and/or for use with their students). Whether teachers think about these benefits separately or not will relate to whether they can merge their personal and professional identities. One of the features of our modern, technology-enhanced society is that multi-tasking is becoming normal across public and private parts of our lives, with societal pressures to continue working professionally in our previously personal times and spaces and to stay connected socially whilst at work (Turkle, 2011). Qualman (2012) talks about how social media are breaking down what he terms a 'social schizophrenia' in an individual's identity. By this he means that, pre-social media, a teacher could keep their non-school and schoolteacher identities separate and act in different ways in both settings. Qualman challenges us to accept that, if a teacher tries to behave in different ways within the virtual world offered by social media – with what he terms as both 'party and work personalities' (Qualman, 2012, p134), there can be consequences. Social media therefore bring challenges for teachers as well as potential benefits.

Teachers, as other professionals, have lost their jobs as a result of their social media activity or been exposed to bullying, affecting them beyond the workplace into their personal lives with examples in Australia (Stokes & Simos, 2012); the United States (Simpson, 2010) and the United Kingdom (Briggs, 2013). As well as responsibilities to themselves, teachers are additionally responsible for the pupils in their care. They will be aware of similar challenges from social media impacting pupils' lives, for example as captured in large-scale surveys of teenagers in the United States (Juvonen & Gross, 2008) and Canada (Li, 2006) and with studies exploring teachers' perceptions and awareness of such cyberbullying (Li, 2008; Yilmaz, 2010).

Public debate regarding educational uses of social media tends to focus on the ethical implications (eg. Forkosh-Baruch & Hershkovitz , 2014), including teachers' 'unprofessional' use of these media, leading to calls for national codes of conduct to be developed for the profession (e.g. Helleve et al., 2013; Edwards & Jones, 2009). Guidance about social media use is also being given to teachers through school policies and from Trade Unions (mostly in how to avoid negative consequences) – see Table 2. However, it is teachers as individuals who are deciding whether and how to explore social media for either their own or their students' learning.

Teachers might chose to keep separate identities to maintain their work-life balance, so affecting their use of and attitudes towards social media. Qualman (2012) asserts that there are also generational differences in attitudes to work-life balance, differences noted as part of the Variations in Teachers' Work, Lives, and their Effects on Pupils (VITAE) project (2001–2006) conducted with teachers in over 100 UK schools (Day et al., 2005; Day & Gu, 2008).

1.3 English teachers' use and attitudes to social media

A survey of 700 teachers and support staff across 23 schools in one English city (by a University-City Council project termed Digilit) looked at teachers' self-reported digital literacy confidence (Digilit, 2014), finding high levels of general confidence as well as confidence in terms of e-safety and online identity (in this case understanding applied to student use). However, there were lower levels of confidence reported in using digital technologies for; communication, collaboration and participation (which would include all forms of social media), and technology-supported professional development (again which could include the use of social media).

This paper focuses on teachers' use and attitudes to social media to explore the way such use connects with teacher identities, in particular tensions revealed between teachers' professional and personal identities in relation to such use. It draws on data collected in 2013 as part of a study of English school teachers. A survey of over 200 teachers in England was followed by interviews with a sample of survey respondents. The design and findings of the survey by questionnaire have been reported (Owen, Fox & Bird, 2015) but the interviews revealed interesting data in terms of teacher identity with respect to social media. Focus groups held prior to the survey had helped define categories of identity towards social media which were included as the last question of the questionnaire used to survey teachers. The last two columns of Table 1 show the self-reported responses to these categories. A slightly different set of categories were determined as a result of, first, factor and, then, cluster analysis (Owen et al, 2015). These identities took into account both reported use and attitudes towards social media. The spread of survey participants' identities using this analysis forms the first two columns of Table 1.

Table 1 here

Overall, the 217 respondents represented age groups between 20 and 65, with the 46-50 age group most represented and the 36-40 age group underrepresented. 71 per cent of the respondents were women. This data shows that, whilst teachers reveal a range of identities towards social media, teachers on the whole are more likely to call themselves social media enthusiasts and less likely to name themselves as 'conscious luddites' (a term arising from the focus groups), with a skew to younger teachers being more enthusiastic. From an initial analysis of the data collected from the 12 teachers interviewed narratives arose of how teachers were or were not engaging with social media and how this related to their identity as teachers. This paper focuses on the particularly interesting evidence of why teachers were not using/had stopped using social media as well as personal versus professional tensions of engaging with social media.

2.0 Conceptual framework

2.1 Social media and teachers' personal-professional identities

Being a professional, such as a school teacher, is a social and therefore cultural position. Being a professional in one of the caring professions (such as teaching, social work, counselling, medicine) includes an emotional investment and places particular social expectations of them, The VITAE project referred to earlier noted that 'there are unavoidable interrelationships between professional and personal identities, if only because the overwhelming evidence is that teaching demands significant personal investment' (Day & Gu, 2008, p250). These authors considered identity to cover three dimensions: professional, situated, and personal (Day et al., 2005).

- Professional identity reflecting the social and policy expectations of teachers.
- Situated identity referring to teachers working in a specific school and context, affected by local conditions
- Personal identity as linked to life outside school, through family and social connections.

In this paper *professional* identity is considered to cover both generic 'professional' and local 'situated' workplace-related identities, in contrast to the existence of *personal* (wholly social) identities. Identity therefore

relates to an individual's personal position but recognises that working as a professional occurs in a social and particular cultural context (Beijard et al., 2004; Leijen & Kullasep, 2013). A study of English school leaders (Fox, 2011) looked for evidence of identity building using Wenger's communities of practice model (Wenger, 1998) and found that teachers developed multiple identities simultaneously and dynamically; some relating to identities from beyond work, such as mother, musician, and others from within work, such as leader or teacher. Psychologists explain that the identity work individual teachers engage in when relating their personal to the social/cultural positions is negotiated through internal dialogue (Akkerman & Meyer, 2011; Hermans & Hermans-Konopka, 2010; Valsiner, 2001). Such psychologists explain that this involves individuals in making sense of social messages about expectations of them as professionals (by internalisation) and using these understandings to engage with society (by externalisation). These ideas are similar to the way Fox interpreted Wenger's model of identity development drawing on Sfard and Prusak's (Sfard & Prusak, 2005; Sfard, 2006) assertions of the necessary role of self-talk and talk with others. This personal-social/cultural dialogue helps explain the development of an individual's professional identity and is manifest through their use of cultural material and tools. Social media is a topical and interesting example of this, appearing as it has in teachers' lives both through being members of society as individuals and through opportunities to engage with it as professional teachers.

It is known from an international body of research that teachers, like other members of society, engage with social media such as blogs (Funkhauser & Mauser, 2013; Luehmann & Tinelli, 2008; Wood, 2012); Twitter (Forte et al., 2012; Lord & Lomicka, 2014; Minkee & Bulent, 2014) and Facebook (Hew, 2012; Hershkovitz et al., 2014; Manca and Ranieri, 2014). Some of this use is with their students (e.g. Hershkovitz et al., 2014) and some for their own learning (e.g. Manca & Ranieri, 2014). There is also a research interest in the online identity of teachers, for example in university contexts in Canada (Kimmons & Veletsianos, 2014; Veletsianos, 2013) and the United States (Richardson & Alsup, 2014). However, it is not the case that all teachers engage with or have positive attitudes towards social media (Owen et al., 2015). Little is known about how school teachers come across social media, whether personally or professionally, and, further, how they make sense of the use of social media as teachers (whether personally and/or professionally). This paper seeks to understand how these opportunities impact on teachers specifically, acknowledging the particularities of their professional work context.

2.2 The psychological notion of i-positions

One useful way of thinking about the relationship between social media and teachers' identity development is the psychological notion that an individual's self is a system of dynamic and fluctuating I (or identity)-positions. Each of these positions is affected by an individual's prior experiences, with each supplied with a 'voice'. It is not expected that the voices will always be harmonious: They might conflict with or enhance one another (Hermans, 2001; Hermans & Hermans-Konopka, 2010). The resolution of such identity tensions was evidenced, albeit using a different conceptual lens, in Fox's study of English school leaders' identity development (Fox, 2011) with reference to what Wenger termed the 'work of reconciliation' (Wenger, 1998, p160). The data collected for Fox's study were pre-social media. Since 2006, and the global spread of social media (Standage, 2013; Turkle, 2011), teachers, as others in society, are developing attitudes towards social media and deciding whether to engage with them or not. Researchers (e.g. Richardson & Alsup, 2014; Kimmons & Veletsianos, 2014) point to teachers holding a number of possible identity positions. A teacher might feel tempted to try to use social media a) if invited by their friends in their personal life, b) because they have heard of its use in the general media, c) because a colleague promotes the use of it for either professional learning or use as a pedagogical tool. Conversely, teachers might be anxious about using social media because of what they have heard socially or within the profession. They will be aware of the particular responsibilities they have to pupils, their families and to the community by working a caring profession and that this affects their decisions about social media use. Will teachers respond to these opportunities personally or professionally? And will tensions between i-positions be resolvable?

2.3 Negotiating teacher identity related to social media use

In the context of teacher education such identity work has been described as engaging in 'borderland discourses' (Alsup, 2006, p6) whereby a teacher will develop their professional self by making sense of personal beliefs, classroom practices and professional development experiences. There has been interesting empirical work carried out with training teachers about the resolution of teachers' conflicting i-positions (Leijen & Kullasep, 2013) and 'borderland discourses' (Alsup, 2006). These studies included spaces for externalising the dialogue (either through interviews or assignment tasks) towards helping teachers voice their internal identity positions. In Fox's study (Fox, 2011) interviews as discursive settings also contributed, inadvertently, to the identification and resolution of multiple identities held by the school leaders. It seems identity resolution can be assisted if it can involve others through dialogue (Hermans & Hermans-Jansen, 1995). There is a dearth of research into the identity resolution by teachers of their views on social media use

Helpful in thinking about this is research which links identity to online interaction (Herring, 2003; Jones, 2005; Page, 2012; Thurlow et al., 2004; Whiteman, 2009), exploring how identity is revealed through discourse. Such identity work takes place both off and online (Jones, 2005; Thurlow et al., 2004) and identities can overlap (Herring, 2003). Marwick (2010) goes further to state that any distinction between online and offline identities is no longer valid. Zimmerman's (1998) notion of transportable identities, those which an individual carries across multiple discourse situations, is helpful in framing thinking about the i-positions of teachers in relation to their social media use. This paper seeks to make a contribution to these understandings, highlighting the value of considering challenges and tensions between teachers' i-positions towards social media.

2.4 Cultural influences on teachers' positions towards social media

We note the need to consider a cultural dimension to teacher identity to acknowledge the cultural expectations of teachers (Beijard et al., 2004; Day et al., 2005). Cultural dialogue about teachers, education and social media takes place in a number of public spaces, as summarised in Table 2 below:

Table 2 here.

This activity around the relationship between social media and teachers can be categorised as:

- promotional (where social media enthusiasts champion social media and encourage others to engage with it);
- cautionary (highlighting issues for teachers and pupils whereby social media are attributed to having caused harm);
- advisory (providing codes of practice and guidance for teachers).

Sometimes such media and policy activity stimulates debate (BBC News Wales, 2010). Regulatory policy is generated, not only at a national and regional level, but also in individual schools, with some operating a 'lock down' policy on social media use (Clark, 2014; Herskovitz et al., 2014). The balance of messages to teachers is of caution. However, because teachers are also individuals exposed to social media in their wider life, such codes of practice and policy cannot dictate their personal use of social media, nor their attitudes towards it. Some will be aware of educational technologists promoting the use of social media both for teaching and for teachers' professional development. This leaves individual teachers needing to decide whether and how to engage as individuals, both personally and professionally, As noted earlier, teachers, at least in a recent English survey (reference to be supplied), hold a range of attitudes and levels of engagement with social media from those self-reporting themselves as 'conscious luddites' to the 'social media enthusiasts'.

3.0 The research questions

This study focused on understanding:

1. How do teachers report challenges to their use of social media personally or professionally?

2. What tensions are there between a teacher's personal and professional use of social media?

3. Do teachers resolve such tensions?

4.0 The research design

4.1 The study's overall design

This paper reports part of a larger sequential mixed methods study termed the Teachers' Use (and not use) of Social Media (TUSM) project supported by internal university funds. The particular focus of this paper relates to interview data collected after a wider questionnaire survey, to address the research questions above.

The study began with two focus groups (one held in London and the other in the Midlands) with 7 school teachers covering a range of school settings (including primary[1], secondary[2], pupil referral units[3] and consultant teachers[4]). These focus groups debated teachers' attitudes towards and use of social media in ways which contributed to the design of a 42 item questionnaire. This questionnaire was completed online by 217 teachers approached through contacts attending a University MA in Education programme and, more widely, through posting on a Times Educational Supplement (TES) online forum. The survey's design and findings are reported elsewhere (reference to be supplied).

4.2 The interview sample

As part of this questionnaire teachers were invited to be contacted to arrange an interview about their use and attitudes towards social media use. 15 teachers responded positively and it was possible to interview 12 of these teachers, covering primary, secondary and tertiary[5] education settings. Teachers mainly came from the Midlands and NorthWest of England. See Table 3 for information about the interview sample.

Table 3 here

The interview schedule (attached as Appendix 1) included asking teachers to construct a map of their personal networks (applying a tool used in other studies with teachers eg. Fox et al., 2007; Fox & Wilson, 2009), as well as asking them about their use, change in use and attitudes towards using social media for educational purposes. The interviews of about 60 minutes each, apart from shorter ones carried out in the NorthWest secondary school, were carried out by two interviewers in venues arranged by the interviewees, usually schools. The sixth-form interviews were carried out together with three respondents, each identified separately on transcripts. The interviews were recorded, transcribed and checked for accuracy.

4.3 Ethical considerations

The study design was appraised using a comprehensive ethical approval framework (Stutchbury & Fox, 2009) which ensured that British Educational Research Association guidance (BERA, 2011) was followed. All names and schools are anonymised to protect the identity of individuals who offered generous access to personal data, with participants offering their own pseudonyms. Participants were asked to read a letter to gain their informed consent and reminded of their rights at the start of the interview (see Appendix 1). Negotiating the most convenient time and space to conduct the interview was the highest priority for the researchers, prioritising relational ethical concerns (Flinders, 1992). This led to the ideal length and completeness of the interviews being compromised in two of the school situations. For volunteers without any immediate benefit to be gained from participating this was considered necessary to accept.

4.4 Data analysis

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[1] Primary schools teach children aged 4-11 years of age.
[2] Secondary schools teach children aged 11-16 (or 18) years of age.
[3] These units take children referred out of mainstream education.
[4] Teachers working across schools, usually self-employed.
[5] These are usually called sixth-form colleges or just colleges and take children from 16-18 years beyond the age of compulsory education.

Data analysis applied a coding frame pertaining to the purposes of the wider TUSM project, which chunked the data into useful categories for further analysis. These codes are summarised in Table 4.

Table 4 here

Mutually exclusive coding was conducted (with 'use with students' was subsumed within ' teacher use') using Atlas.ti™ qualitative data analysis software by both researchers involved in interviewing. One interview transcript was co-analysed blind and discussed, creating greater clarity about the meaning and scope of each code. In addition to the deductive approach to analysis, codes marked * in Table 4 were added inductively from the initial analysis to generate a more valid coding frame, which could be applied with greater reliability. 80% intercoder reliability was achieved on first coding of the sample transcript, increasing to 98% on second coding. Each researcher then analysed their own interview transcripts, generating a combined data set.

For this paper data pertaining to the code 'Teacher Use' was used to sub-analyse the i-positions represented by teachers in relation to social media use. This coded data included extracts of interviews from all 12 interviewees and was thought likely to contain the most pertinent data to addressing the research questions. Leijen and Kullasep's (2013) notion of personal versus professional i-positions were adapted to apply to teachers' social media connectivity.

Connectivity can be conceptualised by looking at the nature of an individual's networks (Lin, 1999; Nardi et al., 2000). One approach to the study of social networks is the application of social network analysis (International Network for Social Network Analysis, 2014). This has been used to explain school teacher connectivity in the United States (Baker-Doyle, 2011); Portugal (de Lima, 2007) and Canada (Deal et al., 2009). Sub-codes of both personal and professional identity were aligned with notions drawn from this field. Researchers applying social network analysis look for whether individuals gain: a) information, b) advice, from their network ties or whether they: c) collaborate or d) engage socially with one another (e.g. Hakkarainen et al., 2004). Although social network analysts generate quantitative data about such ties this study sought to use these categories qualitatively. This has been successfully used in relation to teachers' networking in previous studies (Carmichael, 2011; Fox & Wilson, 2009). Table 5 summarises the resulting coding frame: Gaining information (I1 and T1); advice (I2 and T2); collaboration (I3 and T4) and social engagement (I4).

Table 5 here

Whilst these social network categories appeared to encompass teachers' personal i-positions extra codes were needed for their professional positions to cover use of the tools with parents and students (codes T3 and T5). An additional code (for both personal and professional positions) was added for references to non-use or cessation of use. Such references were captured despite this data being coded as 'teacher use'. Deliberately trying to capture accounts of non-use formed part of the aspirations of the main TUSM study, accepting the importance of what can be learnt from what might otherwise easily have been missed. The coding frame was applied deductively by the first author, with checking by the second author.

4.5 Scope and limitations of the study

The survey data as noted earlier (see Tables 1 and 3) was able to capture the responses of a spectrum of teachers in relation to social media use and attitudes, not only those who considered themselves to be enthusiastic users. This had been an early concern of the recruitment as it was thought non-users might not wish to engage with research about social media. This diverse participation allowed us to collect data which reflected diverse i-positions. Due to the way informed consent was gained it was not possible to link interview to survey data, limiting retrospective analysis of each interviewee's fuller reported digital activity and attitudes.

Even for the interview data collected, this paper does report the full data around teachers' attitudes towards social media as it focused only on a subset of the data. The focus of this paper was on evidence for challenges to teachers' social media use (to address research question one) and, in particular, for any tensions between teachers' personal and professional i-positions (to address research questions two and three). This provides some

insight, however partial, into the intrapersonal dialogue undertaken by individual teachers as revealed from extracts of interview data from a small sample of teachers in England.

5.0 Overall patterns of teachers' i-positions in relation to social media use

All 12 teachers interviewed evidenced discussion about their use (or not use) of social media, as summarised in Table 6 in terms of the number of times the code 'teacher use' was applied. Although this provides an indication of the relative depth of discussion by different interviewees, there is little validity in the actual numeric values of incidences of the code. The extracts coded for each code were of different lengths (from 3- 30 lines of transcribed text) and, although were considered to have made discrete points, may have been coded as separate or merged extracts depending on the researcher's subjective view. Judith, Lara and Eric talked about their use much less than the three sixth-form teachers (Max, Belinda and Claire) and the two primary school teachers (Rosie and Jane).

Table 6 here

Lara and Eric were only able to make 30 minute interviews, which meant that the full interview schedule could not be followed. This partly explains the lower incidence of teacher use extracts as well as why data was not available in Table 3 for Lara's self-identification of social media identity.

5.1 Evidence of personal versus professional i-positions with respect to social media

From further analysis of the data set summarised in Table 6, using the coding frame presented in Table 5, the following spread of data representing single i-positions (ie. those which were not in tension with one another) were identified (see Table 7). Shorter and more focused sections of text were identified in this sub-analysis. Redundancy in the data was found within a transcript and so table 7 presents the numbers of teachers represented for each sub-code, rather than extract counts.

Table 7 here

The aims of the TUSM project had been explained to participants as reflecting on teachers' use of social media for educational purposes. Combined with the decision to use only the 'teacher use' coded data for this sub-analysis there may be a bias in the apparent predominance of discussions about teacher i-positions as professional rather than personal (see Table 7). This data set does reveal a diversity of i-positions, with all codes except 'personal use for gaining advice' (I2) represented. All teachers' referred to use (or non-use) of Facebook and/or Twitter, with additional reference made to LinkedIn (Blazer and Eric), forums (Blazer and Rosie), Google + and blogging (Jane). There is not space in this paper to report more fully the uses teachers' made and this is already a fertile area of international research as summarised earlier. However, the two under-researched and most interesting aspects of this data were in accounts of non-use/cessation of use of social media tools and the incidences of i-position tension between personal versus professional identities.

6.0 The findings: teachers' personal and professional i-positions in relation to social media use

6.1 Evidence of teachers' non-use of social media: eight vignettes

Non-use of social media sites is restricted to a limited body of research, mainly with adolescents (eg. Hargittai, 2008; Baker & White, 2011 in Australia and Turan, Tinmaz, & Göktasi, 2013 in Turkey). These studies identify factors such as with whom they lived and their internet access. Explanations for non-use include: lack of motivation, inefficient use of time, preference for other modes of communication, offline social activity, online safety concerns and their dislike of online self-representation (Baker & White, 2011). Explanations for those stopping Facebook use in Turkey included that it was considered dangerous, meaningless and artificial (Turan et al., 2013). An American survey of a wider age range of respondents found high proportions of Facebook users stopped use temporarily with a significant proportion leaving Facebook permanently (Rainie et al., 2013). Additional explanations cited were a negative impact from others' posts, boredom, the absence of a reason to connect, health, age and religious barriers. A study of Turkish pre-service teachers identified over 200 who had

either temporarily or permanently stopped using Facebook (Dindar & Akbulut, 2014) confirmed concerns around: online privacy, the inefficient use of time and disliking self-representation. These pre-service teachers reported feeling pressurised by their peers. Interestingly, these pre-service teachers reported stopping social media tools altogether, rather than moving to alternative tools.

In our study, discussions about stopping use or not using social media were not restricted to those identified as 'conscious luddites'. All teachers had tried more than one social media tool: Six spoke about their disengagement in terms of their personal and three in terms of their professional use. We offer vignettes of the eight teachers' i-positions who reported *non-use.*

Blazer, the self-reported 'conscious luddite', talked about how he had registered for LinkedIn to find a particular contact for someone (personally) but then withdrew when he began to get many email alerts. It 'just led to filling my inbox with loads of people offering me jobs and stuff…and I thought that's not for me' (extract 2:6). He also registered for and withdrew from Twitter, describing it as 'full of nonsense. I almost think it's like electronic Tourette's' (extract 2:13), concluding that he had never used Facebook as he 'didn't see the need' (extract 2:3). He therefore didn't use these social media personally or professionally. He did however use professional forums. The forums offered Blazer a way to connect with other teachers about aspects of teaching and education he felt passionate about. As an experienced teacher he reflected that he was offering professional advice rather than gathering information. These contributions were recognised by the TES, who hosted the forums, by sending him books in thanks. The forums spawned into offline face-to-face meets in the Midlands region to which he took his wife. He reported these to be social (personal) rather than necessarily professional, although based on shared interests in and vision for their profession. This offers evidence of the transportability of identities from online to offline contexts linked to ideas by Zimmerman (1998) and Marwich (2010). In Blazer's case there was no distinction.

Eric reported that he had accounts with various platforms but used social media little either personally or professionally. As a teacher he preferred to connect with other teachers and students through face-to-face conference events and video sharing as part of a web platform run by the school. He concluded 'I'm not au fait with it, but I'm aware it's there…but it's not a major part of my professional life' (extract 6:18). His comments indicate a choice not to engage, not through lack of awareness, but rather a lack of appreciation of any potential value to him as a teacher. He, however, did not self-identify himself as a 'sceptic' (see Table 3).

Judith, a Science teacher and self-identified 'sceptic', confessed that, although she had a Twitter account and followed a number of scientists she didn't use this information and considered this activity personal. She concluded that as a result of her experience of a personal use of Twitter 'I have no intention of tweeting' (extract 3:11) because, as a teacher, 'You've got to be very careful about what you tweet, haven't you? It's got to be something bland, something non-contentious…I don't want anything I've said being out there. It's quite bad enough knowing if you've sent an email they might forward it to someone else' (extract 3:12). Judith's thoughts connect with what has been termed 'the persistence of data', reported to be a phenomenon society are becoming increasingly aware of in terms of information posted on social media and the internet more generally (Turkle, 2011, p259). Teachers are particularly sensitised to this in response to social media scandals involving teachers internationally as well as in the UK (eg. Briggs, 2013; Scott, 2014).

Winter, another Science teacher and 'cautious user' explained that 'if I need to contact one of [my contacts] I've occasionally sent an email via LinkedIn, but I don't really understand what LinkedIn does…The contacts that I've got are people that have contacted me. I've not bothered trying to make contacts' (extract 5:32). However, she used Twitter regularly to inform her teaching, as she described - for 'science knowledge'. Winter did not perceive that she used Twitter for her own professional learning, referring instead to doing 'a lot of reading of books and research still for that, thanks to my gold Masters training' (extract 5:38). This conflicts with the provocative statements about social media engagement leading to the demise of books made by those debating the impact of increasing social networking and as reported by Turkle (2011, p338) and dramatized by teenagers (Film Collective, 2012).

Rosie, a primary school teacher who classed herself as an 'enthusiast', particularly in her personal life, concluded, when asked about the role of social media in her professional learning, that 'it's a shame because…I'm sure other people have found it more valuable, perhaps there's a world out there of using it for a professional basis that I don't know about that I could probably benefit from' (extract 4: 60). This was despite her use of TES forums The school had a Facebook and Twitter account but, even thought she was the ICT co-ordinator, she did not contribute to this as posting was restricted to the senior leadership team. Rosie did use blogging with her pupils, aware that she was unable to use other social media tools with children under the age of 13. She was clear how this had allowed them to make connections with other schools that otherwise would have been difficult. However, and despite her engagement socially with a wide range of others through Facebook, she did not see the potential for social media to help her learn professionally.

The **sixth form teachers** all used Twitter in their teaching with students. However their engagement with social media was limited to microblogging. They were not as confident users of other social media platforms. For example Max could not remember that Claire had friended him on Facebook, showing that Facebook was not an active means of communication between them. They also discussed Google +. Max concluded that '[Google] forced me to use, set up Google Plus when I set up the YouTube thing, which was a real pain' (extract 1:31), with Belinda agreeing that 'Yes I don't understand the passwords' and Claire summing up that she was 'a fan of all things Google by and large, but Google Plus doesn't seem to offer anything…and so I've ignored it' (extract 1:31). As with Rosie, they could see opportunities to use social media in their teaching but did not see this as informing their professional learning. These findings are in contrast with other research on teachers developing vibrant communities through Twitter use, for example by Forte et al. (2012) in the United States. Forte and colleagues also reported that teachers who used Twitter tend to be enthusiastic adopters of technologies in their teaching. This was so for the sixth form teachers interviewed in our study.

6.2 Tensions between personal and professional i-positions

The evidence for tensions between personal and professional i-positions are summarised in Table 8. Interestingly these tensions were not always seen negatively, with some considered synergistically. The tensions are therefore categorised into negative as opposed to positive implications of the tension. Opposing implications can be manifest in the same teacher.

Table 8 here

6.2.1 Synergies between personal and professional identities

Comfort in inhabiting social media spaces both personally and professionally?

There was some, although limited, evidence (eg. the Science teacher Winter) that Twitter offers a social media space which teachers can inhabit both professional and personally. Evidence from the wider survey (reference to be supplied) concluded that, of the 40% of teachers surveyed reporting using social media professionally, two thirds referred to this relating to Twitter rather than Facebook use. Winter was a teacher whose predominant interest in using Twitter was to gather information to inform her subject knowledge and to ensure her sixth-form science teaching was up-to-date. She did not use it with her students. Whilst using Twitter professionally she sometimes responded personally in response to issues she felt strongly about as an individual, for example badger culling and charity work. Interestingly, it was only with this personal i-position that she would post and share links, even though the issues were science-related. 'I'm really interested in a technology where you use eye movements to communicate…it's something I have done quite a bit of fundraising for and then I have got some of my friends that have followed me' (extract 5: 21). Posting using a personal i-position contrasts with the sixth-form teachers Max, Belinda and Claire who only posted professionally, using Twitter to lead their students to resources to help them prepare for face-to-face sessions. As noted earlier, although connected with one another via Twitter, they did not use these (or the other social media tools they engaged with) to socialise. Rosie too, using Facebook, showed some comfort in including both friends and colleagues 'I am friends with some people I do work with…that's sort of bridging [personal and professional] isn't it…There are two colleagues I

would class as a friend. 'Friend' as I would in my personal life' (extract 4: 20). However, as discussed later there are tensions in classing colleagues as 'friends'.

Pre-service teacher identity development

Jane offered a narrative of using social media to transition into teaching, including her recruitment into the profession. She notes this on her network map reporting named 'Googlers' as 'They're all people that I've followed whilst I was thinking of going into teaching, some of the main people that influenced me in thinking about it…they've got me into teaching exclamation mark' (extract 10:18). She also reported social media as vital for her support in the first year of teaching citing 'The first year is really tough and I think I would've really struggled without social media' (extract 10:33). She reported the value of connecting beyond one school, in her case a primary school 'you can get quite quickly very isolated…and you don't always look outside to see what practices are going on…Twitter has been amazing for resources, ideas, for connections with people, for inspiration and encouragement to keep going' (extract 10:33). These connections allowed her to develop a sense of belonging to the wider profession rather than just one school as a workplace. This matches studies of identity development in teacher education contexts (eg. Alsup, 2006; Leijen & Kullasep, 2013). Alsup might refer to Jane's use of social media, which became focused on Twitter, as opportunities for 'borderland discourse' towards developing an explicit teacher identity (Alsup, 2006, p6). Unlike Alsup and colleagues' work as teacher educators, Jane shows that such identity work can be driven by individuals rather than being associated with initial teacher education provision. The benefits of gaining support from personal networks extending beyond formally-offered support are reported in international studies of training and in-post teachers (le Cornu, 2013; Baker-Doyle, 2011). The above positive account is despite the narrative that Jane moved from a very active social media network presence in her work prior to training as a teacher to something much more limited and focused once in post, as discussed later.

On-line linking to off-line activity

Teachers can use social media to enhance their offline connectivity. That identity work is carried out in both off and online contexts is accepted by some authors (Jones, 2005; Thurlow et al., 2004) with an acceptance that this might (Herring, 2003) or will (Marwick, 2010) merge any distinction between on and offline identities. Even without social media the personal and professional i-positions relating to meeting teachers outside of the formal work context will challenge them to consider merging i-positions. In such situations do teachers consider themselves to be interacting with colleagues as colleagues (professionally) or as friends (personally) or are there only some colleagues they meet they would consider as friends? In face-to-face situations no-one asks us to identify what relationship we have to others. This is tacit, unspoken and may even not be understood in the same way by both actors in any one relationship. In contrast, social media name our relationships with others. Facebook requests that you accept 'friends' into your social network, ignore their requests to join or 'unfriend' them if you change your mind. Others, like Twitter rely on you choosing to 'follow' others or, like LinkedIn, make and accept invitations to join your network without using such personal language or the expectations 'friendship' might entail (Turkle, 2011).

This study revealed that teachers make a range of decisions about whether to invite colleagues into their social networks or not. Rosie offers a positive example of this when she reported she was happy to invite ex-colleagues into her current network so mixing colleagues who wouldn't normally otherwise meet as some are physically distant. Rosie saw this as a way of keeping current what had been strong and highly valued relationships (Carmichael et al., 2006). These colleagues she had known offline and now continued to keep in touch with online, presumably holding the same mixture of personal-professional i-position towards them. This is an example of Nardi et al. (2000)'s assertion that, to use personal networks effectively, network links need maintenance, increasing our chances of reactivating such relationships should the need (or opportunity) arise. An alternative strategy is to manage different groups of friends and colleagues using different social media platforms, like Jane; 'When I was working before, Facebook was just friends and family and there were a few colleagues in there. Twitter was almost entirely professional and then Google+ was a different group of people that were professional…In the last few months the odd professional page has slipped into my Facebook stream' (extract 10:23). She tried to represent on her network map the complexity of her online activity and the

relationship with her offline life. Jane, as also the sixth-form teachers Max, Belinda and Claire, talked about even dividing their activity within Twitter between different accounts and then using software, such as Tweetdeck[TM], to manage the multiple feeds. Using multiple platforms and operating sub-groups are strategies noted by Frampton & Child (2013) as allowing individuals to manage their privacy. From our conceptual perspective this can be explained by holding concurrently different i-positions. Having different accounts allows the potential for different identities to be acted out. In Max, Belinda and Claire's situations these were always as a teacher, using different accounts with different classes. As with Rosie, these online relationships were all related to offline relationships; in their case with students and in-school colleagues. Conversely Jane's online professional activity was not always with people she had physically met.

The blurring of personal versus professional i-positions is one which is not limited to engagement through social media but is a value judgement teachers will make about all colleagues. However, if all the friends in a social network are professionals then the interactions will take place in this (professional) context. This might be argued to create something like a community of practice (Wenger, 1998) as the participation takes place between professionals. The participants may well discuss and develop their practice, drawing on an increasingly shared repertoire of tools and practices (important criteria of communities of practice), but they do not necessarily share a set of goals/clear purpose. Social networks are much more democratic and diverse than such communities.

Whilst online activity may grow from an offline context, some online activity can also extend offline. Blazer, who was an active contributor to forums run by the TES, referred to the way local offline social occasions were organised; 'we've taken the virtual environment her back to reality, we have regular meets once or twice a year …at a pub…somebody would suggest a date and a venue and then people would just sign up' (extract 2:31). Blazer described these as purely social, such that he took his wife. However, as noted before, the context for the discussions would all operate within the context of the group meeting as teachers. Jane too referred to offline 'Teachmeets' resulting from her Twitter activity. In these situations personal and professional i-positions merge, evidencing the potential transportability of identities from online to offline contexts (Marwich, 2010; Zimmerman, 1998).

6.2.2 Unresolved tensions between personal and professional identities

Peer pressure

Although Winter was generally comfortable occupying both personal and professional i-positions when engaging with Twitter she did note that 'I have four friends on Twitter who have found me and befriended me and they've felt like I should follow them back, which is silly isn't it, but I did' (extract 5:21). This was echoed by Rosie within Facebook 'I do have other members of staff who are friends but only because we work together, if that makes sense…I've only done if because it's professional courtesy to be friends with them' (extract 4:20). This points to the peer pressure teachers can feel as to how they should connect in these public spaces, most keenly felt when a colleague makes a request to become connected. This poses a possible privacy dilemma for the teacher (Dindar & Akbulat, 2014; Frampton & Child, 2013). Rosie shows a sense of frustration between her personal i-position to create a social network of 'friends' and her professional i-position to meet the expectations of her local professional culture. This culture is being unsettled by the online possibilities. Rosie concludes 'I should be able to say I don't want to be friends with them but you've got to kind of get that balance…because I work with them (extract 4: 36).

Rosie made two responses to the tensions she perceived in relation to her Facebook use. The first, in line with reports from other studies (eg. Child et al., 2011; Frampton & Child, 2013), was to assert greater control by limiting what she revealed on her pages and her activity 'I generally don't post a lot myself, mainly because I have people on there who are colleagues who I don't necessarily see as a friend…I tend to use it to catch up with what everybody else is doing rather than promote what I am doing' (extract 4:36). The second was to cull or 'unfriend' members of her Facebook network. This meant taking positive action (Turkle, 2011). This Rosie did for both colleagues and friends, needing to decide on criteria on which to base these culls. Rosie reviewed whether she would interact with them offline and as a friend and, if not, she considered that they were only in

her network to be 'nosy' and so unfriended them. This made Rosie re-evaluate the connections she made between online and offline i-positions. 'I think the people who know me and know anything about me I would tell anyway…it doesn't now become my only method of communicating with people' (extract 4:38). Rosie shows high levels of public-private self-awareness and associated self-monitoring skills (Frampton & Child, 2013). She also points to possible issues in the future when ex-pupils might invite her into their networks, noting that this would be difficult to decide upon. Her identity would no longer be as a current teacher, although she would still feel some sense of a professional i-position towards interacting with them.

The omnipresence of social media has been charged as causing members of society a loss of control over whether, with whom and when to communicate (Turkle, 2011). Our study shows evidence that teachers are aware of these pressures and can make conscious decisions on how to respond. This depends on their preferences for interacting with teachers as colleagues as well as how prepared they are to invite teacher professionals into their personal lives.

Privacy

Privacy was an undercurrent to issues teachers needed to resolve when deciding whether, how, when and with whom to connect through social media. Privacy is of primary concern when teachers decide whether to connect with their students or not. This is something that is often banned in English schools (eg. Clark, 2014), and this was referred to by Rosie and Jane. However, Max, Belinda and Claire show how it is possible to use social media effectively with students. Rosie is already worried about what will happen as her primary aged children leave school and want to connect with her. Winter talked about how difficult it is in a rural school community not to connect with ex-pupils and parents despite her school guidance which bans such connectivity. Nearly two thirds of Israeli secondary school teachers surveyed reported wanting to connect with their students. These views are responding to a softening of the Israeli ban on teachers using social media originally introduced in 2011(Hershkovitz Forush et al., 2014). Connecting with parents as friends also need great caution from teachers as, although this may be implicitly social, the view of the parent will no doubt also relate to them as teachers therefore denying the teacher control over whether they take a personal or professional i-position. None of the teachers in this study reported connecting with parents on social media.

Privacy issues also affect whether, how and when teachers interact with one another, as discussed above in relation to peer pressure. One of the issues may be that, as members of the same organization, there is the danger that information shared could be used in surveillance (Frampton & Child, 2011; Smith & Kidder, 2010). Understanding human behaviours towards information disclosure is an emerging field with recent studies with undergraduates in the United States (Chen, 2013) and of Facebook users in Australia (Tow et al., 2010). Studies about people's perceived risk when engaging on the internet (Baek et al., 2013 in South Korea; Cho et al., 2010 in Singapore) conclude that adults, at least in these contexts, have an optimistic outlook to their online privacy risks, underestimating risks. These conclusions do not seem particularly valid for teachers who, as outlined earlier (see Table 2), are affected by the high profile media coverage of examples of inappropriate social media use by teachers. Surveys in England have found that teachers feel highly sensitized to issues of privacy and the importance of e-safety (Digilit, 2014; Owen et al., 2015), not only in terms of teaching this to the children in their care, but also through local codes of practice of how to use social media with parents and pupils. It is less clear how empowered teachers feel in managing their engagement with their peers in ways that allow them control over privacy. Nigel concluded that he saw potential in using social media for his own professional learning but '…there are lots of issues and problems with it and so it is having something that is safe and just about education. Currently there is no clear line to distinguish it' (extract 2: 10).

Motivation to connect

A third dimension to tensions reported by teachers in using social media across personal and professional i-positions relates to motivations to connect. Studies of Facebook use from the United States (Baek et al., 2011) and Canada (Ross et al., 2009) found differential motivations towards its use, although with self-representation (posting data about oneself) as predominant. This was not something that was observed in our data. In fact it has been shown how privacy concerns see teachers limiting the disclosure of information. Teachers reported

motivations for non-use as being too busy to engage due to their already heavy workload. This was exemplified even by enthusiast Jane who explained that she had minimised her activity since become a teacher 'Google+ has gone…I can't maintain another network…between Facebook and Twitter, well if you watched a graph it has plummeted. If I post twice a day I am doing well' (extract 10:13). Even managing several accounts within Twitter were now becoming too busy and Jane reported that her closest professional friends were now moving to Facebook spaces, where she would devote most of her attention (drawn from extract 10:28).

Teachers also reported a lack of perceived usefulness of social media tools. Even though teachers had tried a range of social media tools, teachers like Blazer and Eric had unregistered or, like Max, Belinda and Claire, were inactive. Others limited their use to receiving information eg. Judith and Winter or restricting engagement to reading and downloading eg. Rosie rather than commenting or offering information. There was an awareness of other teachers' greater motivation to participate. Rosie reflects 'it's great that they feel they can interact with other people they don't know in the same profession in that way…but I haven't personally. I don't feel the need' (extract 4.65).

7.0 Discussion and conclusions

7.1 Societal expectations of teachers' (and other employees') use of social media

This study revealed some of the expectations of teachers, as members of the wider English society, in terms of their pressure to engage with social media. This has affected them both personally and professionally. Turkle (2011) termed the modern culture as 'always on' (p151), with multitasking as a new cultural phenomenon. For professionals an unspoken tension has emerged between whether, how, when and with whom to engage using social media and on what basis these connections and interactions are being made – whether as an individual (personally) or as a teacher (professionally). Thinking about the psychological work of holding different i-positions has been helpful in shedding insights into teachers' reported behaviours (in terms of internalisation and externalisation processes). Whilst indicating the wider setting of a teacher's personal networks and the role of social networking within these, this paper has focused on non-use and tensions between personal and professional i-positions. This paper has focused only on a small-sample of teachers, It is not known without a broader, comparable study how similar or different teachers are to other professionals.

Teachers, as other professionals, work in modern technology-rich societies where it is easy to be sociable but are left vulnerable in terms of how to perform as professionals (Turkle, 2011; Qualman, 2012). For teachers, advice is increasingly being provided by unions, government agencies (see Table 2) and the schools in which teachers are employed. Most of this advice calls for conservativism and avoidance of using social media. However, Hershkovitz et al. (2014) agree that societies need to accept, not only the inevitable rise in social media useage, but also the increasing evidence for it to offer benefits for teachers and, therefore, pupils. More constructive guidance on professional social media etiquette is now needed which takes account of the tensions noted in studies such as this. Teachers have already developed different attitudes towards social media and its benefits and challenges (eg. Owen et al., 2015). This paper offers evidence for the different 'internalised' and then 'externalised' responses teachers make to such expectations (Hermans & Hermans-Konopka, 2010; Valsiner, 2001). For example comparing teachers such as Jane and Blazer. Jane, who has an active online network in which she consciously operates different sub-networks with different groups of contacts, and Blazer, who has eschewed social media other than national professional forums, and who has turned even these online communities into offline networks.

The teachers in this English study in 2013 referred to a limited number of social media tools (principally Twitter, Facebook and Forums with, to a lesser degree blogs, LinkedIn and Google+). Their accounts revealed how different tools offered different opportunities for connectivity, with some more open and some more closed. After experiencing the tools teachers make decisions:Some; changed tool (eg. Jane); changed the way they used the tool (e.g. Rosie); created sub-groups within a tool (eg. Jane, Max, Belinda and Claire) or unregistered (eg. Blazer). Most of the teachers in this study, apart from Jane, were not clear enough as to how to use such tools safely and comfortably to benefit from their potential to inform professional development. Even Jane had, since moving into the teaching profession, not been able to find time-efficient ways to use the tools effectively.

This leaves us with the question as to how to protect busy professionals, in particular teachers who are engaged in face-to-face activities for the bulk of a working day, from the increasing pressure to connect for professional purposes beyond the working day and workplace. Although not evidenced in this study teachers may even feel ashamed, as Turkle (2011) reports for working parents, to admit the pressure they feel of work impinging on their personal spaces and times. The societal pressure to do so is increasing at such speed that the teaching profession, as a profession, does not seem able to keep pace and offer evidence-based advice for teachers. The findings from the surge of social media-related research from fields of psychology, educational research and computer science, as exemplified in work cited in this paper, need to be brought together to inform professional bodies and policymakers.

7.2 Teacher agency in social media use

Based on the evidence reported in this paper such advice and support for teachers should cover issues of how to think about peer pressure and privacy. Together with a stronger advocation of the benefits of using social media as a professional, such discourse might increase motivation to use it. Teachers might need encouragement to reflect on whether to separate personal from professional identities or work to reconcile their i-positions. Although there was evidence from this study that it was possible to gain synergies from merging i-positions (for example Winter and Blazer), most teachers reported feeling safest by dividing their use of social media. This is not perhaps surprising given the particular pressures teachers feel from society. There are also decisions to be made about i-positions in relation to offline and online connectivity (Thurlow et al., 2004; Marwick, 2010). Blazer, for example, was able to enhance his online forum activity by helping organise and attending offline social events. This meant that his professional identity became merged comfortably with his personal, in ways which he felt in control of. This offline networking of teachers may again be because they feel safe to offer views without them being made public such that they might be vulnerable to repercussions in the future.

The teachers' accounts in this paper demonstrate that individuals are exerting control over their connectivity and hence a sense of agency, through 'externalisation' of expectations of them (Hermans & Hermans-Konopka, 2010; Valsiner, 2001). Thinking with teachers about the identities (or i-positions) they hold when interacting in social networks can be helpful, especially in recognising the importance of context both externally and locally to the expression of these identities (Beijard et al., 2013; Day et al., 2005). Teachers need to be empowered to become self-aware and socially-aware such that all teachers can develop the high level of self-monitoring skills advocated by Frampton & Child (2013) and evidenced by teachers in this study such as Rosie and Jane. This may see them overcoming their sense of vulnerability and using social media more productively.

7.3 The role of discourse in identity development

Whilst Table 2 summarised the spaces for debate about teachers' use of social media, there is very little explicit effort to hear teachers' perspectives in these public debates. At the moment individual teachers are developing their own social media behaviours, involving themselves in psychological identity work. It would be helpful to have support for this and, if it is agreed that discourse is important to identity development (Alsup, 2006; Fox, 2011; Page, 2012; Sfard & Prusak, 2005), spaces for discourse between teachers are needed. Reflecting the range of teachers' current use (and not use), spaces need to be located beyond social media, both off and online. A Finnish ethnographic study of one secondary school showed that debate between teachers and teachers with students (Kupiainen, 2013) developed a community of practice working towards greater technological self-awareness and practices. Parents would also be important to include in such discussions. Perhaps such school communities working to develop a response to the increasingly digital and connected age might better be described as communities of learners (Levine, 2010).

7.4 Concluding comments: The future

If we accept the real and pervasive 'persistence of data' (Turkle, 2011, p259) from social media use, teachers, as those with a particular status in society in terms of their responsibilities to young people and their parents/carers, need to be upskilled and supported in how to capitalise on rather than be negatively affected by their digital footprints. Whilst the negative impact of social media use has led to teachers not being encouraged to harness

social media for their own learning some, as individuals, will continue to experiment covertly. This is therefore not a profession taking a proactive and strategic view to the value of social media for educational purposes. Given the issues raised in this paper, teachers need educating and reassuring. On the one hand teachers could be introduced to the spaces they could populate to explore whether these can be used to expand their sense of belonging to the profession. This would allow teachers to develop a clear sense of how they might open up new avenues 'for resources, ideas, for connections with people, for inspiration and encouragement (Jane, extract 10:33) through expanding their personal learning networks (Tobin, 1998). On the other hand they need supporting in how to operate safely. This extends what they already teach to their students to their own professional learning in ways in which the overarching message is not necessarily to avoid the tools. It would be interesting to know how others in caring professions, such as social workers, counsellors and medics, have responded to similar societal pressures to see what lessons these professions have to offer to teachers and the teaching profession. This would be a fruitful further line of inquiry.

8.0 References

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Appendix 1: Interview schedule

1. Agree interviewee happy to be audio recorded and that the network map about to be produced can be used for analysis. Remind interviewee that participation is voluntary and data can be withdrawn before analysis.A transcript will be generated of the portion of the interview to be used as data and will be returned to the participant for any comments/amendments. Ask for a preferred pseudonym to be used and confirm that the school will only be mentioned by type and region.

2. On the piece of paper provided ask interviewee to represent with whom and how they communicate with others as part of their professional life ie. anyone (could be individuals, groups or organisations) with whom they learn, discuss, share ideas about teaching, learning and being a teaching professional. As they are drawing ask them to talk through their thinking, referring to the emerging map in a way which will help us connect the audio with the document where relevant.

3. Start by asking them to represent with whom they collect but explain that we are also interested in knowing the modes of communication, ie. whether face-to-face, phone, or various other virtual methods of communication. Ask them to identify which parts of their network connect via social media such as Twitter, Facebook (FB), LinkedIn etc.

4. When this is mainly complete ask the following questions:

   a) Explain how you think about the use of social media personally and professionally?

   b) Identify what have been the influences on how you connect using social media, ideally with examples that are relevant to your professional use of these media.

   c) Reflect on how your use of social media has changed, in particular as it affects your professional life.

   d) How would you summarise the role of social media in your professional learning, compared to other learning opportunities?

   e) Would you classify yourself as a social media enthusiast/sceptic/conscious luddite or other category of user for professional learning?

Prompts:

If users of FB/Twitter check approx. numbers of friends/follows/followers

If they have begun to categorise their map, suggest that they add a key

Ensure that any new sources/modes of communication offered during the questions are added to the map