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Citation: Warnock, Christopher (2017) #FramingFragmentsofThought - Exploring the Role of Social Media, in Developing Emergent Reflective Practitioners in Initial Teacher Training. Journal of the European Teacher Education Network, 12. pp. 84-95. ISSN 2183-2234

Published by: Instituto Politecnico de Viana do Castelo

URL: <https://etenjournal.com/2020/02/07/framingfragment...>  
<<https://etenjournal.com/2020/02/07/framingfragmentsofthought-exploring-the-role-of-social-media-in-developing-emergent-reflective-practitioners-in-initial-teacher-training/>>

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# **#FramingFragmentsofThought - Exploring the Role of Social Media, in Developing Emergent Reflective Practitioners in Initial Teacher Training**

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## **Abstract**

*#framingfragmentsofthought* considers the changing dynamic of teacher education and the relevance of digital pedagogical changes in course instruction. It explores Initial Teacher Training (ITT) undergraduates' propensity to reflect upon professional practice through utilising social media networks [specifically *Twitter*] as a professional learning and/or teaching tool. It explores whether collaboration in the social network [acting as a community of practice] enables reflective discourse and analysis of professional practice with emergent practitioners in ITT and whether this instigates pedagogical change.

*Key words:* Twitter, tacit, emancipatory, reflective, social

## **Context**

Initial Teacher Training (ITT) is charged with a distinct dichotomy. Enhancing student engagement with both the science and art of teaching, through consideration of educational pedagogy and/or practice in order to develop emergent reflective practitioners. This composite involves practitioners working professionally [both individually and collaboratively] on agreed facets of pedagogy and/or practice [content], in shared reflection [through collaboration and conversation] to learn from each other in a supportive environment. This notion of establishing the fully reflective practitioner is explored by Moore (1999, p. 127) who asserts that, "such reflection involves...drawing on the range of strategies and techniques one has at one's own disposal, or developing new ones...selectively, flexibly and strategically".

Traditionally, effective teachers would consider themselves to be reflective practitioners, reliant upon and learning from their own experiences in the profession (Hargreaves 1996); however, the critical thinking necessary for Moore's (1999) true reflective analysis and appraisal of ideas indeed provides a challenge to ITT. This pilot study considers whether social media [specifically *Twitter*] offers strategic opportunities to develop the learning arena beyond the classroom. Fostering skills by essentially suggesting alternative interactions, via a supportive environment. This provides opportunities for collegial collaboration and reflection upon agreed facets of pedagogy and/or practice, enabling students to learn from one another to further their understanding.

Despite social media being considered a recent research area suited to a descriptive approach which Porterfield and Cairns (2012) argue is an important and powerful tool [which when harnessed correctly, enhances communication and professional development] worthy of an analytical, explanatory approach via its relationship with how and/or why it impacts upon

learning (Punch, 2006). Social media is about relationship building and Twitter could and perhaps should be seen as a professional learning technology; a tool to enhance teaching and/or learning. It is one which allows for the sharing and discussion of information/ideas with people you may not know (Northumbria University, 2012), in a shared learning community which consents to the layering of “a formal education engagement” on top (Wiliam, 2009, Pearson, 2012). Subsequently the intention was to explore how the integration of online learning alongside traditional classroom learning facilitates opportunities for students to engage more readily and collaboratively in reflection, analysis and appraisal of professional practice - thereby creating the space to capture *#fragmentsofthought* in their embryonic state, in order to challenge ITT students’ capacity, confidence and competence to analyse and reflect upon aspects of professional practice. These half-finished remarks of 140 characters or less [that are not meaningful outside of the context in which they occur] present a cadence, enforcing brevity and a clarity of thought in their description, debate and/or explanation of the views expressed. Paradoxically, this offers the added opportunity to develop professional practice via refinement of individuals’ writing skills through the dedication necessary for it to work (Miles, 2012, Pearson, 2012, Porterfield and Cairns, 2012; Uusiautti and Maata, 2014). This provided an opportunity to bypass the interactional asymmetry oft-prevalent in student/teacher praxis [whereby what is routine for one participant is not so for the other] often resulting in asymmetries of power and status, impairing the dynamic and resulting in a passivity of recipient response to expert talk (Gavruseva, 1995; MacClure, 2003). This presents an opportunity to challenge the assumption that the asymmetrical discussion led by the single-expert voice to engender the input of a diversity of opinion and personal perspective is best (Veletsianos, 2011). It looks instead to conceptualise “online environments as ‘safe spaces’ where power relationships are altered, informal speech can be used and ideas are unrestricted” (Prestridge, 2014, p. 103). This acted as the point of departure for the study and provides the opportunity to follow Straczynski’s (1997) maxim of ensuring you “begin at the end...and end at the beginning”.

## **Reflective Practitioners and Thinking Teachers**

Prestridge (2014, p. 104) presented a “paradigm that enables the researcher to gain deeper insights into the types of interactions students engage in when using Twitter”. It is this approach that is replicated here by considering the “interchange of tweets, the content of the tweets” (Ibid, p. 105) as opposed to their frequency. Subsequently by beginning with the end in mind, (Straczynski, 1997) the desired direction and destination (Covey, 2004) conceptualises the what, how and why of the study (Punch, 2006). Subsequently we are able to explore ITT students’ ability to reflect upon, analyse and critically appraise practice, in order to consider whether engagement with social media [specifically *Twitter*] enhances reflection upon knowledge and/or practice. In essence, the purpose of this pilot study was to explore the potential for social media [specifically *Twitter*], in offer an alternative arena for emergent practitioners in ITT to reflect upon professional practice. It considered the following:

- What are the [potential] challenges and/or possibilities of the role of social media [specifically *Twitter*] in Initial Teacher Training?
- How can engagement with social media [specifically *Twitter*] facilitate and/or enhance emergent practitioners’ analysis and reflection of professional practice?
- Why [and to what extent] can engagement with social media [specifically *Twitter*] as a professional teaching and/or learning tool enhances ITT students’ capacity, confidence and competence to reflect upon and analyse professional practice?

## Methodology

Prestridge (2014) looked specifically at students' use of Twitter. She considered the causal links between tweeting and learning, whereby "tweets can be constructed to express an idea, paraphrase or critique a concept, provide a level of discourse in a virtual space that supports dialogue occurring face-to-face" (Sweeney, 2012 in Prestridge, 2014, p. 101). Veletsianos (2011) however approached this differently; looking inwards towards HE scholars and the numerous ways in which they engaged in participatory practices on Twitter. He noted that "Crawford (2009) characterised Twitter as consisting of a 'stream of multi-layered information'" (Ibid, p. 4), with functionality and potential for learning originating in its participatory connectivity - thereby allowing a user to interact and collaborate with other users on an agreed topic of conversation, or simply 'follow' the conversations of others.

This dictated that the proposed design followed a qualitative investigation, via a single case study of a focus group (Robson, 2002) comprising of 14 ITT students, self-selected from the accessible population. This study adopted a similar approach as Prestridge (2014, p. 105); who "did not provide any technical training as this was considered assumed knowledge and if technical support was required, students were encouraged to help each other which is in keeping with the development of a learning community" that the participatory focus group will form. Participants were facilitated to interact with others, share ideas via a single collaborative discussion through the online learning arena and begin to co-construct reflective knowledge. The task presented to the researcher was to enable refinement of the meaning and knowledge shared so that a new found clarity and cadence to the responses became evident; driven in part by the learning environment and interaction within it (Guba and Lincoln, 1994, Prestridge, 2014). This because "Twitter users post messages, 'tweets', read by users who follow that person or use the same Twitter hashtag" (Anderson, 2011 in Prestridge 2014, p. 102) which allows users to "generate a constant transparent stream of user defined data" (Murphy and Salomone, 2012, p. 74).

For the purpose of the study a single one hour #conversation was conducted within Twitter, at the mid-point of a taught module as a pilot exercise. The scenario created focused specifically upon the module assessment (the use of assessment for learning strategies in teaching practice) and provided the content for reflection upon what had been learnt. Participants were asked to consider an agreed aspect of pedagogy directly related to the module assessment responding to a conversation initiated by the participant researcher through the initial tweet: 'What does assessment for learning mean to you?' This contained an identified # ["the Twitter practice of adding the # symbol in front of a keyword" (Veletsianos, 2011, p. 7)]. The focus group participated in the ongoing discussion [for the agreed one hour interval] based upon the subject matter of this initial tweet. Participants were instructed to include the relevant # in their tweets, so as to ensure that all members could follow the conversation and so that recording of the full conversation stream could be facilitated through a Twitterwall. This allowed for the collection of all the tweeted comments (229 in total) which formed the data set, aiding subsequent coding and thematic analysis. The data set was coded against a constant comparative analysis, whereby the design has sought to take this opportunity to harness and facilitate learning; extending students' reflective thinking (Hungerford-Kresser et-al. 2014) via the collaborative simulation in the online arena (Bovill et-al. 2011). Prestridge (2014) noted that the students' tweets; demonstrated content across a hierarchical scale which presupposes that "levels of reflective thinking were distinguished ranging from no reflective thinking to describing learning content without explanation, to reflecting for future applications...in different contexts" (Lu and Churchill, 2012, p. 404). Here we sought to broaden the taxonomy of reflective thinking

identified by Lu and Churchill (2014) and Prestridge (2014) to draw parallels with HE assessment criterion and rely on the following intervals of reflective thought: none, description (the what...), analysis (the how...), evaluation (the why...) of ideas. Due to the early-stage nature of the participants' practice, synthesis of ideas was not considered in this pilot study. These were coded for a thematic content analysis in order to characterise hierarchical levels of reflective learning cognition (Jonassen et-al, 2003) in the data and subsequent analysis.

It was anticipated that these practitioner tweets would take the form of [predominantly] descriptive and/or analytical primary qualitative data, drawn from personal practice reflections in response to the initial tweet, but also secondary data in the form of pedagogical suggestions drawn from other/wider sources to help participants strengthen, validate, critique and/or synthesise a given point. In addition, the participant researcher acted as a knowledgeable mentor or 'boundary spanner' (Jonassen, 1999; Goodyear et- al. 2014) by facilitating, guiding and stimulating the Twitterfall, where necessary, and throughout the reflective discussion at pre-determined intervals with the following tweets: 'How do you use assessment for learning strategies?' and 'Why do you use assessment for learning strategies?' In principle, this approach mirrored module seminars by involving practitioners working together, collaborating upon an agreed facet of pedagogy, to allow shared reflection upon the tacit and explicit expertise explored and learn in an alternative supportive environment (Bush & Tiwana, 2005).

The addendum here is to consider whether adapting the 'flexibility' and 'agility' offered by Twitter, essentially an "expertise sharing network" (Murphy and Salomone, 2012, p. 72), acts as a teaching and/or learning tool which provides the added value of the multi-layered nature of this environment; placing social media as an "apposite tool through which educators can blend formal and informal learning experiences" (Hoyer et-al, 2010, in Donlan, 2012, p. 3). It is this blended perspective that provides the interest from a research perspective as this "requires students to engage in self-regulated learning" (Prestridge, 2014, p. 102), which is perhaps a more complex process and vital for professional practice in education. It requires the participant to draw upon Deuze's (2006) notion of bricolage to remix, reconstruct ideas through changing the arena for reflection "to create new insights or meanings" (Deuze, 2006 p. 15, in Mihailidis, 2014, p. 2).

### **[The What] - Social Media in Higher Education (HE)**

Whilst the "phenomenal growth in the use of social media...has dramatically and irreversibly changed the way individuals communicate and interact with one another (Rowe, 2014, p. 241)...researchers have looked to better understand and develop how participation in social media networks can impact upon learning" (Kirschner and Karpinski, 2010 in Veletsianos, 2011). The consideration is whether "participatory internet technologies may offer expanded opportunities...for professional endeavours, transforming the ways academics engage in teaching and research" (Greenhow et-al. 2009; Katz, 2010, in Veletsianos, 2011, p. 1) with Veletsianos (2011), Prestridge (2012) and Donlan (2012, p. 3) believing that it is this developing relationship between participatory technologies and scholarship which offers countless opportunities to transform learning practices.

Raacke and Bonds-Raacke (2013) noted that Goode and Caicedo (2010) and Badge et-al. (2012), found social media networks to positively influence students' active engagement with and collaboration upon learning practices which Donlan (2012, p. 3) presents as allowing for the linear approach to learning to be superseded to encourage greater "active student participation (Maloney, 2007) in the co-creation and co-construction of knowledge (Gunawardena et-al. 2009)." Despite this Coddington (2010 in Veletsianos, 2011) found social

media application in HE to be narrow, with the perception being that it is “in its infancy” (Betnus, 2012 in Prestridge, 2014, p. 103). This is perhaps due to Veletsianos’ (2011) regard that the organisational and delivery structures of HE are perhaps barriers to this compatibility, with Donlan (2012) considering that “while there has been some exploration of the use of social networking sites in an academic context (Estes, 2010; Madge et-al. 2009; Selwyn, 2009)...there is still much to explore in relation to the use of social networking...in higher education contexts” (Donlan, 2012, p. 2). Despite this, Murphy and Salomone (2012, p. 81) acknowledge “the use of social media platforms such as...Twitter by educators increases student engagement, promotes a deeper sense of community, enhances collaborative learning and facilitates a higher degree of student-to-student and student-to-teacher interactions (Luo and Gao, 2012; Sheriff, 2012)”. Subsequently, efficiently fostering meaningful student engagement in this new learning arena remains key to its success (Carey, 2013 in Uusiautti and Maata, 2014).

Consequently the intention here was to “explore how social media operates as a communicative space...to support” (Goodyear et-al. 2014, p. 3) the “lowering of the doorstep” (Uusiautti and Maata, 2014, p. 300) so to speak and enable students to engage more readily in their learning. Social media not only becomes a vehicle to consider pedagogical learning, but by accepting the challenge to educators (Donlan, 2012) also the arena for the kind of professional learning we are looking to engender. It presupposes, as with Prestridge (2014) and Lu and Churchill (2012, p. 404) that “levels of reflective thinking were distinguished ranging from no reflective thinking to describing learning content without explanation, to reflecting for future application...in different contexts” (Lu and Churchill, 2012, p. 404). However in looking to harness the way ITT students communicate and interact, any discussion and/or analysis needs to consider whether students are really connected (Raacke and Bonds-Raacke, 2013; Rowe, 2014). Subsequently Murphy and Salomone (2012, p. 80) consider the notion of user-readiness as “another important issue...to consider in implementing social media technology” where it is the technical skills of the user (Goodyear et-al. 2014) alongside the readiness, willingness and propensity to utilise the tools of the arena that will lead to its success. It should be noted that the participants here did self-select to engage with the study; and although drawn from the accessible population, represented less than 10% of this. It therefore stands to reason that this simple and random selection criteria (Punch, 2006) led to a small focus group of participants who demonstrated a proclivity towards social media use thus impacting upon the validity of findings.

Subsequently it was observed that, all participants readily engaged but to differing degrees of involvement; with @Student1 (21%) and @Student7 (22%) demonstrating the highest frequency of contribution to the discussion. There was clear evidence that social media offered a platform for the sharing of knowledge, as all participants were able to share initial ideas around the topic of interest. However, as approximately a quarter of tweets could be considered descriptive in nature, there is as Prestridge (2014, p. 110) considers. “evidence here of a frustrated response to learner-interface interaction which could be based on the restrictions imposed by tweets – 140 character limit – and by the lack of other sensory input that restricts the flow of conversation through digital communication tools”. We need to look to the data to challenge this hypothesis; and although a quarter of the contributions were descriptive in form, there was a sustained flow to the conversation evident in the regular interactions between participants that demonstrated the participatory nature of the process positively influencing active engagement and collaboration (Raacke and Bonds-Raacke, 2013).

However at the outset of the process this was restricted to direct responses to the researcher, where “students rarely kept conversation going past the required post and subsequent response”

(Hungerford-Kresser et-al, p. 2014, p. 6), as opposed to sustained conversation. While, towards the end of the process @Student7's engagement moved away from interactions within the Community of Practice (CoP), predominantly seeking the help of more knowledgeable others from the expanded audience (Veletsianos, 2011). External to the process and "thinking about this in a different way, Twitter illuminated what content students were having trouble with, which could inform future practices" (Prestridge, 2014, p. 112). Despite this there is sufficient evidence in the data to demonstrate the potential for further exploration of how the communicative space can facilitate opportunities to blend professional learning through social interaction, collaboration and peer support (Donlan, 2012; Murphy and Salomone, 2012; Veletsianos, 2011), leading at the very least towards the "sharing of resources...and knowledge building" (Lu and Churchill, 2012, p. 401).

### **[The How] Facilitating (Engagement in) Reflective Discourse and Analysis**

It is the pedagogical applications for social media that pose the interest, drawing upon communities of practice (Lave and Wenger, 1991; Goodyear et-al. 2014) and participatory networks note that "individuals participating on Twitter...create their own...unique networks in which learning occurs" (Veletsianos, 2011, p. 2). Hungerford- Kresser et-al (2014, p. 4) however draw upon Alcaez-Salariche et-al. (2011, p. 549) who argue "that digital pedagogies, while becoming commonplace in university classrooms are often 'used without reflection.'"; this is perhaps because the "interaction and content are more free-flowing and therefore more difficult to control" (Veletsianos, 2013 in Prestridge, 2014, p. 102).

Prestridge (2014) meanwhile looked at how universities adopt such digital pedagogies to increase students' engagement with reflective learning, hypothesising that Twitter specifically can be utilised to facilitate the generation, acquisition, construction and transfer of knowledge. Prestridge's (2014, p. 101) initial findings indicated "that student- initiated interaction supported by instructor use of participatory pedagogies enabled substantive dialogue through Twitter and that paraphrasing was the most common way students made learning active" - harnessing engagement in this dynamic interaction therefore is of crucial importance. Despite this Prestridge (2014, p. 102) noted that this was limited to individual interactions and the lack of participatory engagement leads to a "call for a move to more innovative, authentic pedagogies" (Ibid, p. 102) that consider how students conceptualise social media to support their learning and "will affect how it is used" (Ibid, p. 104). Put simply ensuring that we are engaging and "enabling students to be active learners...interact with course content and to support their sense of academic culture is a defining characteristic of education" (Moore, 2009, in Prestridge, 2014, p. 109) remaining central to any such innovation. Thus the argument naturally follows that engendering motivation, drawing upon the idea of leverage, as advocated by Rosen (2010) in Goodyear et-al. (2014) presents the opportunity to facilitate collaborative learning that engages participants in higher order reflective skills to go beyond descriptive thought: analysing, evaluating and synthesising learning.

Prestridge (2014, p. 102) sought to take participation 'beyond the walled garden' of learning management systems [such as eLPs] prompting a teacher-centered pedagogy, to social networks where "interaction is the central activity (Mott, 2010)" (Ibid, p. 102). In accordance with Brading et-al (2010) she notes that here the process of engagement with knowledge and content shifts as the students initiate the discussion. It can be argued that every classroom is a socially networked space that presents this opportunity, but the appropriation and repurposing of Twitter "for educational and scholarly endeavours" (Veletsianos, 2011, p. 2) provides a networked space [that exists beyond the walled garden of a Virtual learning Environment] to

further facilitate student centered discourse via enhanced social presence and participation (Prestridge, 2014) in the network. In this context, “Twitter serves as an emerging and evolving network of scholar-learners where scholarly practices, may be created, refined, performed, discussed and negotiated” (Veletsianos, 2011, p. 2), which allows the interactional asymmetry oft-prevalent in student/teacher praxis noted above (Gavruseva, 1995; MacClure, 2003) to be bypassed.

However, Lu and Churchill (2012, p. 413) noted that “high levels of cognitive engagement were not demonstrated in social interactions”; considering whether this could be because online social networks are exactly what they are defined as social spaces and not cognitive spaces. They discovered that “the social interaction provoked...was individual-centered and asymmetrical” (Lu and Churchill, 2012, p. 413), requiring us to question whether we are trying to force repurposing upon online social networks for our own means. In considering this challenge; Murphy and Salomone (2012) look towards tacit knowledge as the kind of knowledge that is difficult to facilitate opportunities for effective transfer to another person by means of writing it down or verbalising it. They acknowledge that this “differs substantially from explicit knowledge, which is both easily explained and codified (Hansen et-al. 1999). They suppose that the nature of this tacit knowledge means that it may need to be modified to facilitate transfer” (Bundred 2006, in Murphy and Salomone, 2012, p. 71) and to ensure efficient collaboration with explicit knowledge to engender accurate construction in another. The challenge here is to consider whether Twitter provides a “mechanism for interaction...that facilitates tacit knowledge transfer through both socialisation and internalisation” (Ibid, p. 74) and offers the deeper reflective thinking via the nuanced reading and paraphrased writing (Prestridge, 2014; Veletsianos, 2011) necessary to traverse this supposition. Thus it allows educators to apply this rhetoric to manage pedagogical knowledge transfer. This in turn “makes thinking conscious and builds students’ metacognitive skills” (Prestridge, 2014, p. 109) to enable sustained changes in practice.

It is important to note here that 43% of the tweets in the #conversation could be considered analytical in nature, with all but one participant demonstrating a greater frequency of analytical commentary than of descriptive. What was particularly noticeable was the limited input necessary from the researcher (4%). Initially it was thought that the participant researcher would act as a ‘boundary spanner’ facilitating, guiding and stimulating the Twitterfall throughout the reflective discussion. However as the Twitterfall expanded; the ideas quickly ‘snowballed’ as the participants created something that was “free-flowing and therefore more difficult to control” (Veletsianos, 2013 in Prestridge, 2014, p. 102), causing the researcher to move at two speeds during the course of the Twitterfall, judging tweets and beginning conversations (Goodyear et- al. 2014). Thus interactional asymmetry was removed as the participants initiated their own discussions (Prestridge, 2014) in a network of their own creation, where as noted by Veletsianos (2011) learning, although embryonic, was occurring.

However if as acknowledged by Lu and Churchill, (2012, p. 402) in coordinating and facilitating learning, “active participation is essential”, then the more individual contributions of @Student8 warrant consideration. @Student8 did not actively interact with the other participants in a cohesive CoP, opting instead to lurk and observe, perhaps being motivated differently to that of the other participants (Lu and Churchill, 2012). This subsequently reinforces how students conceptualise social media to support their learning to “affect how it is used” (Prestridge, 2014, p. 104) and the impact it can have. Subsequently if as identified by Carini and Klein, 2006; Pintrich and De Groot, 1990 (In Lu and Churchill, 2012, p. 402), “learning engagement can positively affect the achievement of learning outcomes”, then it

would be of interest to compare the academic outcomes of the participants in the end of module assessment, against their individual grade profiles, “with the assumption being that the engaged students would perform better due to their desire to question ideas” (Ibid, p. 402).

It is more difficult here to judge to whether this process has provided a “mechanism for interaction...that facilitates tacit knowledge transfer” (Murphy and Salomone, 2012, p. 74). The pilot nature of this study prevent valid claims to be made that the socialisation and internalisation inherent in the study offers deeper reflective thinking (Prestridge, 2014; Veletsianos, 2011), to justify knowledge transfer in this manner and enable sustained changes in practice.

### **[The Why] Professional Practice and Pedagogical Change**

In Prestridge’s study (2014, p. 106) “Twitter was implemented to support the development of a learning community...a Community of Practice (Wenger, 1998)”. In adapting it as such she acknowledged the educational potential offered in promoting engagement and interaction via the participatory network. Prestridge (2014) reveals a “pedagogical shift towards a constructivist paradigm, of enabling critique, collaboration and co-construction of knowledge where learners engage in ‘knowledge construction, not reproduction and co-construction; re-conception, not repetition; collaboration, not competition; reflection, not prescription’” (Jonasson et-al. 2003, p. 15) – it is this that is key to establishing pedagogical change through subsequent application and synthesis in professional practice.

If we are ‘thinking like a practitioner’ it should be noted that the viewpoint of the student should be regarded as the starting point, and “often they seem to have barriers to beginning to see themselves as teachers” (Hungerford-Kresser et-al. 2014, p. 12). Subsequent reflection upon teaching episodes provides the context (the how), as outlined above, the purpose (the why): linked to this, it offers students the opportunity for pedagogical change by considering “their past educational experiences and how they might go about doing things differently in their future classrooms” (Ibid, p. 12). This is because we cannot underappreciate the need to begin “to think like a practitioner” but ultimately, “it becomes important that students learn to access and critically interrogate their own social constructions” (Ibid, p. 12-14), in order to take ownership of their learning (Bovill, 2011).

In looking towards the students’ ability to evaluate ideas discussed [the assumption being that the higher order nature of this skill leads to increased confidence and competence to reflect upon professional practice] it should be noted that 20% of the conversation was regarded as evaluative in nature. Specifically within this analysis of @Student 1 (42%) and @Student3’s (54) responses demonstrate a greater proportion of evaluative commentary than analytical response. This approach, similar to Goodyear et-al.’s (2014, p. 8) study where the participant researcher “had developed a level of ‘Social Capital’, and a subsequent level of ‘trust’...on Twitter”; led to students interacting in the topic of interest enjoying “an advanced degree of importance through this association” (Ibid, p. 8). This idea can of course be similarly applied to participants in the process who are perceived by other participants to be more knowledgeable students – whereby interaction with them is appreciated and enhances an individual’s social capital. With this in mind it is important to note the frequency of interaction that all participants look to engender with @Student 1 (21) and @Student3 (13) who were our students with the greatest propensity towards evaluative comment. The majority of these interactions were analytical or evaluative (73%). Which in nature, suggests an ability to mobilise others to engender behaviour change by association and potentially reinforces subsequent changes in

individuals' practice (Goodyear et-al. 2014; Hungerford-Kresser et-al. 2014; Uusiautti and Maatta, 2014).

## Conclusions

Corresponding with Prestridge's (2014) findings, it was thought that although there was potential for the facilitation of ideas and knowledge building between student small-talk outside of classrooms – substantive reflective and evaluative thinking were not always observed in the results. However this proposes educational benefits for students through emerging practices such as “sharing of resources, enhancing motivation and facilitating reflection, social interaction and knowledge building” (Lu and Churchill, 2012, p. 401), observed in the data. In-line with Lu and Churchill (2012, p. 403) the consideration for whether the study could be taken further notes that all participants in the study “gave feedback on peers' work, shared resources, asked questions and exchanged ideas” pointing towards, at the very least, a possible role for social media in ITT, advocating that engagement with such an arena has the potential to enhance a range of professional practices and is worthy of further investigation.

Veletsianos (2011, p. 11) agrees with this supposition, but warns those looking to harness this potential that “tools such as twitter are not neutral. In fact they have their intended uses, purposes and practices...for instance, the ease with which individuals can follow and remain updated on the activities, thoughts, resources and...enables awareness of others' work, possibly aiding multidisciplinary thinking or introduction to ideas outside of their own domain”. This presents both the challenge and the possibility inherent in this idea, but what remains unsubstantiated and requires further exploration is how to channel student engagement to facilitate worthwhile analysis and reflection of professional practice. The leverage offered by the established medium is a starting point, but if we are to see social media [specifically *Twitter*] as a professional teaching and/or learning tool the challenge is clear to those who warn of the impact of such initiatives in HE practices (Mihailidis, 2014) and their contribution to professional learning.

However, to paraphrase Veletsianos' (2011, p. 3) observation, although social media demonstrates the “potential to transform numerous facets of learning, teaching and research (Greenhow et-al. 2009; Oblinger, 2010), these opportunities cannot be realised without a deep understanding” of how students participate in and experience social networks. Deep understanding of such unintended learning outcomes (Biggs and Tang, 2011) warrants further exploration alongside Bourdieu's (1996, in Uusiautti and Maatta, 2014) notion of social capital. The participatory nature of the established CoP offers comprehensive review of the collaborative learning evident in the established network. This is established through the sort of participatory matrices utilised by Lu and Churchill (2014, p. 477) in their models of social network interactions documenting the frequency and form of interactions between participants and through analysis of the clustering and density of the interactions (Lu and Churchill, 2014). Subsequently it is this commentary that is the key enabler here and provides the testing ground for the measure of the metacognitive process of reflection; which can be viewed in hierarchical layers in the style akin to Bloom's Taxonomy, drawing upon trigger verbs indicative of levels of reflection. However this requires further thought upon how to validly assess reflections (Brown, 2004) through further study which permits for the opportunity for the raising of the stakes by hunting assumptions and reflecting on the tacit knowledge essential to the sort of critical thinking reflective and reflexive practice (Brookfield, 1995; Dewey, 1933; and Schon

1983; in Finlay, 2008).

If this supposition is, as anticipated, confirmed then it is essential to acknowledge that the following guiding principle remains: to consider whether the collegiate environment of the ‘Teacher Learning Community’ built within a social network acts as a strength (Robson, 2002, Wiliam, 2009) and provides insight into the genuine interactions present between participants. This allows one to record not only what is and what could be, but also what may be (Schofield, 1990), and perhaps what should be. Which enables us to focus on Veletsianos’ (2011, p. 7) seven themes of scholars’ participation and practices on Twitter and looking at “expanding learning opportunities beyond the confines of the classroom”. Not simply seeking to simply make the outer edge of the classroom available to all, but by providing “opportunities for students to interact with individuals outside of the classroom” (Ibid, p. 7), we seek opportunities to go beyond the rim (Straczynski, 1997) of reflection upon cumulative experiences and to allow knowledge acquired to develop and refine practice. Simply because, “sometimes it's those short pertinent comments that make all the difference” (Walker, 2015).

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