An analysis of teacher professionalism, in light of personal learning networks and an online habitus

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Abstract

Discourses on teacher professionalism illustrate its contested nature, and professional traits or paradigms are heavily influenced by ongoing tensions between managerialism and teacher autonomy. Yet, a singular class teacher habitus commonly features across discourses, which directly links the mindset of teachers to paid work in physical locations, for example sites of schooling, with notions of professional autonomy clearly constructed in terms of the relationship between teacher and student. In recent years, many teachers have engaged extensively with new work, online, away from sites of schooling. The literature relies on the computer network metaphor to explain the new relationships, spaces and data arising from what some connectivists and others have termed 'personal learning networks' (PLNs). In identifying themselves as teachers and working around selected educational key words and concepts, these professionals are creating knowledge, identities, and social and other capital. However, online PLNs are not sites of public discourse, as access and participation are restricted by cultural codes and methods of artifact creation. Teachers online may find that, similar to their work in sites of schooling, performativity may offer them individual rewards, at the same time drawing them from micro-level generativity, to macro-level envisioning of change. The existence of PLNs raises two questions. Firstly, should we broaden teacher habitus to recognise new professional values, actions, commitments, capacities, skills, impact and collaboration, where activity in PLNs does not involve clients, stakeholders and colleagues from physical work locations? Secondly, how might we reconceptualise online work so that in future, discourses on teacher professionalism recognise teachers' work across multiple sites, yet retain a singular teacher habitus? The lack of criticality and empirical grounding in the literature on PLNs must also be addressed, in order for our conceptualisations of the varied work of teachers to move beyond narrow theories of e-learning.

Keywords: teacher professionalism, personal learning network, habitus, managerialism, social capital, connectivism

Profesionalismul dascălilor din punctul de vedere al reţelelor de învăţare personală şi al habitusului online

Rezumat

Discursurile ce privesc profesionalismul meseriei de dascăl ilustrează natura sa conflictuală, şi trăsăturile sau paradigmele profesionale sunt puternic influenţate de disputa dintre managerialism şi conceptul de autonomie profesorală. Însă, discursurile profesionalismului dascălilor se concentrează asupra unui singur habitus de clasă, ceea ce leagă mentalitatea dascălilor de munca plătită în anumite locaţii fizice, şi anume spaţiile şcolare. O altă conexiune ar fi între profesionalism şi noţiuni de autonomie profesională bazată pe relaţia dintre profesor şi elev/student.

Recent, tot mai mulţi profesori s-au implicat extensiv în noi activităţi educaţionale, online, departe de spaţiul educaţional tradiţional. Literatura de specialitate se bazează pe metafora reţelei sociale pentru a explica noile spaţii şi date care iau naştere din ceea ce specialiştii au numit reţele de învăţare personală (sau „personal learning networks", PLN). Prin faptul că dascălii se identifică ca atare şi activează în jurul unor anumite cuvinte cheie şi a unor concepte, aceşti profesionişti creează cunoaştere, identităţi şi capital social. Aceste reţele de învăţare personală, însă, nu sunt spaţii ale unui discurs public, deoarece accesul şi participarea sunt restricţionate de coduri culturale şi de metode de creaţie.

Online, dascălii pot afla că, în mod asemănător lucrului în spaţiile tradiţionale de educaţie, este posibil ca performativitatea să aducă răsplăţi individuale, dar în acelaşi timp poate încuraja dascălii atrăgându-i de la generativitatea micro-individuală la un nivel de unde se pot implementa schimbări.

Existenţa reţelelor de învăţare personală ridică două întrebări. În primul rând, ar trebui oare să lărgim habitusul educaţional pentru a recunoaşte noi valori profesionale, acţiuni, angajamente, capacităţi, deprinderi, impact şi colaborări, unde activitatea în cadrul reţelei de învăţare personală nu include clienţi, părţi interesate şi colegi de la locul fizic de muncă?

În al doilea rând, cum am putea regândi lucrul online astfel ca în viitor discursurile referitoare la profesionalismul dascălilor să recunoască activitatea dascălilor pe multiple situri, şi în acelaşi timp să rămână un habitus unitar?

Lipsa unei baze critice şi empirice în literatura care studiază reţelele de învăţare personală trebuie de asemenea remediată pentru ca cercetarea diferitelor activităţi ale dascălilor să depăşească teoriile limitate ale e-learning-ului.

Cuvinte-cheie: profesionalismul dascălilor, reţea de învăţare personală, habitus, managerialism, capital social, conectivism

BIOGRAPHICAL DETAILS

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INTRODUCTION

For teachers with an online personal learning network (PLN), freedom exists to move beyond the singular occupation, role or identity, and yet remain identifiable as a teacher. PLNs consist of loose interactions (Wilson, 2008), and fluid and weak spaces, sources of data, and relationships (Haythornthwaite, 2000). Interrogating online PLNs enable us to see the existence of *multiple* teacher habituses, and I will show how both notions now influence discourses on professionalism, having previously been unrecognised. This has implications for the future conceptualisation of teachers' work, learning, collegiality, and accountability.

By teacher habitus, I mean the structure of teachers' minds; incorporating schema, dispositions and modes of work (Bourdieu, 1985a). Habitus is learned or adopted, and for teachers this has traditionally been scaffolded in and around the classroom and school. In examining the online work of teachers, and in particular the construction of artifacts within their PLNs, I will argue that a singular teacher habitus, developed at traditional sites of schooling, may no longer be sufficient when significant professional activity (as defined by, for example, teaching Codes and Standards) takes place remote from school buildings and their inhabitants. By developing an online teacher habitus, contemporary discourses on professionalism may in the future better reflect the plurality of sites of teachers' work.

I seek to illustrate and explore this emerging online teacher habitus, relating it to existing core concepts around teacher professionalism, these being: traits, autonomy, managerialism and service. I begin by setting out established notions of teacher professionalism, recognising the ongoing tension between managerialism and autonomy. After illustrating the historical swing between the freedom and control of teachers, and the present pervasiveness of school managerialism, I attempt to explain the nature of the historical focus of teacher autonomy. I argue that service for the benefit of students' learning has been an established focus of the autonomous actions of teachers. I go on to show that this relies on a teacher habitus, developed around sites of schooling, that can no longer be assumed to exist in isolation in light of the stratification of the definition of a teacher, and developments in information and communications technologies (ICT).

I then introduce the emerging practices of teachers who work online around what have been loosely defined, particularly by writers on connectivism and educational technologies, as personal learning networks. Here we see contemporary teacher professionalism through a wider lens than the established, singular school-based teacher habitus. I show that the new ways of working are seductive, though have implications for the focus of teacher action. This broadly means that new work is taking place in online sites to which traditional clients, stakeholders and colleagues have no access, and therefore students' (in physical sites of schooling) learning, experiences and outcomes cannot directly be addressed, influenced or improved where none of the above three groups exist and participate in PLNs.

I begin my analysis of personal learning networks by arguing that the literature on PLNs lacks criticality, and that there are problems in examining notions of online freedom and autonomy through using the metaphor of the computer network and the recent theory of connectivism. After considering how artifacts and identities (and therefore a type of online teacher habitus) are created within PLNs, I suggest that clients of schooling (in particular pupils and parents or carers) will be restricted in their ability to access and participate in PLNs as online sites of educational discourse.

It is possible to question why clients would wish to do so, particularly where they have not previously been active in systems-designed sites of discourse such as parent councils and policy consultation events. However, classroom-based teachers and others working with young people are

existing and, it is often claimed, developing their practice (Noble, 2011) within their PLNs. There appears to be no direct or rounded consideration of the educational needs and wants of young people and their parents or careers.

Stakeholders, such as managers and employers, construct policies and priorities based upon, for example, successful manifestos and 'school improvement plans'. These pertain to geo-political areas and systems, and are often arrived at through consultation and suffrage. These may bound the work of colleagues within sites of schooling. Again, I will argue that none of the above are materially present in online PLNs, whereas they do have, and have had, access to sites of discourse which feature clients and stakeholders (admittedly each to different and varying degrees) in physical proximity.

I show how knowledge in PLNs may be being constructed for the benefit of individuals within it (likely to be educationists) and that the portability of this knowledge will be limited. I explore how this alters one notion of teacher professionalism; the transformative teacher, that is, one who is inclusive, ethical, collaborative, collegial, activist, progressive and policy-active (Sachs, 2000). The transformative teacher sees their „primary responsibility in terms of the development of critical, literate, socially aware citizens with a strong sense of their own civic responsibility, and through them the generation of social capital and the propagation of civil society." (Mockler, 2005:736)

Returning to my earlier identification of the focus of traditional teacher autonomy, I claim that the transformative teacher with an online teacher habitus is foremost an expert and pre-figurer of change, and is focused on systems, pedagogies and technologies, not classrooms and the lives of individual students. I develop this idea by briefly considering another possible new teacher habitus around the concept and work of the enhanced or extended practitioner, that is, one who is recognized (and rewarded) by their peers or systems managers as possessing desirable traits, values and commitments, and developing and exemplifying additional skills, abilities, knowledge and understanding.

After interrogating the apparent transformative and extended traits of an online teacher habitus, I go on to explore the implications of the concomitant marketising of individual teachers who successfully work online and in their PLN. I suggest that there is an ongoing requirement for performance within a PLN, which ensures that one aspect of managerialism, performativity, is nowadays present online as well as offline in these teachers' professional lives.

I conclude by interrogating the use of the agora as an alternative to the network metaphor, as I consider whether an online teacher habitus can be reconciled with a school teacher habitus and the core concepts of teacher professionalism.

CONCEPTIONS OF TEACHER PROFESSIONALISM

Teacher professionalism is a contested area of educational theory, with conceptions influenced by civic societies, stakeholders, economics, political ideologies and professional bodies (Mockler, 2005). Early conceptions were influenced by, or aligned with, the early professions such as medicine and law. These professions retain distinctive traits, including: a discrete body of specialist knowledge, restrictions on entry, and the freedom to police themselves (Carr, 1999). Within discourses on teacher professionalism, each trait has been challenged by educational philosophers, teachers, politicians and employers (Mockler, 2005). Teacher professionalism has continued to be redefined by conceptions of public service such as vocationalism, semi-professionalism and deprofessionalism (Carr, 2000; Stevenson, 2007).

The iterative nature of teacher professionalism is evident. Discourses have reflected related tensions, such as: teacher autonomy versus government control (latterly, managerialism), self-

servers versus policy implementers, freedom versus accountability, and expansiveness versus restrictedness. Following a review of relevant literature, Menter et al (2010) identified four influential paradigms of teacher professionalism: the transformative teacher, the enquiring teacher, the reflective teacher, and the effective teacher. Menter et al chart how each paradigm underlies recent research and policy literature on teacher professionalism. These paradigms match, in order, each of the above tensions.

As curricula became more prescriptive after the 1960s, there was a shift towards government control, implementation, accountability and restricted practices. However, Lipsky (1980) illustrated the tendency of public sector workers to, at the 'street level', reclaim or retain power over clients, in response to attacks on their status. For this dualism to exist, discourses must have developed across multiple sites. In education, these have included: the press, sites of schooling, sites of teacher collegiality, and policy networks. Later, I will show how ICT, and the ability and freedom of teachers to create new sites of discourse, disrupt, subvert and influence discourses on teacher professionalism. Firstly, I document a key thread running through contemporary discourses on teacher professionalism; one that can be later recognized in my discussion on singular and multiple teacher habituses.

EMERGENCE OF SCHOOL MANAGERIALISM

Evetts (2009:20) states that, „the discourse of professionalism has entered the managerial literature" and therefore through policy can be 'improved' or 'enhanced'. Managerialism is a doctrine defined by excessive leadership and management (Hoyle & Wallace, 2005). It is rooted in neo-liberalism and aims to increase productivity and success (however defined by those with power) from the minimum of inputs (Simkins, 2000). Managerialism has gained ground during an era of changes in teachers' conditions of work and work practices, where teachers have been portrayed by managers and employers as inefficient, profession-centered 'bureau-professionals', who make decisions without enquiry (Gewirtz et al, 1995).

Instruments of managerialism include: surveillance, competition for inputs, and measurement of outcomes, accountability, bench-marking and value-for-money (Avis, 2003). These have been justified as ensuring client choice, target setting, effective continuing professional development (CPD), and the meeting and evidencing of professional standards. Helgøy & Homme (2007) argue that the existence of managerialism implies a loss of trust in teachers, which may be threatening their long-held sense of local autonomy and weakening the collective autonomy of the profession.

This key thread of managerialism is intertwined with autonomy. However, the term autonomy is presently used across many educational and professional discourses, and often appears synonymous with freedom. It is important to find commonalities in how the term has been used, before gauging the impact that PLNs and an emerging online habitus are having on teacher professionalism.

TEACHER AUTONOMY: OBLIGATION TO THE STUDENT

The word autonomy is derived from *autonomia*; a Greek word meaning 'the condition or quality of self-governance' (Berovsky (2003) uses the term 'self regulation'). This has been interpreted by Castle (2006:1097) as „self-direction within a broader community". These definitions hint at notions of moral behavior and invite the question as to where the socialization of such subjective behavior originates. Later, I hope to answer this question as I explore how identity is created through online artifacts.

Lawson (2004) found that autonomy cascades from the teacher to the student, that is, teachers experience autonomy in their professional lives and, through their work with your people, aspire for them to experience this in their own lives. This raises the possibility of what Giroux (1989) refers to as 'critical education' and 'critical autonomy', where societal structures come to be understood by students through dialogue and reflection with peers and teachers. Such conditions enable radical transformation in power relations and pedagogy (Flake et al, 1995). Teachers may be more inclined to implicate students in their own learning (Vygotsky, 1964) through, for example, reflective dialogue which explicitly recognizes relationships of social power (Bustingorry, 2008). Such a conception of autonomy characterizes the teacher as a transformative professional, in that they help to make possible students' divergence from 'paths' encouraged by the state, which exist, not necessarily for the benefit of the individual, but to maintain, say, power differentials in society.

However, Bustingorry (2008) also argues that autonomy is primarily a perception. It is often used as a euphemism for freedom and is linked with actions such as challenge, change and development (Haugaløkken & Ramberg, 2007), and „initiative, discretion and change" (Friedman, 1999:62). These hints at a more Stenhousian interpretation of autonomous action, that is, 'enquiry for effectiveness' (Stenhouse, 1975).

Bustingorry (2008) also relates autonomy to control or influence over learning materials. Porter (1989) defines it as the freedom to set students' academic targets. Charters' Sense of Autonomy Scale (SAS) (in Licata, Teddlie & Greenfield, 1990) assessed teacher autonomy in terms of external forces. There followed the construction of six scales: Freedom to select work techniques, freedom from distrust by administrators or colleagues, freedom from administrator or colleague influence, freedom to control the pace of students' work, freedom from excessive school level organization of instruction, and freedom in relationships with students.

We can see that autonomy has been constructed differently, not solely associated with activist or transformative professionalism and the imbuing of autonomy, emancipation or freedom in the student. However, it is evident that teacher autonomy has been conceptualized in relation to workplace, classroom, teacher tasks, and fundamentally, pedagogies and interactions with students. This may no longer be sufficient, as I will establish that the single teacher habitus, centered on the above, is being challenged by developments around, and notions of, enhanced professionalism and the personal learning network.

LOOKING BEYOND A SINGULAR TEACHER HABITUS

Discourse on professionalism has been conducted along continua such as control → autonomy, and transmission of knowledge → construction of knowledge. The idea of a single, collective teacher habitus appears to underlie the academic and occupational literature on professionalism. It is created by generic influences such as teacher training, government policy, trade unionism, classroom experience and moral expectations, from a profession with common backgrounds and processes of identity creation and socialization (Menter et al, 2006).

If we assume that teachers have always performed diverse roles in their local communities, and that other habituses could have previously been recognized and considered within discourses on teacher professionalism but were not, then we might consider that multiple teacher habituses can exist across or within the individual teacher. Day et al (2006) researched teachers' personal and professional lives, and found that identities are unstable and shift across time.

Developments such as the 'marketisation of teacher roles' (Whitty, 2002), and the ability for teachers to construct and manage their online PLN, have rendered as insufficient the notion that there is a pre-existing teacher identity. Identities change as teachers move into different phases of

their career (Day et al, 2006). With professional longevity often comes managerial and leadership responsibilities, and with the present focus on 'excellent' performance in the classroom and school, teachers are encouraged to promote their own practice in order to raise the value of their roles. Online, as one's PLN develops, so the number and nature of the professional relationships will alter, compared to prior to the conception of PLNs.

Whitty (2002) argues that marketisation can be seen as further division of labor across the teaching profession. He shows that by using government policy to create a leadership agenda (subsequent to Whitty's work, featuring competencies and standards frameworks relating to 'advanced', 'Chartered', and 'accomplished' teaching), the system receives in return 'policy friendly extended professionals', that is, candidates for 'enhanced professional status' who must exhibit compliance with government requirements. Therefore, there is dominance over the activities of such teachers.

Giddens (1991) argues that as these teachers focus on the policies, competencies and standards (that they are expected to adhere to as they move into a new habitus), they develop expertise and gain status within the education system, not necessarily through classroom practices, where knowledge of curricula and clients is central. I argue later in this paper that an online habitus may lead to a similar shift in focus away from teachers' direct work with students and local communities. This shift in, or addition of, habitus has occurred during the growth of social media, not as a result of value-free landscapes and free online tools, but of recent education policy (if one accepts the contemporary characterization of Gray & Whitty (2010)).

I now extend my analysis of teacher professionalism and the idea of multiple teacher habituses by examining the recent appearance and development of online teacher PLNs. PLNs appear to foster new types of professional action and have recently featured in journals relating to educational technology. However, PLNs have not been critically analyzed in relation to impact on teacher habitus and conceptions of professionalism.

ONLINE TEACHER HABITUS DEVELOPING VIA PERSONAL LEARNING NETWORKS

Increasingly, online communications between individuals are conducted in public spheres (Barnes, 2006). These include open comment facilities on news websites, discussion boards, and social and professional networking sites. Nowadays, many teachers are confident and competent in utilizing such online environments, for example, several hundred Scottish teachers actively use Twitter in a professional context (Robertson, 2011). They are able to interact with, create or co-create artifacts, such as text and multimedia, through fluid or established online relationships.

Activities such as reading and publishing to weblogs, managing and reading RSS feeds (where individuals syndicate Web content using a third party online service), posting multimedia to 'followers' on Twitter, and uploading elements of one's practice to online spaces, exemplify Warlick's notion of online collegiality. Teachers working with or within their PLN, themselves learners, „become amplifiers as they engage in knowledge-building activities, connect what they learn, add value to existing knowledge and ideas, and re-issue them back into the network to be captured by others through their PLNs." (Warlick, 2009:15)

Emerging from the literature on connectivism (Siemens, 2005), the term personal learning network (PLN) has been loosely applied to this new, technology-driven milieu. The 2009 Horizon Report (in Johnson et al 2009:19) defines PLNs as „customized, personal Web-based environments … that explicitly support one's social, professional, (and) learning … activities via highly personalized windows to the networked world." Utecht (2008) characterizes PLNs as „communit(ies) of

colleagues, peers, teachers … that the learner can connect to using PWTs (personalised Web tools)." (in McElvaney and Berge, 2009:2)

Writers on connectivism claim that it is a new theory of learning, based upon the recent exponential growth in the online activities of citizens around the world who have access to the internet. Learning is seen as a social activity, managed by the individual.

It should be noted at this point that earlier writings on personal learning networks link it with actions in the physical world (Tobin, 1998), such as Socratic debate (Cookson, 2009). The term also appears to be synonymous with Haythornthwaite's (2000) 'personal online network', where online ties are classified along a continuum between 'close' and 'weak', and Haskins (2007) 'personal learning environment', a managed online developmental milieu, of which PLNs comprise one part.

Learning through social and work oriented tasks (Haythornthwaite, 2000) takes place in a PLN, where the relationships, spaces and sources of data are 'personally maintained' (Warlick, 2009). Such personalization exists alongside developing connectivist and collegiate notions of network, interdependence and sharing. PLNs may enable teachers to work convivially, exemplifying Illich's (1973) concept of personal interdependence. The construction of objects, environments, actions and mindsets within PLNs takes place, and is recognized, within connectivist discourse, and through an evocation of the computer network metaphor. PLNs appear to realize part of Illich's vision for de-institutionalising society and schooling, that is, through the existence of 'intentional social relations' conducted through 'peer matching networks' (Illich, 1970).

It appears that activity within PLNs is social, humanistic, and mutually beneficial, similar to Castle's (2006) conceptualization of autonomous action. This relates to Fraser's (1992:123) 'subaltern counter publics' or „overlapping (and) interpenetrating" egalitarian spheres of public discourse, and Nixon et al's (1997) „emergent, localized, and negotiated" 'communities of practice', engaged in professional enquiry 'beyond the classroom' (in Reeves, 2007:66). It is evident that new ICT can expand, vitalize, and connect such actions and interactions.

However, I will argue that professional action within a PLN challenges established notions of teacher autonomy and raises questions around the visibility of clients of schooling, that is, those who are the focus of professional action by teachers with a school-based habitus. In seeking to judge the visibility of clients, I begin by looking more closely at activity within a PLN, in particular the ways in which artifacts are constructed, and the impact this has upon identity creation and the socialization of those involved. To assist with this, I briefly draw upon discursive psychology.

PLN IDENTITY AND SOCIALISATION THROUGH THE CONSTRUCTION OF ARTIFACTS

Discursive psychology (Edwards & Potter, 1992; Harré & Gillette, 1994) is a form of discourse analysis that treats action around an artifact as naturally occurring. It helps to reveal what is happening at the point when an artifact is created, grown or added to. Scollon's (1997) analysis of handing out handbills in Hong Kong uses discursive psychology and in this section I make a comparison with artifact creation in an online PLN.

Scollon writes of artifacts being formed from 'instances of public discourse'. Online, artifacts such as Twitter-mediated dialogue, blog posts and Web conference recordings are created by teachers worldwide. In addition to text and other media, Tobin (1998) includes as artifacts, all conversations, people and organizations within PLNs. Nowadays, artifacts can be shared freely and efficiently between those in and around online PLNs.

In his analysis, Scollon argues that a site of engagement (or discourse) is socially constructed when action occurs. This gives rise to frames, behaviors and expectations among those present. Online, the sharing or publishing of a digital artifact such as a blog post is the equivalent to handing out a handbill; the site of engagement being an online PLN. Scollon finds that at the point at which the artifact is created, shared and consumed, identities are imputed, claimed, ratified or contested.

However, Scollon (1997:59) warns, „What one does not find is any identity-free instances of public discourse. The ascription of identity is inherent in the activities at the sites of engagement, in which discourse takes place … (therefore) public discourse is inherently constitutive of social identity."

For teachers, including those who work online in PLNs, social identity may be constitutive of their race, gender and class (Hoyle & Wallace, 2005). It may be influenced by civic and bureaucratic discursive spaces such as staffrooms, conferences, academic institutions and educational literature. In Scotland, for example, these spaces will feature the language and other codes of dominant discourses such as standards-based professionalism (Scottish Executive Education Department, 2002) and managerialism (Jeffrey, Troman, & Zezlina-Phillips, 2008).

In the above section I have described online personal learning networks and established that actions within a PLN link with notions of connectivism and conviviality. I will now develop Scollon's idea that public discourse and constructed artifacts cannot be value-free, by drawing upon the literature and contested nature of discourse. I go on to problematise an assumption, implicit in the literature on PLNs, that clients of schooling and others are free and able to participate in these online sites of public discourse.

RECOGNISING THE BIAS INHERENT IN DISCOURSES

Discourse is characterized by Ihlen, Fredriksson & Van Ruler (2009:88) as a „vehicle through which power/knowledge circulates." Foucalt (1972) argued that discourse exists in the form of objects, concepts, subjects and strategies. It is bounded by rules governing speech, viewpoints and who is represented. Concepts are established, normalized and legitimized such that discourse is a creation of power (Foucalt, 1984).

Based upon Marxist conceptualizations of power, Gramsci (1971) and Foucalt show how legitimacy and hegemony, that is, where „disciplinary power normalizes individuals and their behavior through spatial structures, temporal rhythms, and body movements" (Demirović 2011:7), is attained by discourse pervading sites and becoming seen as 'common sense' (Boggs, 1976:39). Aggregated, dominant discourses form a 'regime of truth'. However, Ainsworth & Hardy (2004), Foucalt (1980), and Ihlen, Fredriksson & Van Ruler (2009) argue that human agency survives, that is, citizens (including teachers) are free to act beyond normalized parameters created by discourse.

Habermas (1996) developed the idea of public discourse across the public sphere, that is: „communicative action of discursive contests on public policy, functioning specifically to allow citizens the opportunity to understand opinion without 'perceived' rhetorical influence." (Ihlen, Fredriksson & Van Ruler, 2009:219)

Having briefly illustrated the ways in which discourse arises and is bounded, I intend to interrogate the public accessibility of online PLNs which technically exist on the open Web and appear value-free. I return to my question around the extent to which clients of schooling are able to create their identity and become socialized within a teacher PLN. To help me answer this, I draw upon Fuller & Unwin's (2003) notion of 'expansive' and 'restrictive' learning environments.

ARE PLNS EXPANSIVE OR RESTRICTIVE?

PLNs have been conceptualized as communities (Warlick, 2009) or learning communities (Tobin, 1998). Bhatia's (1993) discourse analysis of language used in professional settings shows that discourse communities possess norms of enquiry, modes of expression and a 'genre system' (Bazerman, 1994). For discourses on schooling and education to be visible to, and understandable by, those outside of teachers' PLN, artifacts need to feature language and codes which exist in sites of schooling.

However teachers' Personal Learning Networks often function around discourses on education and educational technologies, shared within these online environments by converging professions, occupations and ideologies (Rheingold, 1993; Siemens, 2008). Grosseck & Holotescu (2010) describe PLNs as 'communities of learning and practice', filtered by interest. These traits can result in what Haythornthwaite (2000) terms 'whispering'. As non-teachers have not been socialised into such environments and discourses, they are unlikely to be proximate, when online, to teachers and their work.

The need for convergence to enable artifacts to be created, traded and shared, illustrates the restricted nature of PLNs. Prior knowledge and shared language are necessary for one to enter or build a PLN, attach to established relationships, and deal with new data (Warlick, 2009). Along with trust, these are the conditions which Warlick states precede the creation of wealth in PLNs, that is, currency such as social capital, which I will discuss below.

Opportunities to participate in the construction of identities depend on the presence of social capital in a PLN (Wasko & Faraj, 2005). Bourdieu (1985b:248) defines social capital as, „the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition." Within connectivist theory, Siemens (2006) identifies the creation of currency, that is, accurate, up-to-date knowledge, as the intent of connectivist learning activities within PLNs.

Marketplace metaphors such as these can be traced to Haythornthwaite's (2000) conceptualization of PLNs as environments where the benefit to the individual is commensurate with 'how much they put in'. There are exchanges, with value forming around artifacts. I return to the characterization of PLN-as-marketplace later in this paper.

Although rather intangible, ethereal and difficult to measure, these characterizations of what arises from activity within PLNs suggest, through the use of market metaphors, that some forms of capital, such social or cultural (Bourdieu, 1985b) are created when PLNs operate efficiently. This implies that attempts can be made to make value visible, accumulable and tradable. In one way this suggests why PLNs may not be value-free, and has implications for where PLNs 'sit' in terms of teacher autonomy and aspects of managerialism, such as performativity.

In broadly being without the language and codes necessary to access educational discourses and sites of discourse, clients of schooling and others will be unable to engage in the public construction and sharing of knowledge. It could be argued that as clients of schooling are not involved in, say, diagnosing and attempting to solve educational problems within their site of schooling (Nuttall, 2004), through participation in their teachers' PLNs, knowledge constructed within PLNs is not readily transferable or useful to the core work of the teacher with a school-based habitus.

Despite being conceived of as a dialogue community (Walton, 2007), existing as a site of public discourse, PLNs are restricted by their membership and the limited degree to which they enable the teacher, working online within their PLN, to subsequently change the educational circumstances of their clients of schooling.

Activity within PLNs appears focused on the 'micro', that is, it is small in scope (personal interests), size (keeping the amount of data manageable (Noble, 2009)), reach (outside interest in the artifacts of a PLN), and relevance (portability of artifacts and understandability of discourse used in their creation). Such conditions should enable teachers to work online with their clients of schooling in ways which exemplify each of the paradigms of teacher professionalism, that is: the transformative teacher, the enquiring teacher, the reflective teacher, and the effective teacher.

However, beyond pragmatic concerns over online safety, degree of convergence of work patterns, and the online behaviors of different generations, I have established that PLNs are restricted environments which do not facilitate relationships between teachers and clients of schooling, and the co-construction of artifacts. Clients miss out on their teacher acting as an 'amplifier' (Warlick, 2009) alongside them. They may, of course, engage in constructivist activity within the school, and even indirectly with the teacher's PLN, however they are not able to become an included member. It could be said that they function on the periphery (Lave & Wenger, 1991).

My attempts to understand the emergence of an online teacher habitus, and the implications for teacher professionalism and those who are the focus of the work of teachers with a school-based habitus, have thus far been carried out through the prism of theories of discourse, construction of artifacts and identity creation. However, a major factor has been overlooked thus far; one that has allowed PLNs and other attractive, social, online communities to grow in the name of improving teaching and learning.

The network metaphor is a rhetorical device used throughout the literature on PLNs. It is important to ask what we mean by network, and whether its use as a way of envisaging what is possible online, in and of itself, limit the potential for teacher autonomy and the perpetuation of school-based habitus in a new, but familiar, location.

EFFECT OF THE NETWORK METAPHOR ON NOTIONS OF TRANSFORMATION

Using the network metaphor, writers have aligned modern PLNs with ICT and educational technology. Notions of freedom in PLNs conflate with teacher autonomy, implying that PLNs foster the transformative professional (Haskins, 2007). Haskins claims that „PLEs (personal learning environments) become a source of discrepancy and deviation from the 'party line' … Learning from a PLE makes it possible to see patterns of abuse, exploitation, and neglect in the workplace. PLEs undermine the imposed, top-down, command and control kind of power."

In exploring further the impact of PLNs on notions of teacher professionalism and autonomy, I ask: What are the transformations being worked for; how might teachers in PLNs be more accurately characterized; and in what ways does this challenge or develop notions of professionalism and autonomy?

Use of the network metaphor in education resurfaced with Hiltz's (1994) 'virtual classroom' and early discourse around distance education and e-learning. As a world of computer networks developed into innumerable global communication networks, images of a networked society enabled us to see beyond ICT as useful only within a transmission model of pedagogy. Networked learning (Goodyear et al, 2004:1) was defined as „promot(ing) connections between one learner and other learners … learners and tutors … (and) a learning community and its learning resources."

In his ethnography of networks, Wittel (2000:2) characterizes a network as „a set of connections between nodes … contain(ing) as much movement and flow as they contain residence and localities." Within network theory and analysis, the node metaphor is a fundamental construction. By characterising any artifact as a node, and looking for clustering, activity, performance and

connections, connectivists can elevate this 'theory' of learning, by synonimising movement and flow with notions of sharing, collaboration and social constructivism.

However, there is an absence of a theoretical underpinning of networks within early conceptualizations of online PLNs. These environments are portrayed through the use of the apparently neutral metaphor of the network; implying openness, freedom from resistance, and an absence of human biases.

Network theory may allow assumptions to go unchallenged and values to remain hidden. The internet and other technological developments, which have helped to facilitate those forces enabling the existence of online teacher PLNs, occurred several years ago during an economic and political period dominated by neo-liberal and managerialist ideology. In addition, due to the open and liberal ideals of the internet, network theory may conspire to allow power relations, such as between teacher and client, to become invisible, as discursive spaces are created in the image of teacher professionals.

In utilizing the network metaphor, PLN theorists have ignored earlier, pre-internet iterations (Tobin, 1998), as well as simultaneous developments such as 'communities of practice' (Lave & Wenger, 1991) and 'professional learning communities' (Stoll & Louis, 2007). Although categorising the ties within networks as 'strong' or 'weak' (Jones, 2004), network theory does not consider human beings as complex. For example, it fails to consider our ability to hold multiple identities (habituses) across a number of environments. Additionally, with the development of mobile internet technologies, those utilizing the Web increasingly are active online and offline at the same time.

We see that individuals have agency, that is, a capacity to make choices freely or with regard for their society. Diagrammatic representations of human activity within networks, such as the 'ladder of participation' (Arnstein, 1969) and 'reader-to-leader' (Preece & Shneiderman, 2009) frameworks are not cognisant of, for example, Actor-network theory (Callon, 2001), which recognizes the transient nature of networks, comprising material and semiotic relations. Such a theory is constructivist, not determinist. The theory shows how networks exist, reform and dissolve through processes between humans and non-humans. The linear representations of the above frameworks do not illustrate the incoherence which tends to arise from social relations.

At this point, I could introduce new, more relevant metaphors, which conceive of activity in teachers' PLNs in ways which more closely resemble their school-based habitus. However, as I have claimed that activity is remote from sites of schooling, I shall continue to develop the notion of an online teacher habitus, alongside the emerging habitus of the extended or enhanced professional, referred to in an earlier section.

TEACHER AUTONOMY, TRANSFORMATION, AND CLIENTS OF SCHOOLING: CONSTRUCTING PRE-FIGURERS OF CHANGE USING THE CONCEPT OF REFLECTIVE PROFESSIONAL

Martinelli (2008) asks whether teachers who immerse themselves in their PLN risk losing autonomy. I am interpreting this question, not along a freedom → control continuum, but in terms of whether the existence of PLNs leads to teachers shifting their conception of autonomy, and whether multiple habituses are creating new dimensions to, or types of, teacher autonomy.

To answer this question, I will draw on Breines' (1980) notion of professionals as 'pre-figurers of change'. This recognizes that PLNs appear to be environments in which autonomous action of some kind takes place, 'reflection' being one significant example. Those with a PLN are able to use

online environments to reflect, for example, reflection-in-action (Schön, 1983), or on social justice (Fendler, 2003) or systems, and then 'move forward'.

Teachers with a PLN understand new online technologies sufficiently to exploit them in ways which give them access to new spaces, relationships and data (Noble, 2009). It is possible to reflect more often and with more people in more geographical locations than before the advent of the internet, that is, in the early days of Schön's (1983) 'reflective practitioner'. Previously, reflection would have mainly occurred through academic study, conference attendance, the staffroom, or during 'generative dialogue' with students (Banathy & Jenlink, 2004), where initial lack of focus 'gives way to' open exploration, discovery and creation.

Reflective teachers have been recognized as 'policy brokers' (Lipsky, 1980; Schwille et al, 1986; Webb, 2002), in that their autonomous thought and action, and moral imperative for research-informed change can improve schooling (Stenhouse, 1975), particularly where it is embodied in collegiality (Lieberman, 1986). However, earlier I established the absence of 'joint work', 'sharing', and 'aid and assistance' between teachers and clients of schooling in online environments such as PLNs (Clement & Vandenberghe, 2000). This reinforces the discrepancy, recognized by Berovsky (2003:219), between teachers' „reflective and … active nature". Those reflecting on their practice through their PLN (working within or across more than one habitus) will be unable to directly change their site of schooling, as the relationships, data and spaces utilized are remote and not directly known by the clients of schooling.

Nonetheless, teachers with a PLN are potentially pre-figurers of change within education systems. They are able to master issues and construct new knowledge around contemporary insights, resources, pedagogies and policies. This can be done over a shorter period of time by accessing online artifacts and by engaging in dialogue which is visible to others, even though it may not be in a form or within an environment that overcomes the exclusion which I previously indicated often precludes engagement. Such action may demonstrate a teacher's adeptness in dealing with aspects of education, and may generate currency and social capital within their PLN. I will now explore the impact that this may have on the teacher and their professionalism.

TRANSFORMATIVE PROFESSIONAL AS PRE-FIGURER OF CHANGE

In this section I argue that Personal Learning Networks can be conceived of as environments for the apprenticeship of future 'leaders of learning' (HM Inspectorate of Education, 2007). It may be that such online environments enable teachers to develop their learning, identities, standpoints and capacities for future action. If they exhibit, online, Parson's (1939) four tenets of leadership, that is: trust, competence, strong occupational identity, and co-operation, such teachers may be marketable. They may be viewed not only as pre-figurers of change, but as part of a new hierarchy, dominant discourse, or influential hub within their education system. Recently, this was exemplified by the invitation extended by the Scottish Government to most of the original Scottish education 'bloggers' to take part in the recent 'Technologies for Learning' policy process (Leicester, 2010).

These connected and collegial teachers (Siemens, 2005) make many of their professional activities visible through online artifacts. They do so mostly free from teachers' statutory duties and school managerialism. Instead, they have to deal with being accountable for their work and actions while holding an online teacher habitus. This suggests that, if we accept the existence of multiple habituses, then in addition to a need to develop, add to, or alter our notions of teacher professionalism, we may wish to explore how being remote from sites of schooling could lead to the presence of managerialism in PLNs that may be similar or different in nature from school managerialism.

CREDENTIALISING THE PRE-FIGURER OF CHANGE

Firstly, we need to recognize that school managerialism, constituted mostly by managers, employers and government, has been a feature of recent education discourses, and will be evident in traditional sites of discourse and the artifacts found there (Jeffreys, Troman, & Zezlina-Phillips, 2008). 'Vehicles' for such managerialism now exist on the Web and are likely to feature in many teacher PLNs. For example, non-departmental public bodies (NDPBs) are visible on Twitter.

Despite working in a remote environment removed from their site of schooling, teachers remain socialized by established discourses, histories, and professional standards and codes. Although managerialism can be ported from sites of schooling and education systems into teachers' PLNs, I will now briefly explore whether an aspect of managerialism, performativity, is emerging in a new form. Ball (2004:143) defines performativity as „a culture and a mode of regulation that employs judgements, comparisons and displays as means of control, attrition and change. The performances of individual subjects or organizations serve as measures of productivity or output, or displays of 'quality', or 'moments' of promotion or inspection." I will explore this by developing my earlier idea of PLNs as marketisable and credentialisable.

Online PLNs are mediated by social software. The related forms of professional action listed earlier in this paper can be scored and ranked in terms of popularity and influence. For example, an artifact such as a blog post or Twitter account can have value ascribed to it by others by being read, responded to, or shared with others. A teacher working online may choose to exploit opportunities to credentialise themselves. They may build the value of their identity and the social capital within their PLN. It may be necessary for such teachers to learn and exhibit behaviors that enable them to build relationships and followers, enabling them to gain access to others' public, visible artifacts.

For teachers to sustain themselves or succeed in this environment, that is to be relevant, read and influential, they will need to create artifacts (self-created or collaboratively-created) of value to another person, through for example displaying that they know how to manage the implementation of a policy, or showing that they can cope with performance expectations stemming from dominant educational discourses.

Continuous performance may also be necessary by teachers who have, in recent times, constructed an online identity and who find that they need to maintain public visibility by, for example, continuously sharing and being contactable. Wilson (2008:28) writes of „'object centered sociality' (Engeström, 2005), (implying) that without shared artifacts, the number and strength of connections within the network may not reach a desirable level."

At this point I depart from my emerging construction of an online teacher habitus, where the teacher is at the centre of online professional action. It appears that such teachers may, like clients of schooling, risk becoming constrained by the restrictiveness of networked professional learning. To aide the visualization of alternative conceptualizations, I explore whether a different metaphor might suggest expansiveness, and narrow the distance between teachers working online and their clients of schooling.

CONSIDERING THE 'AGORA' AS A METAPHOR FOR TRANSFORMATIVE PROFESSIONALISM

PLN and connectivist theory has been subsumed by the computer network metaphor, such that it is contributing to a new, restricted online habitus. To enable, for example, generative dialogue and notions of activist or transformative professionalism to develop around environments such as PLNs, alternative metaphors would need to become visible in discourses.

The agora was an expansive environment for politics and commerce in Ancient Greece, where one would listen to leaders, perform duties or operate within the marketplace (Walton, 2007). Today the idea is embodied in a free speech zone in California, a multifunctional covered space in Valencia, and a networked, interdisciplinary research centre in Finland.

In using the spaces, relationships and data of their PLN for democratic, progressive purposes, teachers could become like Gramsci's (1971) 'organic intellectuals', that is, agents for a counter-hegemony who, despite recognizing that they are 'products' of the interests of dominant groups, become involved in forms of informal education which bring them closer to students and their communities. Through dialogue and action, 'organic knowledge' is created (Burke, 2005) which is indigenous and local, yet also widely-distributable through the digital adeptness of the teacher who works online. This constructs teacher and public (or a sub-set, such as the working class) as agents in a 'struggle'.

Walton (2007:381) states: „The experience of dialogue builds trust and social capital while providing space for exploring assumptions and creating new meanings." Teachers could ensure that they „study everything from the point of view of civil society and (give) voice to the associations, movements and publics that are outside both state and market." (Martinelli, 2008:365)

However, Martinelli argues that in such an environment, dominant ideologies, class and power would impinge on progress, which would be further affected by the 'value preferences' of social groups. Martinelli (2008:365) continues: „organic intellectuals themselves, on becoming part of the nomenklatura and pretending to speak in the name of given social groups, actually manipulate those groups with the aim of legitimating political power." Additionally, Evetts (2009) shows that professions often look inward rather than using their trustworthiness (Gewirtz et al, 2009) to advance civic society. In the final section, I relate this warning to online PLNs and reach a conclusion as to how we might begin to reconsider notions of teacher professionalism.

CONCLUSION: TRANSFORMATIVE PROFESSIONALISM AND ONLINE COMMUNITIES

Wilson (2008:18) states: „(G)enerativity comes from how people construct the environment for themselves: the tools they choose, the communities they start and join, the resources they assemble, (and) the things they write." One challenge to teachers who, through their work online or offline, consider themselves to be activist or transformative professionals, may be to provide ways for those interested in individual schools and communities to develop 'virtual proximity' (Haythornthwaite, 2000), that is, online opportunities which replace, or compensate for a lack of, physical proximity. Considering the conception of PLNs featuring in this paper, and the restrictiveness embedded in established online environments, virtual proximity may need to occur in online environments which do not yet exist.

In this paper, I have shown that notions of teacher professionalism can no longer assume a single school-based teacher habitus. I established this primarily by illustrating how the work of teachers within an online personal learning network is challenging the concept of professional autonomy through a shift from student-focus to autonomy-as-individual-freedom.

By going on to explain artifact and identity creation through discourse analysis, I have illustrated an emerging online teacher habitus, one that does not permit or value co-constructivist activity with clients of schooling, and appears to feature more of a focus on macro (systemic) rather than micro (student) transformation. In examining whether these new influential actors in education are working autonomously or are bounded by performativity, I conclude that a key dualism around teacher professionalism is emerging, one that is embedded in the nature of PLNs.

In documenting the pervasiveness of managerialism in the school-based habitus and performativity in an online habitus, I challenge the notion that the autonomy → control continuum is central to discourses on teacher professionalism. Rather, there is a need firstly to reconsider the broad definition of teacher autonomy and whether online professional action by teachers is appropriately characterized using the network metaphor.

Secondly, those who assert their professionalism in online environments need to be reflexive, considering who the intended beneficiaries of their online work are and whether they intend to construct their PLN in a way that fits with their notion of teacher professionalism, consistent with and exemplified by their school-based habitus. Such reflexivity will determine the proximity of teacher and student, and ultimately whether there is a long-term requirement across discourses on teacher professionalism to engage with notions of multiple or additional teacher habituses.

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