

# The Past and Future inside the Present: Dialectical Thinking and the Transformation of Teaching

**Gail Edwards**

School of Education, Communication and Language Sciences, Newcastle University, Newcastle-upon-Tyne, UK

## **Abstract:**

Despite decades of research exposing its limitations, transmission-based pedagogy is notably resistant to change. This paper argues that reform efforts will continue to be limited without a concomitant historical, dialectical analysis of the origin of such pedagogy. The paper locates the origin of transmission-based pedagogy in the economic and social transitions of seventeenth century Europe. It concludes by suggesting that only a dialectical understanding of this emergence can sensitise the education community to the possibilities for genuine transformation immanent in the current educational landscape.

**Key words:** dialectic; transmission pedagogy; social constructionism; praxis; epistemology; ontology.

## **Introduction**

Over the last few decades, official discourse and government policy has reduced teaching to ‘performativity’ (Ball, 2003). In England, and in many other parts of the world, the ‘good teacher’ is now defined as someone who performs within a framework of prespecified ‘standards’. On this view, good teaching is transmission-based, defined narrowly as curriculum delivery for testing. Of course, this recent policy reductionism cannot fully explain the ubiquity of transmission-based teaching; it has always been possible for teachers to subvert policy directives after all. Moreover, the reduction of teaching and learning to delivery and acquisition is not entirely new and transmission-based pedagogy has remained pervasive even during periods of more progressive policy. Indeed the assumptions informing it can be traced back through a long established tradition of didactic teaching and passive learning. Educationists of the late nineteenth century, for example, were offering devastating critiques of what Alfred North Whitehead (1929) referred to as the ‘passive reception of inert, disconnected ideas’ in institutionalised schooling. What is perplexing about transmission-based teaching then, is its resilience and longevity. It has persisted despite significant progress being made over many decades in understanding teaching and learning (Lanier and Little, 1986). Moreover, its resilience cannot be explained by a lack of research aimed at pedagogical reform. The diversity, breadth and rigour of teacher education research are impressive. Issues researchers have explored include: the processes of teacher learning (e.g. Clark & Peterson, 1986; Korthagen, 2010); the conservatism of school cultures (e.g. Lortie, 1975); the nature of reflective practice (e.g. Pollard 2002; Schon, 1983); the importance of teachers’ prior knowledge (e.g. Wubbels, 1992); and even the role of teacher intuition and tacit knowledge (e.g. Atkinson & Claxton, 2000; Eraut, 2000). Despite this extensive body of work, the impact of teacher education upon teachers’ practice internationally remains remarkably low (see for example, Zeichner and Gore, 1990; Zeichner and Tabachnick, 1981 and the extensive review by Wideen, Mayer-Smith and Moon, 1998).

So why is transmission-based pedagogy so resistant to reform? In what

follows I argue that none of the foregoing reform efforts have involved a full examination of pedagogic practices inside their sociohistorical and economic context and that without such a holistic analysis, efforts to transform teaching will continue to fail. History then, is where my analysis begins. First, I discuss how the delivery-acquisition metaphor, its concepts and attendant pedagogy, is located deep inside the problems faced by some of our ancestors, not in any teacher pathology. I borrow a phrase from Ollman (1993) to argue that, to think critically about the future of education, we must go beyond cataloguing the errors of transmission pedagogy and instead examine the 'past inside the present'. Following an examination of the historical circumstances within which this pedagogy was conceived, I go on to show why transmission-based teaching is actually in harmony with the prevailing political and economic agenda and I briefly illustrate how this is played out in educational contexts. My intention here is not to suggest crude determinism wherein the economic mode of production determines theoretical modes of thinking. Indeed, for those who find the dominant agenda undesirable, I go on to discuss possibilities for confrontation by building upon conceptual tools which contradict the embedding mode of production. In so doing, I draw attention to a powerful common thread characteristic of a diverse (and indeed often opposed) group of thinkers which includes – but is not limited to - Jerome Bruner, John Dewey, Martin Heidegger, Karl Marx, Paulo Freire, Lev Vygotsky Alfred North Whitehead and Ludvig Wittgenstein. Not all these thinkers have been associated with formal education but nonetheless I suggest that the worldview they helped to create is central to understanding educational change. The common thread to which I refer is their concern with holistic *process-relational thinking* which places praxis rather than the individual knower at the heart of the analyses. I further suggest that this common thread should be seen as part of a competing worldview arising out of specific periods of political struggle, rather than as a set of disembodied philosophical ideas which can be readily translated into pedagogical techniques. Indeed, without an examination of the political life within which pedagogic ideas are conceived, educationists run the risk of uncritically endorsing unhelpful interpretations of these ideas consonant with the dominant social formation. Transmission-based pedagogy, in other words, will persist unless we acknowledge that the problem of transforming teaching is at core a struggle over the kind of human being and indeed the kind of society towards which the education system should contribute. In the argument which follows then, I suggest that if we are to aim at genuine transformation of teaching, we must address the question of what sort of society dominant pedagogical metaphors have sustained. For those sympathetic to the counter movement, the paper concludes with some indicative directions for critical praxis.

### **The historical context of transmission-based teaching: where does it originate?**

It is common for policy-makers to use concepts associated with transmission pedagogy or what Ellis (2010) calls a 'delivery-acquisition metaphor' of teaching. We are all familiar with a discourse peppered with phrases such as 'delivery of the curriculum', 'acquiring knowledge', 'retaining ideas' and so on. So naturalised are these concepts that over time they have become abstractions detached from their practical moorings, making them appear neutral or, at worst, rudimentary. Yet they are derived from specific social relations peculiar to a period of Western history and thus are not innocent. They have arisen because they *enable*. Like all concepts, they have conferred power by allowing their creators to solve problems in their capacity to deal with the world. But what power have these enduring educational concepts

conferred and to whom?

A clue to the answer lies in the question of why, in Western societies, it became necessary to separate knowing from doing, or theory from practice, in human labour. Typically, this involves an elevation of mental over manual labour, an assumption that these are separable and that the latter is governed by the former. In the context of teacher education, this is what Carlson (1999) refers to as the 'theory-to-practice approach', where researchers produce theory and teachers apply it. The significant point to note is that this theory-practice separation is peculiar to the history of class-divided societies. Ainley (1993), for example, in drawing upon the work of Zuboff, notes that the Western separation of body from mind in manual and mental work has a legacy drawn from three traditions: "(1) The Greco-Roman legacy that associated labour with slavery, (2) the barbarian heritage that distained those who worked the land and extolled the warrior who gained his livelihood in bloody booty, (and) (3) Judeo-Christian theology that admired contemplation over action" (Zuboff, cited in Ainley, 1993, p.16).

Significantly, this separation of mental and manual labour took a new turn in the seventeenth century. Feudal society had been organised around a leisured and a labouring class with power wielded by the landed nobility and managed through a system of enfeoffment based upon the exploitation of serfs forced to work land. This arrangement was legitimised by appeal to strongly held religious beliefs about the 'natural order'. But three interrelated developments in the seventeenth century began to challenge this order: the growth of the merchant class, the growth of science and the development of individualist epistemology (Taylor, 2007) - developments linked to the emergence of democratic industrialism. This project usurped feudal relations and instituted a system of juridical relations between putatively 'free subjects'. It promoted the belief in an individual engaging 'freely' with a *given* external world of commodity exchange. With the rise of the merchant class, the individual became 'free' to sell their labour in the market place. Of course, the usurping elite required a system of legitimation for this new division of labour. As Suchting (1986) argues, this was necessary to support the merchant class struggle for supremacy against their feudal predecessors. This newly emerging ruling class thus required an individualist epistemology, a science of knowing which would form an authoritative system of legitimation for truth claims acting to place their own ideas beyond the bounds of challenge, and thereby safeguarding their privilege.

Though this modern epistemology was rooted in ancient Greece, it reached its zenith during this age of Enlightenment (Crotty, 1998). It was the birth of the 'technical-rationalist' project, a 'science of knowing' which persists to this day. It involved a fundamental shift in how knowledge and knowing were conceived. Knowledge no longer came unquestioningly from God or his representatives; rather, the self-constituted knower became understood as confronting a *given* world of external objects to be known. In accord with the logic of the emerging capitalist order knowing was severed from doing and evicted from its natural home in social activity. For if it were acknowledged that knowing was tethered to practice then there could be no basis for justifying intellectual elites issuing prescriptions to labourers or technicians. As the nineteenth century liberal J.S. Mill insisted "...the best government...must be the government of the wisest and these must always be the few" (cited in Carr and Hartnett, 1996, p.50). Whereas once the validity of knowledge would have relied upon public criteria of successful practice, modern epistemology permitted the validity of an *individual's* knowledge to be guaranteed. Moreover, this was a supposedly neutral method of validation which could be used as a means of

legitimising an individual's knowledge claims made across a range of human practices – indeed without the need for that individual to engage in any practical labour at all. This epistemology was *a priori*. By definition it could be used as a mechanism of governance *over* practical labour. The separation of theory and practice, in other words, could be used as a mechanism of accountability and social control.

What is of significance for the argument presented here, is that these transitions made the idea of teaching as the 'transmission of knowledge' possible. A new social division of labour legitimised the separation of knowledge 'producers' and 'technicians'. It became possible to speak of 'acquiring knowledge' and 'applying knowledge' as separate activities which could be undertaken by an individual. According to this logic, knowledge can be defined in advance, transmitted, acquired and possessed without the need for any practical labour at all. The ontological and epistemological assumptions here are that: firstly, it is *individuals* who know things, secondly, knowledge can be *possessed* by individuals and thirdly that, once acquired, knowledge can *later be applied* to practice. Moore (cited in Smyth and Shacklock, 1998, p.79) has described the logic and beliefs which rationalize these arrangements as the "political theory of possessive individualism". Possessive individualism has become increasingly visible in educational reform of the last three decades. The delivery-acquisition model of human learning here takes centre stage since it naturalises a view of humans as isolated individuals engaging in pre-given exchange relations. This ontological individualism in humanity's self-understanding gives analytic primacy to a self-constituted learner in a meritocratic society confronting an objective, given world. The individualism underpinning traditional epistemologies (whether of the rationalist or empiricist variety) is thus predicated upon a view of the subject-object as the fundamental unit of analysis. It severs the knower from the known. On this view, reality is divided into two parts; there is the objective given world and then there is the subjective world of experience through which underlying reality appears to us and thus truth is representational, found in a match between a statement and elements of an extra-discursive reality that the statement is about. In terms of education then, the aim for the learner is to acquire, apply and *demonstrate their acquisition of* this truth. The role of the teacher is to faithfully transmit the knowledge to be assessed. Smith and Shacklock describe possessive individualism in the context of education thus:

Put simply, this view holds that individuals are composed of personal capacities made up of bundles of skills, and that they operate in society as 'proprietors of their own capacities' in exchange relationships with each other. The role of government is to provide for the protection of this property and facilitate orderly conditions under which exchange can occur. In other words, the role of government is restricted to setting up pedagogical processes to enable the creation and delivery of skills modules and to provide for subsequent accreditation (Smith and Shacklock, 1998, p.79).

Accreditation plays a key role in sustaining the notion of meritocracy and ultimately legitimising economic privilege for the few. The ontic privileging of the individual makes this logically possible. Given that there is a need to advantage oneself in the labour market, certification is required to guarantee one's possession of expertise. Thus, when knowledge is understood as separate from practice it becomes possible for it to be commodified and treated as an individual possession – as a demonstration of one's *potential to labour*. Knowing about the world is thus here

considered as prior to action in it. An individual must acquire a theory about the world since their subsequent action must be based upon a foundation more reliable than mere obedience to authority or tradition (as was the case during feudalism). Indeed practical, tacit knowledge, of the type captured in the work of Polanyi (1962), must be ascribed lesser value. For as Schon has argued we “cannot readily treat it as a form of descriptive knowledge of the world, nor can we reduce it to the analytic schemas of logic and mathematics” (Schon, 1983, p. 33). Tacit knowledge bound up in labour, in other words, cannot be separated from the knower and treated as a portable commodity. But conceptual knowledge and skills *can* be treated as transferable commodities, putatively capable of being wrenched free from their practical moorings, packaged into a ‘syllabus’ and transmitted within in the educational marketplace. Moreover, certification provides the visible means of evidencing one’s knowledge and operates as a mechanism of comparison with others. Teacher education and schooling then, with their partner arrangements of summative assessment, are indispensable as a means of providing certification, with transmission-based pedagogy sitting at the heart of the process. Education in Western societies, as Boxley (2003) argues, thus becomes nothing more than the formation of human capital in a competitive global market.

We can think of this as the emergence of what now amounts to economic fundamentalism (Smyth and Shacklock, 1998) - a practice within which the transcendent laws of the market prevail and which competed to overthrow the medieval worldview. Though the connection can at times remain latent, Western education institutions are undeniably shaped by capitalist economies of production. As Bowles and Gintis (1976) have argued, organised schooling has always fulfilled an economic function, the visibility of this declining at times of economic buoyancy and becoming more manifest during periods of economic crisis. The last three decades of what the World Bank refers to as ‘structural adjustment’ has seen the logic of the market become more visible in the public sector as the demand for efficiency and productivity has increased. As resources dwindle, teachers are now expected to do more with less and their salary has become tightly linked to performance. Performance indicators confer a measurable exchange value upon teachers’ labour and fall into two categories: pupil standards and professional development competencies. These standards are, as Ball notes “...expected to provide particular and general skills required by capital and to graduate students who are ‘fit for work’ in a whole variety of ways...” (Ball, 1999, p.189). Pre-service teachers in England, for example, are obliged to evidence the exchange value of their own labour in reference to thirty three Qualified Teacher Status (QTS) Standards (TDA, 2009). This renders visible the commodity value of teachers’ work as they *perform for another*. As Boxley suggests, the economic function of schooling here becomes more visible:

The role of teachers in working principally towards the production of units of economic benefit to the capitalist State is becoming much clearer in the language of performativity (Boxley, 2003, p.8).

Much more can be said in relation to the way that economic relations relate to schooling but the discussion here is intended to bring into focus the origin of the delivery-acquisition or transmission model of teaching and its role within the prevailing economic and social milieu. The foregoing account illustrates why the ontological and epistemological assumptions behind transmission-based pedagogy make complete sense given the context within which they emerged. The separation of

theory and practice and the individualism associated with it are thus not innocent scholastic abstractions. The delivery-acquisition model of teaching is deeply sedimented in practice - in the way schooling and society is organised and performed. Given this context, it is hardly surprising that these concepts maintain a hold over the educational imagination. And because they have their home in social relations - relations legitimised and perpetuated by those whose interests they best serve – it will take more than ideas to evict them.

Nonetheless, as the education community knows all too well, the individualist-acquisitive metaphor of knowing is beset with contradictions. These are contradictions which reflect tensions in the social relations of production from which they derive. In the next section, I illustrate, by way of concrete example, how these contradictions lie at the heart of the difficulties faced by teacher educators and teachers in their daily professional life as they attempt to reconcile theory with practice and individual assessment with alternative accounts of learning and teaching.

### **The contradictions of transmission-based pedagogy in professional life**

The most obvious tension in schools we can note is the professional call for an interactive understanding of the teaching-learning process and the contradictory demand for teachers to accelerate attainment. Schoolteaching is aimed at pupils' acquisition of knowledge *about* the real world in order to prepare them *for* that world. Here acquisition and application of knowledge are treated separately, a practice which makes complete sense in the light of the capitalist construal of knowing. Moreover, it is logical to formulate a content-based curriculum encompassing the knowledge considered most worthy of transmission; the teacher's role is to deliver content to pupils and measure the rate at which each individual pupil has acquired it. But this aim conflicts with interactive pedagogies since the acquisition of inert knowledge is always a one-way, passive process which necessitates an undoing of the marriage between knowledge and action (Whitehead, 1929). So, despite much research attesting to the value of rejecting transmission models and substituting a view of learning as a constructivist, interactive process, in day to day schooling this contradiction persists and discourages the use of interactive pedagogies.

This contradiction has its parallel in the teaching and learning of teachers. Vygotskian-inspired cultural-historical and social constructionist theories of learning have advanced our understanding of teachers' development (see Carlson, 1999; Edwards, 2010, Ellis 2010; VanHuizen et al, 2005). Yet, *individualist* epistemology still frames policy and practice. Policy not only aligns with a behaviourist understanding of teacher learning but also with the longstanding cognitivist view that individual teachers should *acquire* pedagogical schemata, a body of craft knowledge or a set of skills so that they may become 'autonomous' professionals (Clark & Peterson, 1986). Moreover, the logic of capitalist modernity casts teacher educators as purveyors of this pedagogical knowledge, concerned more with transmitting 'core skills' and checking whether a teacher's teaching corresponds to a bullet-pointed tick list, than with an analysis of classroom processes. A performativity thus prevails where teachers feel compelled to demonstrate acquisition of 'professional attributes'.

And here transpires another contradictory but inevitable sequela - the espoused aim of teacher autonomy is undermined by accountability demands requiring compliance to a set of competencies (Bates, 2004). The 'neutral' status of modernist knowledge - whilst promising empowerment - actually denies teachers the professional autonomy to connect their pedagogy to moral agendas. Evaluative questions relating to standards are treated as mere empirical matters. Such treatment

legitimises institutionalised practices embedded in the tacit norms and values of a liberal, capitalist society. It allows its ideological proponents to suggest, for example, that school and teacher autonomy is enhanced where rational agents are free to 'choose' from a range on offer by consultants selling their wares in the knowledge economy. But of course, this is a pseudo-freedom. Such 'choosing' merely intensifies performativity because choice is restricted to an individual's selection from a limited range of commodities and restricted by the school's ability to pay. In other words, it excludes the option to redefine education as a social good because teacher learning can be understood only as an individual, acquisitive matter. As teachers 'buy' further credentials, learning is treated as a linear process of acquisition over time. An inability to demonstrate the accumulation of pedagogical techniques may result in severe career – and hence economic penalty. Compliance is only further enforced when accompanied by the comparison of pupil attainment through testing and league-tables, as is the case currently in England. Despite the current rhetoric of devolved power and choice then, genuine innovation in teaching practice is discouraged and compliance enforced.

Even the proposed remedy for such technicism becomes part of the delivery syndrome it seeks to exile, a problem I have discussed in more detail elsewhere (Edwards & Thomas, 2010). The transmission and acquisition of reflective skills is often proposed as an antidote to 'uncritical socialisation' or performativity pressures. However, the phenomenon of impression-management surfaces again as the focus of teachers' thinking becomes faithfulness to a checklist – this time, of reflective skills. Crucially, it matters little whether the criteria for success are a list of competencies or reflective skills if the aim is to enact transmission and demonstrate *acquisition*. The fixation on outcomes robs teachers of the opportunity for professional examination of classroom processes since a concern with fidelity to a tick list diverts their attention away from an analysis of their pupils' learning (Ball, 2001). The teacher's pre-occupation is with summative not formative assessment. Their primary concern is with their performative act and the related performance management outcomes. Of course, the contradictions arise here because reflection, understanding and skills, are not things which can ever be said to have been transmitted or 'acquired'. They are processes which occur within practice. Whilst their enactment may be observed in particular circumstances, they cannot be treated as individual 'possessions'. Yet, seventeenth century epistemology encourages us to think that they *can* be delivered and applied. Historical processes are treated as dehistoricised products; they are distorted and commodified.

This leads us to a further contradiction: despite a competitive policy framework, teachers are expected to collaborate. But as Larson's (2009) study has shown, individualised assessment systems undermine collegiality through their comparative framework. Where teaching is reduced to performance indicators, such objectification of individual performance provides a comparative measure of the exchange value of the teacher's labour in relation to other teachers. Since teachers must compete in the market-place for employment and promotion they thus come to focus upon their relative value as a commodity. In this way, they are alienated from each other in much the same way as children in schools can become confused by collaborative work - an arrangement which makes it difficult to evidence their individual productivity – and ultimately to acquire the certification which will elevate their employability ahead of their peers.

The disincentive to collaborate also distorts the relationship between university teacher educators and schoolteachers. Like the others, these contradictions

originate in the separation of knowing and doing and are mirrored in the swing between theoreticism and historicism. The former separates thinking from its historical context whereas the latter reduces all knowing to historical particularity. Preservice teachers, for example, often hope their tutors will 'transmit useful theory' prior to their school placement with the expectation that theory will act as a guidebook for practice. When this hope fails to be realised they often then disparage theory altogether suggesting that there is a mismatch between the ivory tower idealism of university educators and the real world of school (Lasley, 1980). Moreover, this leads some to suggest that classrooms are so variable that infinite adaptation is required instead. Some teachers – and indeed policy-makers - then champion learning to teach 'on the job'. But 'learning by Nelly' merely substitutes the distorting effects of rationalism for the equally distorting effects of crude empiricism. The assumption of the latter is that teachers can merely absorb their craft via cumulative experience untrammelled by theory. Yet the contradiction is rarely made visible: if we learn through experience alone, why is there any need to demonstrate one's competence through the usual routes of appraisal? Surely competency merely corresponds to the number of teaching years completed?

There are of course many more contradictions in current practice and it is beyond the scope of this paper to provide an account of them all. My intention however, is to indicate how some of these difficulties derive from modern ideas about knowledge formed during the transition from feudal to capitalist relations. Modern conceptions of knowing lie at the heart of transmission-based teaching. They are the conscious expression of social relations originating in the economic and political transitions of the seventeenth century. These conceptions are now deeply embedded in the practices of educational institutions of the Western world; they constrain teachers and bring about tensions which often manifest themselves as contradictions.

However, these contradictions can also be viewed as potential opportunities. They point to the possibilities for transformation immanent in the educational landscape. If we wish to exploit them, we need to build on the work of those who have provided tools of critique. It is to these thinkers that I now turn.

### **A dialectical critique**

... young children are very dialectical; they see everything in motion, in contradictions and transformations. We have to put an immense effort into training kids out of being good dialecticians (Harvey, 2010, p.12).

Though direct reference to dialectical thinking has not yet been made, those familiar with it may have noted that the preceding analysis is dialectical. I began by identifying current trends in teacher education and, rather than treating these as isolated, static phenomena between which links can thereafter be found, I treated their existence within spatial and historical contexts *as part of what they already are*. As Ollman (1993) explains, to understand any phenomena, dialectical thinkers begin with the whole, studying the interconnections and changes that make up that whole as inseparable from it. Dialectical thinkers, in other words, begin from an ontological position which treats reality as a structured whole constituted by interdependent processes in flux. In this paper thus far, I have also presented the tensions experienced by the educational community as *contradictions* – as interactive processes which both support and undermine each other over time - implying that such clashes are at the heart of continual transformation. These processes of educational change are understood to be dialectically related to social change and my claim is that



understanding these contradictions can sensitise the education community to the possibilities for transformation that lie in their work.

Dialectical thinking has a long history as a corrective to epistemological representationalism. Whilst the Cartesian modernist thinker treats subject and object as separate and static (leading to a delivery-acquisition, transmission-based view of teaching and learning), process thinkers posit a dialectical relationship between subject and object, knowing and doing, giving way to a view of education as organic growth (Scarfe, 2009). This is a tradition of critique extending back to the revolutionary impulse of the Enlightenment, with key tenets stretching back further to Ancient Greece (Ollman, 1993). With its insistence upon constant change, dialectics is fundamentally revolutionary. As Ollman notes,

It is revolutionary because it helps us to see the present as a moment through which our society is passing, because it forces us to examine where it is heading as part of learning what is it, and because it enables us to grasp that as actors, as well as victims, in this process in which everyone and everything is connected, we have the power to affect it (Ollman, 1993, p.18-19).

Dialectical thinking is most visible in periods of vigorous political struggle. Marx, for example, was writing during the nineteenth century flow of various streams of worker resistance in Europe. And dialectical thought was also evident during the twentieth century post-war trend towards a more democratic and egalitarian society, a trend which Western governments reversed in the eighties.

Moreover, dialectical thinking tends to be found in thinkers who place practice, rather than the individual knower, at the heart of their analyses. Although I am not claiming that they are one and the same by any means, there are elements of dialectical thinking found in process-relational educational philosophies. It is this similarity to which I wish to draw attention for it forces us to connect pedagogy to its sociohistorical context, rather than analyse it in isolation. This relation is important for researchers have shown how easily progressive, process-centred ideas - when treated in isolation - can be appropriated to the agenda of capital (Bowles and Gintis, 1976; Sharp and Green, 1975). Process-relational thinking is found in the work of many educationists critical of transmission pedagogies. These include but are not limited to thinkers such as Whitehead (1929), Bruner (1996), Freire, (2005), Stenhouse (1975), Dewey (2010) and Vygotsky (1978). What is important about their work is that it has enabled us to understand the knower and the world as constituted *within and by practical relations*. This is also a key tenet of dialectical thinking and it runs counter to the individualist conception of knowing bound up in the modernist construal of knowing. In giving ontological privilege to *practice* rather than the human subject, these thinkers reject the individualist-acquisitive account of knowing and instead embrace praxis. Since the world is understood as a complex of shifting interrelations rather than a collection of ready-made objects to be known, dialectical change leads to continuous conceptual development and decay. Concepts do not pre-exist to be later applied to the world nor do they mark off separable areas or objects in the world; rather, they are derived from our interaction with the world within a social practice. They are tools developed in the coordinating of action. Crotty refers to these ideas as the ‘social constructionist’ view:

It is a view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction

between human beings and their world, and developed and transmitted within an essentially social context (Crotty, 1998, p.42).

The term ‘social constructionism’ is usually attributed to the work of Berger and Luckman (1967) but, as Crotty (1998) notes, this idea has a much longer history in the work of both Hegel and Marx. It is also the basis of the phenomenological movement which developed at the turn of the twentieth century evident in the work of Edmund Husserl (1931) and Martin Heidegger (Blattner, 2006). Moreover, it was central to Charles Peirce and John Dewey’s antiphilosophical movement Pragmatism, and to the work of Vygotsky the psychologist, whose own thinking was located in Marx’s work.

These writers drew our attention to the fact that knowledge, whilst never neutral, goes beyond the subjective. This does not have to lead to the modernist sense of objectivity where a disinterested knower confronts a given world. Rather, the claim is that practices develop within particular historical conditions since they reflect the problems which confront humanity at any given time. Marx (1998, p.569), for example, suggested that the problem with modernist epistemology is that “things ...are conceived only in the form of the object...”, rather than *objects-for-us*. The social constructionist account views truth as a matter of practical power not accuracy - but yet with an objectivity beyond the claims of subjective whim. We are dealing with a critical, rather than naive, realism here; in our practical dealings with the world, we confront actual discernable *relations* between salient aspects of that reality; there is certainly room here for error:

Assessment of claims to knowledge must take place *immanently*, within the relevant practices and processes of production. At any time a system of representations will have quite specific strengths and weaknesses with respect to the specific problems of which it is an attempted solution (Suchting, 1986, p.34).

The social context of knowing described here was also a key tenet of Gadamer’s hermeneutics (Gadamer, 1989) which suggested that we are always participants in a practice rather than detached observers. Initiation into cultural meaning is inseparable from the internalisation of socially-derived convictions hence there is no pre-existing ‘self’ with intentions – a self who then ‘uses’ language to realise these intentions. In drawing upon the work of Wittgenstein amongst others, Edwards et al (2002) similarly conclude in relation to teaching that:

Practice is never pure. It is always inscribed in – and by – a set of circumstances that in turn, mediate the intended practice or delivery. In so far as teaching is about the contextualisation of intentions and ideals, it is always a political practice (Edwards et al, 2002, p.142).

We can think of practice then as intentional activity which transforms one situation into another – for example, political activity, scientific activity, or - as is the focus of this paper - teaching. Within social practices there are certainly relations with something extra-discursive but the aim of producing an accurate account of reality (as in traditional epistemology and its associated transmission pedagogy) is eschewed. Instead of a pre-constituted subject confronting a pre-constituted world, both subject and object are *continually constituted and reconstituted* – that is, transformed – in dialectical practice. Concepts are thus not something transmitted and acquired by the individual before they are used for they are always already applied. As Dewey (2010, p.53) insisted, education is not a preparation for life. Rather it is part of life itself

since it involves the “reconstruction and reorganisation of experience which adds to the meaning of experience, and which increases ability to direct the course of subsequent experience”.

This does not mean that theory is redundant and practice triumphant or that these concepts should be collapsed into one or the other. The problem lies only with a view of theory as ‘finished’ knowledge transmitted by an authority to labourers or technicians. Theory should be understood, not as a representation as in modern epistemology, but as an indivisible aspect of practical work which - whilst *analytically* distinguishable from non-discursive aspects of the practice - nonetheless has no independent or prior existence to the practice itself. Suchting (1986), in explaining Marx’s elucidation of practice, offers an example from the practice of using a beam balance to weigh objects. Within this practice, there is a material basis to metal which is causally affected by other material aspects of the world. Moreover, there is also a theoretical component supplied by the social function of the balance which necessitates conceptualisations such as ‘weight’, ‘pointer’ or ‘scale’ and so on. These material and theoretical aspects of knowledge within a practice are inseparable even if analytically distinguishable. Theory thus does not prescribe practice; rather theory is *dialectically related* to practice since it is always being developed in the process of a practitioner striving to meet practice aims. From this dialectical perspective, it becomes impossible to view teaching as the mere transmission of theory or disembodied knowledge. As Au (2007) argues, Vygotsky’s dialectical account of teaching entails a view of the teacher or more capable peer as a leader within a practice who plays a key role in promoting the critical consciousness of the learner through shaping instruction in relation to the learners’ needs or ‘zone of proximal development’.

### **Teacher education and praxis**

So what does all this portend for teaching and teacher education? Whilst this article has sketched the historical relations within which the delivery-acquisition metaphor was constituted and given an account of a counter process-relational movement, understanding this history cannot yield theoretical prescriptions or forecasts. But it *can* help us to “mark limits to the field of action” (Toulmin, 1992, p.1). This would of course challenge many taken-for-granted structures in education, teacher education and indeed society. Space allows me to intimate only a few directions for praxis here.

The most obvious change is that the separation of theory and practice has to be challenged and replaced with a better understanding of their dialectical relationship. As some educationists have always argued, this means that curriculum should be understood as activity – revolutionary activity which transforms and reconstitutes person-environments (Newman and Holzman, 1993). A problem centred curriculum involves learners, teachers and teacher educators collaborating in *dialectical* (not merely instrumental) inquiry. Such inquiry would of course involve a conversation with humankind’s hitherto constructed knowledge. But this would not be treated as disembodied knowledge. Teachers, for example, would need to examine the cases presented by other educators, including great educators like Dewey and Vygotsky - not merely presented as pedagogical techniques but as holistic stories. If a critical consciousness - characterised by an understanding of education and its relation to history and society - in teachers is to be developed, then they need to engage with educational ideas inside the histories, activities and hopes of their authors. What teachers need are not rules to follow but rather insight from the stories these educators

have told about their own attempts to deal with contradictions in education. As constructivists insist, problematic cases are the engines of educational development (the power of problem-based action research is well appreciated by many educators and contradictions are plentiful in schools) but such conflicts are not usually viewed as the wellsprings of genuine transformation. Rather they often encourage conservative ‘solutions focused’ approaches, rather than a critical understanding of the oppressive relations at the heart of Western schooling. A truly developmental teacher education curriculum would go beyond problem-solving to critical praxis.

Moving beyond atomistic analysis to dialectical thinking means we must also critique the privileging of individualism in education and teacher education. We need to find ways to discourage the separatist focus upon individual teachers and individual children, and instead encourage a critical examination of contexts within which learners find situational opportunities and constraints. Problems and people in education are created together in an historical, economic and political environment. Modernist, capitalist education systems assume there is a mind which contains ‘understanding’ whereas in fact understanding is performative – it is a process. Dialectical thinking helps us to examine such change processes and, as Vygotsky argued, also helps us to see that cognitive processes originate in social activity (1978). This means moving beyond the ontological error of viewing the teacher or child as the unit of analysis in isolation, towards a relational view of the person-environment. The appearance of any skill in a teacher’s or child’s development is related to the particular environmental ‘happenings’ – a skill may fail to appear if those classroom happenings are not conducive to its appearance. This makes it difficult to speak of individuals as ‘underachievers’ or ‘outstanding’, for both the environment and the teacher are involved in the construction of failure or success.

## **Conclusion**

Transmission-based teaching still thrives despite longstanding reform efforts by the educational community. This pedagogy makes sense only within a logic which separates product and process, theory and practice, or knowing and doing. This is a historical legacy which I have argued is rooted in a division of labour in class-based societies and a possessive individualism lying at the heart of a society based upon capitalist relations of production. Pedagogical reform studied in isolation is thus insufficient to bring about genuine transformation of teaching. Reform in the educational sphere must be analysed *in relation to* reform in other spheres of economic and social life. The possibilities for transformation that are immanent within education must be understood in relation to the unfolding dynamic of the broader historical, economic and political milieu. The development of pedagogical ideas should be explored inside the historical context of their emergence. As Freire (2005) argued, pedagogy is always political. The separation of pedagogy from history and society encourages teachers to view theory and pedagogy as ‘neutral’ and the purpose of education as fully settled. This entails a denial of value-incommensurability, a denial which is of course conducive to the prevailing economic and political agenda.

The conclusion to be drawn from the analysis presented here is that dialectical tools of critique are necessary to assist the education community to connect educational ideas to social action. The tendencies immanent in the contradictions of educational practice foreshadow our future. Dialectical thinking helps us to understand why genuine transformation will inevitably involve a clash with frameworks of thinking more convivial to the ruling class. Without such a clash of

competing ends, education will continue to preserve the status quo (Edwards, 2007). But if teaching is to be genuinely transformed, then as Kincheloe (2003) has argued,

...educational reform cannot be conceptualised outside of a deep appreciation of the social, cultural and economic forces that shape contemporary Western societies and their educational institutions. Critical teacher researchers, therefore, (must) develop a detailed understanding of these social dynamics and their relationship to the role and purposes of schooling (Kincheloe, 2003, p.205).

Ultimately dialectical thinking is about examining the past and future inside the present. Any critique of pedagogy has to be deeply embedded in concrete practices in schools whilst also aiming at teachers' collective critical consciousness of the connectedness of their work to wider historical, economic and cultural spheres. Education is ultimately a question of values; it is a matter of relating means to ends and in the final analysis – a matter of considering towards what kind of society education and teacher education should contribute.

### **Acknowledgements**

The author wishes to thank the JCEPS reviewers for their helpful comments on an earlier draft of this paper.

### **Author details**

**Gail Edwards** is Lecturer in Education at Newcastle University. Author contact details: Gail Edwards, School of ECLS, King George VI Building, Queen Victoria Road, Newcastle-upon-Tyne, NE1 7RU. Email: [gail.edwards@ncl.ac.uk](mailto:gail.edwards@ncl.ac.uk). Tel: 0191 2226591.

## References

- Ainley, P. (1993) *Class and skill: Changing divisions of knowledge and labour*. London: Cassell.
- Atkinson, T. & Claxton G. (Eds.) (2000) *The intuitive practitioner: On the value of not always knowing what one is doing*. Berkshire: Open University Press.
- Ball, S. (1990) Performativity and fragmentation in 'postmodern schooling'. In J. Carter (Ed.), *Postmodernity and the Fragmentation of Welfare* (187-204). London: Routledge.
- Ball, S.J. (2001). Performativities and fabrications in the education economy: Towards the performative society. In D. Glesson & C. Husbands (Eds.) *The performing school: Managing teaching and learning in a performance culture* (210-216). London: Routledge-Falmer.
- Ball, S.J. (2003) The teacher's soul and the terrors of performativity. *Journal of Education Policy*, 18 (2), 215-228.
- Bates, R. (2004) Regulation and autonomy in teacher education: Government, community or democracy? *Journal of Education for Teaching*, 30 (2) 117-130.
- Blattner, W. (2006) *Heidegger's being and time*. London: Continuum.
- Boxley, S. (2003) Performativity and capital in schools, *Journal for Critical Education Policy Studies*. 1 (1). Retrieved from <http://www.jceps.com/?pageID=article&articleID=3>.
- Bowles S. & Gintis, H. (1976) *Schooling in capitalist America*. London: Routledge and Kegan-Paul.
- Bruner, J. (1996) *The culture of education*. Harvard: Harvard University Press.
- Carlson, H.L. (1999) From practice to theory: a social constructivist approach to teacher education. In *Teachers and Teaching: Theory and Practice*. 5 (2), 203-18.
- Carr, W. & Hartnett, A. (1996) *Education and the struggle for democracy: The politics of educational ideas*. Buckingham: Open University Press.
- Clark, C.M. & Peterson, P.L. (1986) Teachers' thought processes. In W.R. Houston (Ed.) *Handbook of research on teacher education* (255-296) New York: Macmillan.
- Crotty, M. (1998) *The foundations of social research*. London: Sage.
- Dewey, J. (2010) *Democracy and education: An introduction to the philosophy of education*, Los Angeles, CA: IndoEuropean Publishing.
- Edwards, A. (2010) How can Vygotsky and his legacy help us to understand and develop teacher education? In V. Ellis, A. Edwards and P. Smagorinsky (Eds.)

- Learning teaching: cultural historical perspectives on teacher education and development* (63-77). London: Routledge.
- Edwards, A., Gilroy, P. & Hartley D. (2002) *Rethinking teacher education: collaborative responses to uncertainty*. London: Routledge-Falmer.
- Edwards, G. & Blake, A. (2007) Disciplining the practice of creative inquiry: The suppression of difference in teacher education. *International Journal of Research and Method*, 30 (1), 33-55.
- Edwards, G. & Thomas, G. (2010) Can reflective practice be taught? *Educational Studies*, 36 (4) 403-414.
- Eraut, M. (2000) The intuitive practitioner: a critical overview. In T. Atkinson & G. Claxton (Eds.) (2000) *The intuitive practitioner: On the value of not always knowing what one is doing* (255-268) Berkshire: Open University Press.
- Ellis, V. (2010) Impoverishing experience: the problem of teacher education in England, *Journal of Education for Teaching*, 36 (1) 105-120.
- Freire, P. (2005) *Education for Critical Consciousness*. London: Continuum.
- Gadamer, H.G.(1989) *Truth and Method*. London: Continuum.
- Harvey, D. (2010) *A Companion to Marx's Capital*. London: Verso.
- Kincheloe, J. (2003) *Teachers as researchers: qualitative inquiry as a path to development*, 2<sup>nd</sup> Edition. London: Routledge-Falmer.
- Korthagen, F.A.J. (2010) How teacher education can make a difference. *Journal of Education for Teaching*, 36 (4) 407-423.
- Lanier, J. & Little, J.W. (1986) Research in teacher education. In W.R.Housten (Ed.) *Handbook of research on teacher education* (329-48). New York: Macmillan.
- Larson, M.A. (2009) Stressful, hectic, daunting: A critical policy study of the Ontario teacher performance appraisal system. *Canadian Journal of Educational Administration and Policy*, 95, Oct. (1-44).
- Lasley, T.J. (1980) Preservice teacher beliefs about teaching. *Journal of Teacher Education*, 31 (4) 38-41.
- Lortie, S. (1975) *Schoolteacher: A sociological study*. Chicago: University of Chicago Press.
- Newman, F. & Holzman, L. (1993) *Lev Vygotsky: revolutionary scientist*. London: Routledge.
- Marx, K. (1998) *The German ideology, including theses on Feuerbach and introduction to the critique of political economy*. New York: Prometheus.

- Ollman, B. (1993) *Dialectical investigations*. London: Routledge.
- Polanyi, M. (1962) *Personal knowledge: towards a post-critical philosophy*. London: Routledge & Kegan Paul.
- Pollard, A. (2002) *Reflective teaching: effective and evidence-informed professional practice*. London: Continuum.
- Scarfe, A.C. (2009) Introduction: The adventure of education. In A.C. Scarfe (Ed.) *The adventure of education: Process philosophers on learning, teaching and research* (1-21). New York: Rodopi.
- Schon, D.A. (1983) *The reflective practitioner: how professionals think in action*. New York: Basic Books.
- Sharp R., & Green A. (1975) *Education and social control: a study in progressive education*, London, Routledge Kegan-Paul.
- Stenhouse, L. (1975) *An introduction to curriculum research and development*. London: Heinemann.
- Suchting, W.A. (1986) *Marx and philosophy*. London: Macmillan.
- Taylor, C. (2007) *A secular age*. London: Harvard University Press.
- Teacher Development Agency. (2009) Guidance to accompany the professional standards for qualified teacher status and requirements for initial teacher training. Retrieved from <http://www.tda.gov.uk/qts>.
- Toulmin, S. (1992) *Cosmopolis: the hidden agenda of modernity*. University of Chicago Press: Chicago.
- Van Huizen, P, Van Oers B, and Wubbels, T. (2005) A Vygotskian perspective on teacher education. *Journal of Curriculum Studies*, 37 (3) 267-290.
- Vygotsky, L.S. (1978) *Mind in Society: The development of higher psychological processes*, Cambridge, MA: Harvard University Press.
- Whitehead, A.N. (1929) *The aims of education and other essays*, New York: The Free Press.
- Wideen, M., Mayer-Smith, J. & Moon, B (1998) A critical analysis of the research on learning to teach: making the case for ecological perspective on inquiry, *Review of Educational Research*, 68, 130-78.
- Wubbels, T. (1992) Taking account of student teachers' preconceptions. *Teaching and Teacher Education*, 8 (2) 137-49.
- Zeichner, K.M. & Gore, J.M. (1990) Teacher socialisation. In W.R.Houston (Ed.) *Handbook of research on teacher education* (329-48). New York: Macmillan.



Zeichner K.M. & Tabachnick, B.R. (1981) Are the effects of university teacher education washed out by school experiences? *Journal of Teacher Education*, 32, 7-11.