

Developing Professional Knowledge about Teachers through Metaphor Research: Facilitating a Process of Change

Abstract

This paper draws upon research evidence obtained as metaphors derived from biographical narrative interviews of Mandarin teachers of English working in China, which has illustrated the problems of teachers adapting to change within Chinese schools. The research has attempted to explore teachers' professional adaptation under strenuous challenges, i.e., the need to cater for the new Chinese National Curriculum and school performance league tables. While some teachers appear to be more open towards the new challenges, many others are alienated. Teachers' have identified themselves as being a: "robot"; "skilled worker"; "ferryman" etc. The research suggests that this phenomenon can be explained from the wider Chinese context of educational policies that seek decentralization and marketization. This process of educational and cultural change is discussed and explored in terms of what continuing professional development (CPD) best facilitates teachers to cope with and embrace this emerging educational agenda. An appropriate CPD programme is identified and recommended that seeks to develop a 'critical and creative thinking' education system that both empowers and supports teachers' to engage within a forward-looking knowledge economy.

Key Words: metaphor research, interpreting, metaphor, biographical narrative, teacher adaptation, CPD, advanced pedagogy, discursive discourse analysis.

Metaphor and Teachers' Understanding of Their Work

Metaphors offer us a unique way of portraying the world by helping us to frame meaning of human experience. The essence of metaphor is "understanding and experiencing one kind of thing in terms of another" with something that is more familiar, concrete and visible (Lakoff and Johnson, 1980:5 ; Zhao and Huang, 2008). Metaphors are not just figures of speech, but constitute an essential mechanism of the mind allowing the modeling and reification of prior experience. Thus, metaphors can be understood of as a psychological modeling experience leading to new forms of conceptual insight. This process can also be understood of in terms of Kelly's (1955) personal construct theory that explains human knowledge construction in terms of the construing of prior experience. Metaphors are therefore a type of experiential

construing leading to new forms of conceptual knowledge. A major part of the human conceptual system is structured through metaphorical relationships (Lakoff and Johnson, 1980; Martinez et al, 2001) that also forms the basis of experiential language construction. Metaphors are therefore a creative feature of language use within teaching and learning environments and consequently teachers' conceptions of their own educational practice via metaphors is gaining increasing importance in research (Carter, 1990; Martinez et al, 2001; Zhao, 2009a). Indeed, Collins and Greene (Collins & Green, 1990) accentuates that metaphor can reduce a whole philosophy of education to a comprehensible image. A metaphor such as teachers are "gatekeepers" of the classroom illustrates that teachers, apart from the teaching method and instructional materials, are central in empowering and improving student learning and shaping classroom practice in schools (Zhao, 2008a, p.106).

Metaphors have emerged in education as a way of generating comprehension and knowledge in the study of teachers' thinking of their work and facilitating teacher's professional development. Metaphors capture and model teachers' understanding of teaching and learning, articulate and create reality in its own image, thus, entails knowledge about teachers (Zhao, 2009a). Teaching metaphor is seen as "archetypes" of professional knowledge of teachers' thinking; "or from a merely functional point of view as blueprints of professional thinking" (Martinez et al, 2001, p.966). Carter (1990, p.110) argues that metaphors are the vehicle for "modeling teachers' understanding of their work" and for communicating messages and meanings, which are difficult to access in literal language. Therefore, metaphors are the "what" and "how" of a teacher's understanding of their work; and acts as a valid source for gaining deeper and more profound insights into teachers' thoughts and feelings regarding their teaching, in relation to the wider social context (Connelly et al, 1997; Zhao, 2008a).

As such, metaphors have a key role to play in informing teachers' professional development. Teachers are unconsciously guided by images and metaphorical patterns of thought recurring in their field (Martinez et al, 2001). They constantly portray their roles, ways of teaching, and their understanding of learning, by using expressions of imagery, which are conceptions that teachers have of their work. This is in regard to what they do and think, who they are, and how they feel about their work, both in their roles in the classroom and in relation to their students (Zhao and Huang, 2008). We argue that conceptual metaphors elicited from teachers, informs them with their own *folk pedagogy* and this type of language modeling helps to make sense of and articulate their core beliefs (Tobin, 1990; Stofflett, 1996; Bruner, 1996). Bruner (1996, in Zhao 2009a, p.28) asserts that:

"..in theorizing about the practice of teaching and learning in classrooms and other settings, it is better to take into account the folk theories of those engaged in teaching and learning."

This is because teachers' personal theories and beliefs may determine classroom practice. In another context, metaphors bring into sight key issues to be studied and then to be improved with teachers in schools and the educational system. Identifying the use of metaphors by teachers in a specific context allows both teachers and schools, and the whole educational system to reflect on the way they teach and learn, and the way they view their roles and purposes in teaching and learning (Zhao 2008a). An individual teacher's creation of a metaphor can be a result of the attempt

to make sense of his or her teaching, which is influenced by a specific context (Stofflett, 1996). A cluster of metaphors as understandings from groups of teachers in a particular context maps the culture of their practice, and possibly identifies the sources and forces that shape teachers' discourse about their work from a career history perspective (Zhao, 2008a). This can be further linked to teacher development by reflecting upon their conceptions of pedagogy in beliefs and negotiating the nature of their roles in the classroom. Hence, teachers and schools can explore and reconstruct new metaphors of teaching as a transformative route of teacher development, which subsequently leads to new insights and consequent improvements in teaching and learning (Tobin, 1990; Stofflett, 1996).

This article draws upon research evidence obtained as metaphors from biographical narrative interviews of Mandarin teachers of English working in China. It is "to evoke what the metaphor brings to our attention..." (Aspin, 1984:35; Munby and Russell, 1990), aiming at developing professional knowledge about teachers and their work through the study of their metaphors. Based on this data, the authors address a central question: 'How do we facilitate and adapt teachers to change within the challenges of the current Chinese educational reforms and wider societal transformations through designing appropriate continuing profession development?'

The New Challenges for Mandarin Schools and Teachers

China's economic and industrial development is profoundly impacting on education, teachers' life and work. At a macro-economic level the national economy of China has reoriented towards a market-driven model, which has achieved astounding economic success very rapidly (See also Forrester, 2007; Zhao, 2009a). The same social-economic and industrial approach has been applied to the school system, driven by the ontological belief and assumptions of developing a market-driven educational model. Part of the effect of the radical industrialization and commercialization on the education system is seen in the increased decentralization and marketization of education. This has been arrived at over a relatively short span of time in the last fifteen years or so, which is historically very brief given the long history of Chinese civilization.

This 'marketization' model of education encourages the delivery of educational services to parental consumers and other public sector stakeholders, who, in turn, have some degree of freedom in choosing and bargaining over the educational provision (see also Goodson, 2001, p. 51; Zhao, 2009a). This 'freedom to choose' encourages a sense of competition and engenders the type of culture present in both public and private schools, and in how teachers then work within them (Wong and Ysui, 2007; Zhao, 2009a).

The problem is not so much with the outcome of choice, but with the desires that underpin parental choice, i.e. the end result of examination scores and grades and the fact that this becomes the pure goal and perceived status of an educational 'service sector'. In this way, schools and teachers become overly stressed to maintain their school status and achieve these results for their 'customers', i.e. the children, parents and wider society. This social context and demand is reflected in the research results of a survey conducted through teachers' interview data gleaned from those working in a Chinese public State-run school in Wong and Ysui's study (2007: 467):

"We have to maintain the ranking of our school. We have to keep our name and can't lose

position and reputation in the society. We need to be no.1 here.”

Schools, in this system, are not only places to cultivate potential university students, but also act as “locomotives of education development and are showcases for local educational achievement” (ibid: 467), which rests a lot upon the instrument of the school’s and teachers’ performances. This, on the one hand, promotes teacher professional learning and development to adapt to the wider economic and social changes; on the other hand, it induces a culture of competition and a performance management goal that determines not only what teachers do, but also who they are. This becomes defined in terms of objective and numerical workload targets for the teacher, including student scores in examinations and the outcomes of various teaching competitions that is then reflected in teachers’ pay and promotions (Wang and Paine, 2003; Wang and Ysui , 2007; Zhao, 2008a, 2009a.) This is even more evident with private schools, as Wang and Ysui, (2007:467-468) observe:

“...the rationale of a business-like management tends to retain effective teaching staff only”.

As a result, genuine learning tends to be marginalized, and teaching is deskilled with teachers left in professional struggles that have been similarly experienced by teachers in other industrialized countries, such as Britain (Woods, 1993; Ball, 2003; Gao, 2008; Zhao 2009a). Ball (2003: 216) critiques what happened in the British education system; he maintains:

“Typically, at least in the UK, these struggles are currently highly individualized as teachers, as ethical subjects, find their values challenged or displaced by the terrors of performativity. Some ephemeral examples:

What happened to my creativity? What happened to my professional integrity? What happened to the fun in teaching and learning? What Happened? (G. E. Johnson).
...”

Similarly, teachers’ professional autonomy and integrity in China are undergoing strenuous challenges. The external economical and societal factors are causing pressures and anxiety within the profession of teaching and with school teams. This can be seen through the interface between a traditional heritage that sees education as a route to develop and advance people; and modern societal changes that uses an industrial mindset to measure educational outcomes (Zhao, 2008b) with a subsequent reform agenda for education that has pushed the teaching profession to the top of the political agenda. This means that teachers are currently experiencing much political limelight and are the focus of society’s attention with the consequent professional vulnerability; for when teachers feel insufficiently prepared to manage such exposure and change (Troman and Woods, 2000; Gao, 2008; Zhao, 2008a).

These societal forces on education have now manifested themselves through the visualization of teachers’ roles and identity in teaching and of their teaching methods. That the ‘*ends justify the means*’ as an educational process and experience of education in China today, is fast becoming a dominating culture. Unfortunately, at the same time, this is also generating a potential resistance to innovations and new forms of curriculum (Ministry of Education, 2001; Fullen, 2007), and

communicative language teaching (Hu, 2002). Hu (2002) interestingly identified that despite many years of pedagogical reform, teaching as a one-way transmission mode of pedagogy in China has curiously remained unchanged over the past few decades (see also Zhao and Paulson, 2006).

On the contrary, there are still some teachers that are dedicated to shifting pedagogy towards higher-order thinking skills and learning, and protect their professional autonomy through more intellectual and sophisticated pedagogical approaches. This is generally achieved by planting in students' a sustainable learning interest and nurturing this epistemology within both the school and student capacity to learn (Zhao, 2009a). However, such an embedded approach toward this kind of *advanced pedagogy* does not easily fit into the existing culture of "performativity" (Ball, 2003) and becomes somewhat "strange" if not alien to the prevailing system (Jing, 2005, p.98). The problem is not with those who care to struggle for meaningful change, but with those who have become "passive" and "alienated" to improve themselves and respond to reforms of any kind. This social reality challenges and demands new meaning and approaches towards the leveraging of educational change (Fullen, 2001; Zhao, 2009a) and the nature of meaningful CPD within this context.

To sustain such new energy and to maintain the new meaning of teaching demands a systematic force for the school system to transform from the industrial model to an educational model of learning underpinned by creative and critical thinking to support the knowledge economy. This also requires educational leaders' to engage in a radical rethink for designing appropriate CPD to support teachers' professional wellbeing and needs within this system of rapid social change (See also Fullen, 2001, 2007). We attempt to support and facilitate this process of change coming from all the aforementioned new challenges through using the knowledge gained from *metaphor research* elicited from Mandarin teachers' life-history narratives. This evidence will help to inform CPD policy and the future direction of teacher education in general.

Data Sources and the Qualitative Analysis of Metaphor Research

Teachers' life-history that is also known as a biography is recognized as a significant source that impacts upon the development and formation of teacher's self-understanding of teaching (Dewey, 1938; Knowles, 1992; Goodson and Sikes, 2001; Zhao, 2009a). Life-history has been used as both the content and methodology of research into understanding a teacher's career development and is grounded in evidence derived from teachers' narratives (Clandinin & Connelly, 2000; Zhao, 2009a). According to Zhao (2009a:31):

"Life-history begins with, and builds on, life stories, or looking at critical incidents and events as the educational life experience that the teacher tells...This life experience includes what they strive for, love, and endure, and how people act and are acted upon... Life histories can also inform our thinking about personal engagement with social context, with implications for some of the most prominent public issues of the day..."

It is through the narratives of teachers' life histories and stories that metaphors are naturally brought about. The life-history narrative provides the medium for which metaphors are used by

teachers' to articulate a broader context in understanding a teacher's teaching. This professional development activity generates deeper knowledge about the person that the teacher is, and the social reality that they have to act and operate within (Goodson, 1994; Zhao, 2009a). The narrative obtained reveals a rich field of metaphor-laden discourse. The evidence obtained through such field research produces a wide range of metaphorical expressions that are anchored in teachers' accounts of their life stories of learning and teaching. For instance, a teacher described her feeling about the level of control teachers had over students as:

“It is like grasping sand in your hand, if you squeeze too tight, it hurts your hand, and if you loosen your grip, the sand slips through your fingers (Wang Fang)”.

These expressions emerged as interesting and creative articulations of the participant teachers' experiences, which reflect everyday interactions in teaching and learning. They also form a culturally colourful and meaningful manifestation of pedagogy. The researcher also relies on the ethnographical experience of living with and observing educators, including follow-up ethnographical data added to life-history narrative. In the follow-up ethnographical activities the researcher revisited the original participant teachers with copies of their life-history narrative transcripts. The teachers were asked to reflect upon post-qualitative feedback questions that were then collected as follow-up interview data so as to triangulate and corroborate the researcher's understanding of their original use of metaphors. This qualitative analysis procedure allows the researcher to get to the roots of the metaphors and metaphorical expressions embedded in teachers' narratives of their teaching career.

The primary raw data source for this analysis centers on metaphors and metaphorical expressions identified from the life-history narratives of seventeen (n=17) Chinese teachers of English. They were drawn from a range of secondary schools in a medium-sized city in the central region of the People's Republic of China.

The sample of teachers were all of different ages and at diverse points in their teaching careers, and face different personal circumstances in their teaching. For instance, the ages of the teachers in this study range from 22-55, and their years of teaching experience from 1-30. They were invited to talk about their life-history in terms of learning experiences, teaching practices and future plans. The life-history narrative interviews were originally carried out in Chinese, but then later transcribed and translated from Chinese into English.

As such, metaphors, as a social science research method and qualitative analysis tactic have already had a major influence in the development of conceptualizing practice (Miles and Huberman, 1994). Miles and Huberman (1994:250-252) recognize that metaphors, indeed, are: “halfway from empirical facts to the conceptual significance”, and thus, the “richness and complexity” of metaphors are useful “data-reducing devices” in connecting social findings to theory. Hence, we postulate the usefulness of *metaphor research* as a useful social science methodology that can be adopted for generating authentic case study evidence within ethnographic and action research field studies.

Thus, to make sense of case study data derived from metaphors the process of qualitative analysis was started by reading through all the narrative manuscripts repeatedly. This was done so as to identify the key metaphors and metaphorical expressions that were anchored in a teacher's

narrative discourse. The first stage of this qualitative analysis process was to identify metaphors in this manner and to then code them for further analysis. The coding system adopted was to highlight metaphors and their residing sentences, which we called metaphorical expressions. A massive life-history narrative database was subsequently drilled-down and reduced to around 100 key metaphors and metaphorical sentences. The sentences within which the metaphors resided were then put together for further examination. The next stage of qualitative analysis process was to then cluster groups of metaphors and metaphorical expressions into significant themes according to the imagery conveyed and the ways/types of teaching being described. This data was then further reduced by being clustered into three categorizations that referred and related to the elicited pedagogical implications. Such a qualitative analysis process of sifting and clustering narrative data into meaningful findings is defined by Gardner and Coombs (2009) as a discursive type of discourse analysis. Gardner and Coombs maintain that:

“Discourse analysis helps the researcher to elicit and deconstruct the veiled ontological and epistemological assumptions contained within text-based and indeed other evidence formats such as pictures and video. It is also often seen as discovering the hidden motivation and greater depth of meaning behind a text, problem or situation, by both challenging and critiquing traditional methodological approaches” (p.68).

As a result, the principle findings derived from this case study (see the range of detailed findings given in **Table 1**) were only those key conceptual metaphors that emerged from this discursive process. Thus, through the process of discursive discourse analysis the emergent findings were clustered and elicited into three significant pedagogical themes, namely:

1. the role and self-image of teachers;
2. ways of teaching; and,
3. views on knowledge.

Nevertheless, the following discussion section also refers to other interesting metaphors that were significant but not able to be categorized into the three themes presented in Table 1.

Table 1: Discourse Analysis of Metaphor Themes and Their Pedagogical Implications

Summarized abstract of metaphor	Pedagogical Implications	pedagogical themes	
<p>My students regarded me as their <i>big sister/close friend</i> for the first few years in teaching.</p> <p>I need to transit from my role of student to become a teacher. A teacher is like a <i>manager</i>.</p> <p>I am <i>teacher</i>³.</p>	<p>Novice teachers need to familiarize themselves with and pick up the role of a teacher, while veteran teachers are humorous of their experience.</p>	<p>The role and self-image of teachers</p>	
<p>He (the narrator's teacher) was becoming a <i>housekeeper</i>...I have an <i>account book</i> in my mind about my students.</p> <p>I feel like a <i>robot</i> when correcting students' homework...After working like this for 12 years, I felt myself a <i>skilled worker</i> in this field.</p> <p>The teacher is a <i>ferryman</i>...</p> <p>Teachers do trifles for students, working as <i>burning candles</i>.</p> <p>...That is <i>transmission</i>.</p>	<p>Teachers identify their roles as laborious 'workers', which indicates the absence of intellectual elements. Under such images of teaching and teachers, what would happen to student learning?</p>		
<p>There was so much stuff. It was <i>transmitted</i> into us; we contained it and did not know how to use it. It was a real sense of <i>pouring it into</i> us.</p> <p>At the beginning of my teaching, I followed the textbook rigidly. It was pointed out to me that it was <i>flogging a dead horse</i>.</p> <p>At that time, the teacher often said that <i>study was like having steamed bread, the dry steamed bread, just swallowing it</i>, without thinking too much.</p>	<p>Teaching as transmission learning without thinking and student as 'container'</p>		<p>Ways of teaching & learning</p>
<p>The teachers hold a book in one hand, a chalk in the other, <i>copying</i> from the textbook to the blackboard.</p>			
<p>Perhaps it (University education) <i>deposited</i> something in me.</p> <p>It (learning) is abstracting things out of real life. English learning is <i>picking up shells, one has to keep them well in the basket</i>.</p> <p>When you can memorize it, you have the <i>goods</i> inside you, and then you can use it freely.</p>	<p>Knowledge as 'shells' and 'goods'</p>	<p>Views on knowledge</p>	

Interpreting Metaphors in the Context of Teachers' Life History

What follows is the interpretation and critique of the metaphors obtained through this research case study. We then discuss and speculate how the important messages contained in these metaphors could be incorporated into the educational reforms and related teacher development within the Chinese education system as a new CPD policy. This interpretation, however, only refers to the social context of teachers' life-history and how this might inform CPD policy.

The Role and Self-image of Teachers

It is perceived that teachers' perceptions of their professional roles are closely linked to their self images and their impact on the ways how students are taught and the subsequent achievement of their students (Ben-Peretz et al, 2003). As shown in this analysis, metaphor bestows a fertile avenue to envision teachers' image and role, and possible relationship to their students and other discourses. Interestingly, one metaphor of "teacher³" – "teacher cubed" meaning a very experienced teacher – obtained from Ms Tang, at the age of early retirement, itself gives an image of a veteran teacher who has taught across several generations. This shows that, as reviewed earlier, a metaphor is a highly structured visual language, which can reduce life-long experience into one image.

A few younger participant teachers used "sister" to refer to their roles as teachers in their relation to their students, as described in this account:

"They all regard me as their sister, I think. But also because of that, no one is afraid of me. Sometimes they don't listen to me, or don't take what I say serious."

It was also mentioned and explained by this participant teacher that she is not yet taking an authoritative role. This is because some novice teachers, such as those in their early years of teaching, are not yet familiar or confident with their role as a teacher in the classroom. This metaphorical expression may also show the caring role some teachers have and their relationship of rapport with their students.

Metaphor, as language, changes with wider cultural developments in education and society. For instance, the metaphors describing a school head-teacher as "manager" and teachers as "workers", is now contested as an old view for people working within the educational workforce. This type of observation has almost disappeared in the Western educational discourse, which indicates how the culture and practice of those working in educational situations within developed countries has been transformed (Berliner, 1990, p.86). However, in this current research project, this metaphor is still overwhelmingly used by many Chinese teachers who perceive themselves as either a "manager" or "worker" in their narratives. For example, two novice teachers used almost exactly the same following type of metaphor to describe their experience, as included in Table 1:

"I need to transit from my role as student to become a teacher. A teacher is a manager."

Ms Xu's metaphor of herself as a "robot" and "skilled worker" shows the boredom and stress she

feels about her work, and a similar metaphor is found in Mr Cheng's conceptualization of his teaching career as a "ferryman":

"The teacher is a ferryman, year after year taking people (students) from one side to the other; the teacher remains on the river without a sense of achievement."

These teachers identify their roles as laborious "workers", which reveals the absence of teaching seen as an intellectual and constructive educational task. Similar metaphors such as the teacher as "a housekeeper", is also identified in a teacher's narrative about his own learning:

"He was almost 24 hours with us (The narrator's teacher) and was becoming like a housekeeper...I have an account book in my mind about my students."

The language "housekeeper" is used by a teacher to describe what his own teacher was like in his school time. When he talks about what he knows about his own students, consequently, he referred to the metaphor of an "account book" he has, which indicates an image of a "housekeeper" for himself as a teacher in the school and in the classroom. The metaphors from the teacher's biographical narratives tell where they come from, and how the pedagogical image is shaped in the social relations. In this sense, a change in pedagogical role requires a breakthrough and the influence of a more creative and critical role model in creating a new form of teaching image is particularly necessary (Fullan, Hill & Crévola, 2006).

The metaphor of "housekeeper" and "account book" further echoes Ball's (2003) research on the effects of the culture of performativity, which he describes as:

"Within this ensemble, teachers are represented and encouraged as individuals who calculate about themselves, 'add value' to themselves, improve their productivity, strive for excellence and live an existence of calculation. They are 'enterprising subjects' who live their lives as "an enterprise of the self (p.217)."

The "points" the school teachers accumulate in this study are calculated and based on performance results such as the student examination scores and the student statistical rates of going to "key high schools and universities" etc. If the teacher has an anxiety or fear of losing points and scores, he/she may just have to sacrifice his/her time to make sure that the students are always on the task of "learning" and has thus reduced the teacher identity to be that of a "housekeeper" as defined within Chinese cultural terms of reference. As a result, the educational relationships, identities and promotions are judged by all sorts of "scores" and "points", which then functions and embeds itself as the ontological basis of "professional judgments" such as "excellent teachers" and "effective teachers", and then "good schools" and "bad schools". This information then feeds back and relates to parental choices *via* such statistical league tables. Ball (2003, p.217) critiques the policy and culture of performativity and statistics as "mechanisms for reforming teachers ... and for changing what it means to be a teacher, one's 'social identity' (Bernstein 1996: 73)." It does not only regulate what they do, but also who they are. This educational policy ultimately shapes the methods, expectations, culture and outcomes of student learning (Leithwood and Jantzi, 2008).

Ways of Teaching and Learning

When the image and identity of teachers emerged as “workers”, “ferryman” and “housekeepers”, it was not too difficult to imagine what kind of teaching and learning they were referring to and the limited type of transmissive pedagogical approaches being adopted in schools.

A range of metaphors were used by teachers referring to various ways of teaching and learning. The following examples give a typical picture of classroom learning:

“In senior school, we listened to teachers. In class, there was little interaction between students and the teacher. The teacher talked, and we took notes. Piles of notes were produced. At that time, vocabulary and grammar were stressed...That is transmission. (Ms Xu)”

“There was so much stuff. It was transmitted into us; we contained it and did not know how to use it. It was a real sense of pouring it into us.”

This metaphorical narrative about how English was taught to the participant teachers in secondary school uncovers a pedagogical model of a teaching tradition that relies on transmission and rote learning through discourse. Unfortunately, this prior learning experience has subsequent bearings on how the teacher then teaches in their own classrooms (Zhao & Poulson, 2006). This notion is also captured in metaphors that tell us what it is like in more current teaching practice that continues this tradition of transmission pedagogy:

“At the beginning of my teaching, I followed the textbook rigidly. It was pointed out to me that it was (like) flogging a dead horse. (Miss Tao).”

The concern of the impact of such self-image of teachers and ways of teaching on student learning is also covered by teachers themselves and reflected in the following metaphorical narrative:

“Education is very different from other occupations, in the way it deals with living human beings, rather than objects or products. When there is something wrong with some product, people can make it again. However, it is difficult to remedy a human defect caused by education...We have to constantly adjust ourselves and renew our understanding and knowledge to face new challenges (Mr. Zhu).”

Views on Knowledge

Examples such as “teaching rigidly to the textbook” is described as being like “flogging a dead horse”, and “copying” the textbook content to the blackboard. Learning is described as “picking up shells”, which also indicates that knowledge is perceived to be a solid object, with students seen as the receiver and container. These expressions echo and constitute a “transmission” and “banking” epistemological model of education, which suffers from the absence of more constructive elements in teaching and learning (Freire, 1988; Gui, 2009). Such metaphoric evidence does not reflect the role of teachers as intellectuals in education, but instead emerges as an image of “technician” and

suggests a de-skilling culture of “proletarianization” of teachers (Woods, 1993, p. 355; Ball, 1995). Such perceptions increases teachers’ emotions such as guilt, with one teacher saying: “It made me feel I am doing my work badly. I passively accept it.” When teachers’ sense of self-efficacy is in conflict with the external requirements, and they feel powerless to engage themselves to adapt to such change, then teacher stagnation and psychological withdrawal grows. As a result, there is little space for considering teaching as “scaffolding”, or learning as a discovery and self-experimental process. This low-level epistemological paradigm gives little room for teachers and students to fully experience and enjoy the curriculum as a means of exploring, understanding and ultimately transferring the deeper underlying concepts and knowledge.

Implications for CPD Policy Making

The effects of industrialization and commercialization upon teachers’ work and life in China are pushing the profession of teaching and teachers into a situation that reflects teachers’ experience in Western countries. This phenomenon is described by Woods’ (1993) as:

“...to loss of power and status, and reduced flexibility, which have fuelled the arguments that teachers are deskilled, proletarianized and alienated workers”.

As a result this situation does not encourage creativity, but instead “deadens the intellect” and “devours creative resources” of teachers (Woods, 1993, p.355; see also Ball, 1995; 2003), which therefore erodes teachers’ emotional wellbeing and professional aspirations (Gao, 2008; Zhao, 2008b).

Many of the unique metaphors researched in this study have helped to identify some important missing educational policy areas that address teachers’ continuing professional development (CPD). The study has also uncovered deficits and limitations of the pedagogical range and knowledge of many teachers, and therefore of the CPD needs of the teaching profession in the current educational debate on reforms. These ‘deficits’ include areas such as teacher-student relationship as “worker-product”, the process of learning, teachers as intellectuals, and teaching as intelligent work. Are these issues and concerns expendable as the price and cost of implementing mass-education reforms? Perhaps this absence points to a direction that new educational reforms should tackle; such basic questions as what learning is and how learners learn, because it defines the mutual relationship of teacher and student, and that of teaching and learning (Bruner, 1996:46-47):

“Teaching, in a word, is inevitably based on notions about the nature of the learner’s mind. Beliefs and assumptions about teaching, whether in a school or any other context, are a direct reflection of the beliefs and assumptions the teacher holds about learners.”

This suggests that innovations in teachers’ continuing professional development best involve teachers’ learning about learning to lead student learning (Bullock, 2006; Bullock and Muschamp, 2006). This echoes Fullan’s (2007:35) advocating of what teacher’s professional development should do:

“The future of improvement, indeed of the profession itself, depends on a radical shift in how we conceive learning and the conditions under which teachers and students work.”

Learning empowers teachers through CPD that enables them to critically reflect upon practice and seek meaningful change in both teaching and learning, for themselves, their students and the society (Fullen, 2001; 2007).

We therefore need to move away from the current *status quo* of encouraging teachers as ‘curriculum technicians’ and, instead, return teachers to become the intellectuals of learning professionals of the 21st century knowledge society. The implication for Chinese education in modernizing and remodeling the role of the teaching workforce and transforming the teacher image from that of a “ferryman” or a “skills worker” to a facilitator of learning and creativity is an illuminating goal. But this aspiration is also essential if we wish to improve teacher quality and enable a more creative and thinking society.

Conclusions and Recommendations for CPD Policy

Under the current new wave of educational reform in China there is the introduction and implementation of the New Curriculum Standards. The success of delivery and sustainability of this dramatic change in policy rests in the combination of influences between the external (top-down), internal and personal (Goodson, 2001). The external policy changes are by far the most major influence that will bear down very heavily upon teachers in what they think and do (Fullen, 2001). Little attention has been paid to the internal motivation, psyche, durability, resilience and adaptability of teachers’ to meet this new reform agenda; let alone consider a significant and relevant CPD policy to help teachers transform their practice and update their pedagogical skills and professional knowledge. And this ‘teacher adoption’ factor is absolutely crucial if policy-makers wish to achieve any real success and implement the current wave of curriculum reforms in China in a sustainable way with genuine impact for the profession (see also Palmer, 1998; Goodson, 2001).

Industrialization as a symbol of modernity has impact on all aspects of society (Giddens, 1991). Teachers’ work and life in China has no exception to this challenge and has indeed been engulfed by it.

The analysis of teachers’ metaphors in this paper has produced a detailed web of findings from the participant teachers’. These findings mapped their imagery of current practice and understanding of teaching and learning, and revealed what they are and how they feel about their work, which is depressing news indeed, given on the one hand a high status venerable identity, but on the other, a highly stressed occupation (Truman and Woods, 2000; Gao, 2008). What is of more concern are the discourses of paradox between the cultural traditions of teachers and teaching and the current policy of marketization and performativity that has reshaped the identities of teachers and what it means to be a teacher (Ball, 2003; Day et al, 2005). Clearly, these societal and cultural changes have produced the social problems and issues we discovered in schools uncovered through our

discourse analysis of the obtained evidence from teachers' metaphors about themselves' and their profession.

The embedded culture of transmission pedagogy seems persistent and timeless, passing down through many generations and very difficult to break through (Zhao and Paulson, 2006). This also suggests that teachers need to be professionally developed so as to perform a more proactive agency and role in education (Gu and Day, 2007). This is so as to conduct their work as high skills educators for developing in students higher-order critical and creative thinking; much akin to the policy developed in the late 1990s by the Singapore government in its 'Thinking Schools, Learning Nation' strategy (Coombs and Smith, 1999). Such an educational policy and strategy would thereby shift the perceived role from "ferryman" and "housekeeper" to a more intellectual and educationally sophisticated paradigm that would benefit a new 'Learning People, Learning Society' approach for an outward looking and bi-lingual China of the 21st Century.

Such an approach needs the collective social agency force of external, internal and personal players (Goodson, 2001; Fullen, 2001). The change of teachers' work will change education and vice versa. Exploring teaching and constructing new metaphors can be a meaningful experiment through teacher development and life-long continuing professional learning for all serving teachers to devise, manage and deliver meaningful curriculum change in their classes and schools. With growth in such 'hands-on' and 'self-critical' teaching practice, a sense of "flow" and "facilitating" comes into being with impact not so much on examination scores, but via less tangible creative learning outputs for society, such as new patents and inventions for the unknown industries of the future. Maybe this is why the British government (DCSF, 2007) is promoting teaching as an all-master's profession with its new CPD requirement that *all teachers* in England should eventually obtain a new Masters in Teaching and Learning (MTL).

Perhaps, what we really need to underpin this approach is a reconceptualised league table for schools; one which 'measures' creative learning outputs and values human inventiveness. Maybe, with this goal in mind, future educational reforms should aim to diminish the terrors brought about by the policy of performativity that has misguidedly encouraged teachers to engage in a process of achieving simplistic targets suited to a society characterized by low-skilled industrialization and marketization (Ball, 2003). This suggests that new reforms should use performance management systems to aim for critical and creative student learning targets and reform the assessment system so as to make a virtue of testing knowledge transfer and application (Leithwood and Day, 2007).

Education policy-makers need to investigate and tackle the emerging trend of schools being run as pure commercial "enterprises" in China. The proof of encroaching commercialization of the school system is the self-evident practice of many schools, and some tertiary institutes, being now managed by "xx Educational Enterprise Group", which is increasingly being placed upon school names. Some local education committees have also transformed themselves into these sorts of organizations. In this article we do not intend to get involved in the socio-political debate of "are schools enterprises at all?" But we attempt to facilitate understanding of new meanings of reform, and a new starting point for a process of change. This is so that education policy makers

can discover the correct balance between education reform and sustainable implementation or, if you like, discovering education's yin and yang in the new challenges being faced in current China.

References

- Aspin, D. (1984). Metaphors and meaning in educational discourse. In: W. Taylor (Ed.) *Metaphors of education* (pp 4-21). London: Heinemann Educational Books.
- Ball, S. J. (1995). Intellectuals or technicians? The urgent role of theory in education. *British Journal of Educational Studies*. 43(3), 255-271.
- Ball, S. (2003). The teacher's soul and the terror of performativity. *Journal of Educational Policy*, 18/2, 215-228.
- Ben-Peretz, M., Mendelson, N. & Kron, F. (2003). How teachers in different educational contexts view their roles. *Teaching and Teacher Education*, 19(2), 277-290.
- Berliner, D. (1990) If the metaphor fits, why not wear it? The teacher as executive, *Theory into Practice*. 29 (2), 85-94.
- Bullock, K. (2006) 'Directions for learning', *Curriculum Briefing* 4(3), 28-31.
- Bullock, K. & Muschamp, Y. (2006) Learning about learning in the primary school, *Cambridge Journal of Education*, 36(1), 97-110.
- Bruner, J. (1996) *The Culture of education*. Cambridge Mass: Harvard University Press.
- Carter, K. (1990). Meaning and metaphor: case knowledge in teaching. *Theory into Practice*, 29(2), 109-126.
- Clandinin, J & Connelly, M. (2000) *Narrative inquiry: experience and story in qualitative research*. Jossey-Bass.
- Collins, E. & Green, J. (1990). Metaphors: the construction of a perspective. *Theory into Practice*. 29(2), 1-7.
- Connelly, F. M., Clandinin, D. J & He, M.F. (1997) Teachers' personal practical knowledge on the professional knowledge landscape, *Teaching and Teacher Education*, 13 (7), 665-674.
- Coombs, S. & Smith, I. (1999). Integration of critical and creative thinking skills into Singapore's IT post-graduate teacher training programme. *Change: Transformations in Education*, 2(2), 80-92.

- DCSF (2007) *The Children's Plan*. Online Available: <http://www.dcsf.gov.uk/publications/childrensplan/> (accessed 18 August 2008).
- Dewey, J. (1938) *Experience and Education*. New York: Collier Books.
- Forrester, V. (2007) Professional formation in Hong Kong: yin & yang in a free-market economy? *Teacher Development*, 11(1), 111-127.
- Fullan, M. (2001) *The new meaning of educational change*. NY: Teacher College Press.
- Fullan, M., Hill, P., & Crévola, C. (2006). *Breakthrough*. Thousand Oaks, CA: Corwin Press.
- Fullan, M. (2007) Change the terms for teacher learning, *National Staff Development Council*, 28(3), 35-36.
- Freire, P. (2001). *Pedagogy of the oppressed*. New York: Continuum.
- Gao, X. (2008). Teachers' professional vulnerability and cultural tradition: A Chinese paradox. *Teaching and Teacher Education*, 24, 154-165.
- Gardner, F. & Coombs, S. (Eds.) (2009). *Researching, Reflecting and Writing about Work: Guidance on training course assignments and research for psychotherapists and counselors*. London: Routledge.
- Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age* Cambridge: Polity Press.
- Goodson, I. (2001). Social histories of educational change, *Journal of Educational Change*, 2(1), 45-63.
- Goodson, I. & Sikes, P. (2001) *Life-history research in educational settings: learning from lives*. Buckingham and Philadelphia: Open University Press.
- Gu, Q. & Day, C. (2007) Teachers resilience: A necessary condition for effectiveness. *Teaching and Teacher Education*, 23. 1302-1366.
- Hu, G. W. (2002). Potential cultural resistance to pedagogical import: The case of communicative language teaching in China, *Language, Culture and Curriculum*, 15(2), 94-105.
- Jing, M. F. (2005) *Theory of teacher autonomy development*. Beijing: Educational Science Press.
- Kelly, G. (1955) *The Psychology of Personal Constructs* (Vols. 1 and 2). New York: Norton.

- Kövesces, Z. (2005) *Metaphor and culture*. Cambridge: Cambridge University Press.
- Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Leithwood, K., & Day, C. (Eds.) (2007) The impact of school leadership on pupil outcomes (Editorial), *School Leadership and Management*, 28(1), 1-4.
- Martinez, M.A., Sauleda, N. & Guenter, L.H. (2001) Metaphors as blueprints of thinking about teaching and learning, *Teaching and Teacher Education*, 17(8), 965-977.
- Miles, M. & Huberman, A. (1994) *Qualitative data analysis*. Thousand Oaks California: Sage publications.
- Munby, H & Russell, H. (1990) Metaphor in the study of Teachers' Professional Knowledge. *Theory into Practice*, 29(2), 116-122.
- Palmer, P. (1998) *The courage to teach*. San Francisco: Jossey-Bass.
- Stofflett, R. (1996) Metaphor development by secondary teachers enrolled in graduate teacher education. *Teaching and Teacher Education*, 12(6), 577-589.
- Taylor, W. (1984) *Metaphors of education*. London: Heinemann Educational Books.
- Tobin, K. (1990) Changing metaphors and beliefs: a master switch for teaching? *Theory into Practice*, 29(2), 122-128.
- Troman, G. & Woods, P. (2000) Careers under stress: teacher adaptations at a time of intensive reform. *Journal of Educational Change*, 1, 253-275.
- Wang, J. & Paine, L. (2003) Learning to teach with Mandated curriculum and public examination of teaching as Context, *Teaching and Teacher Education*, 19, 75-94.
- Woods, P. (1993) Critical events in education. *British Journal of Sociology of Education*, 14(4), 355-371.
- Wong, J.L.N & Tsui, A.B.M. (2007) How do teachers view the effects of school-based in-service learning activities? A case study in China. *Journal of Education for Teaching*, 33(4), 457-470.
- Zhao, H. Q. & Poulson, L. (2006) A biographical narrative inquiry into teachers' knowledge: An intergenerational approach. *Asia Pacific Education Review*, 7(2), 123-132.
- Zhao, H.Q. & Huang, J. B. (2008) Interpreting metaphor in use by Mandarin teachers of English,

Polyglossia 15, 1-11.

Zhao, H. Q. (2008a) *Ways forward with ICT-assisted pedagogy in China: theories into practice*. Beijing: National Defense Industry Press.

Zhao, H. Q. (2008b) Why did people become secondary-school English as a foreign language teachers in China? An examination of the pathways, motivations and policy. *Educational Research for Policy and Practice*, 7(3). 183-195.

Zhao, H. Q. (2009a) *Developing professional knowledge about teachers*. Hangzhou: Zhejiang University Press.

Zhao, H. Q. (2009b) Realization of the self, in Scherto, G. (Ed.) *Exploring selfhood: finding ourselves, finding our stories in life narratives* (p.241-258). Sussex: Guerrand-Hermes Foundation for Peace.

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