Is it 'teaching' or just another broadcast channel that students are trying to tune into?

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This article is about a phenomenon playing out in modern day classroom under the guise of 'teaching'. This phenomena we term 'knowledge broadcasting' and while it has the hallmarks of what people have come to expect happens in classrooms, its continuance as a mainstay 'teaching' approach is reflective of how teachers have failed to act on increasing understandings about how people learn and how teachers can best teach. This is not so much a criticism of teachers individually but a reflection of how organised / systemic teaching systems have failed to keep pace with increasing understandings about teaching and learning. We ask what then is teaching? This article uses the premise of an education metaphor to explore this question.

Those who teach 'something' are everywhere in our society. These people include, for example, workplace trainers, the weekend soccer coach, the piano teacher, the day care worker, parents, and of course those who are employed expressly as 'teachers' in primary, secondary and tertiary learning environments. On another plane there are numerous shows on television and on radio that also aim to engage people on topics of interest with a view to them learning something new. The fact that so many people are engaged in the business of teaching underscores how important learning is in our society (Kalantzis and Cope, 2012).

This is not, however, a modern phenomenon. Since early times the need to pass on knowledge and skills and to prepare young people for work and life in society has always been viewed as an essential and, we hasten to add, noble activity. This 'essentiality' has heightened in our modern, technology rich globalised world, where 'a required and current qualification' to do things--- namely work--- is increasingly commonplace. But with so many people engaged in teaching it begs the question as to what the 'expert' teacher does in this modern world.

The defining of what the 'expert teacher' does is somewhat intractable in the teaching literature and it is an effect of history. Simplistically it manifests as a 'silent argument' between, what we've conveniently termed, the 'traditionalists' and the 'scientists'. We think it is not so much a war of ideas but a case of 'ignorance and tradition' avoiding 'evidence and accountability' (Lynch, 2012; Smith and Lynch, 2010).

In short, there are shorthand descriptors of 'teaching' that dominate the field. De Sola Pool (1983: p.7) long ago argued that regulatory agencies apply "familiar analogies from the past" to lay images of key concepts. In the Education field, such metaphors are useful for understanding the world of teaching and for adapting legislation and decisions, but they also have the potential to restrict and limit Education to inappropriate regulation and rash prejudice. In this way, Education metaphors can start out by liberating thought while simultaneously subjugating it.

We explore the premise of an education metaphor a little further to enable key points to be made in a later section.

Education Metaphors

Metaphors identify one phenomenon with another from which the first is literally distinct. Child-centred pedagogy may thus be characterized as a 'progressive' move against 'traditionalism'; an effective teacher may be described as a 'unique creative individual'.

Metaphor is tricky to deal with in discussions of such things as Education policy because it is invariably defined by other metaphors. Arguments are invariably based on comparisons and analogical substitutions. As Lakoff and Johnson (1980: p. 158) suggest,

> "… we define our reality in terms of metaphors and then proceed to act on the basis of the metaphors. We draw inferences, set goals, make commitments, and execute plans, all

on the basis of how we in part structure our experience, consciously and unconsciously, by means of metaphor".

No reading of Education policy in Australia over the post-war decades, as it was fitted to the prevailing ideologies of the day, can escape this insight.

While the role of metaphor is contested, metaphors are commonplace in Education. Perhaps the core principle of Education, 'teaching', is itself metaphorical in structure and function. Policy documents about schools, teacher education and higher education routinely consider previous versions of 'teaching', and make comparisons between the preferred current version by means of similarities to and differences from other known versions. Policy-making, as a process and function, determines the extent to which the similarity is appropriate and justified.

Metaphor, however, generates a dangerous policy paradox. Hibbitts (1994: p. 1) indicates that successful metaphors associate the unfamiliar and abstract with things familiar and concrete that always has the potential to obscure and distort. On the one hand, comparing child-centred approaches to teaching, as happened in the 60s-70s, assisted policy makers to understand and envision the possible implications of this new and rather unknown approach to Education after a prolonged period of academic discipline domination and strong disciplinary regimes for students. On the other hand, it blinded policy-makers and the profession to the specific implications for academic disciplinary learning outcomes, especially the connection between effective teaching and long-term memory, which time has shown, do not fit the scope of the 'teaching' metaphor. Thus, metaphors can "help us comprehend what may have been incomprehensible, can help us find new 'truths,' clarify and create new realities". Nevertheless, there always remains the danger that through metaphors "we can also mislead, conceal, create misunderstanding, and come to rely on cliched thinking" (Bosmajian 1992, p. 205).

Metaphors are models, or shorthand versions of reality (Henley, 1975, p.81). Accordingly, metaphors are part and parcel of political power that determines the shape of an education system. Consequently, developing and disseminating particular metaphors is a fundamental aspect of understanding and implementing education change. It follows that having the power and authority to develop and implement a given metaphor is of major importance in the education and social future of society.

Moreover, for those wishing to further the social and political interests of students, Education metaphors are worth identifying and investigating. They determine the legal, accountability, professional and procedural policy doctrines by which Education is governed. It is therefore especially incumbent on Education professionals to not only invent new processes such as technology assisted teaching, but also to present coherent metaphors that describe and explain innovative developments.

The emergence of the cognitive neurosciences together with studies into teaching effects (circa 1996 onwards) that characterise the 'science movement' complicates the uncritical acceptance of

dominant metaphors. These new developments suggest there are identifiable instructional techniques that have greater learning effects than others. The science approach to teaching is not unlike training doctors to enact procedures that have narrow tolerance for variance outside the accepted norms of practice that are codified and systematic within an 'evidence based practice' profession. Teaching is thus seen as cyclic, starting with a diagnostic profile of the students, teachers enacting an appropriate response and ending with defined student outcomes. This approach is heavily science based and fits uncomfortably with the creative and artistic attributes of the traditionalist teacher view. For teacher trainees the new package of learning to teach is neither as discernible nor familiar as it is in the traditionalist paradigm. It requires an immersion in new knowledge based in neurosciences and knowledge economy capabilities such as strategy, innovation, diagnostics and entrepreneurship respectively (Smith and Lynch, 2010).

It seems strange to us that in the current 'knowledge era', where learning is fundamental and science is leading change in so many quarters, that such contrasting metaphors of teaching continue to exist. The literature tends to indicate that school teachers and teacher educators have fossilised in their resolve to continue doing what they have always done despite calls for fundamental change (see Hattie, 2011 and 2009; Fullan, 2007, p. 264, Hargreaves, 2003).

The conundrum is that the people who work in primary and secondary schools, and increasingly in higher education, for example, are still very much at the point of being able to capture amounts of value and productivity by doing what has always been done (Fullan, 2007). This could be attributed to the pressures for change being diluted by things such as producer capture, industrial agreements and the nature of the associated 'reward systems' or the dominance over educational policy of accepted metaphors. More cynically perhaps, as the 2006 United States Teaching Commission Report (cited in Fullan, 2007, p.275) suggests, "(teaching) graduates are still being hired: if they (in this case, the teacher education faculties Clarification added by authors) are failing they are doing so quietly". But, and it is a big but, we live in a fast changing world in which society and its economy now face daily challenges that invariably require ongoing innovations and change strategies if they are to thrive.

Moreover, in the Australian higher education sector, competition for students is fierce. The traditional regional 'catchments' are no match for the disruptive nature of on-line and flexible learning regimes that enable students from anywhere, to study anytime, at any university. The 'timetabled face-to-face on campus' regime has become a hindrance to young people who are 'digitally connected' all of the time and often consumed with the need for paid employment while studying.

It appears to us that the 'education industry' is living on borrowed time. As Hattie (2011) and Christensen (2011) argue, a disruptive model of teaching is needed to show a better way. Thus,

> Professional development has barely begun to address the needs of teachers in a
> creative society where industrial production has already been eclipsed by the service
> sector in consumer-led economies which are driven by knowledge-based innovation.

> There is a need for organisations to continually review their operations, strategies,

> work practices and HR policies to ensure they remain relevant, vibrant, meaningful and accountable…
>
> If teachers are to participate in and serve the burgeoning needs of the future – where creativity, innovation, risk, autonomy and self-management are the secret life that drives economic and social development – then they need a make-over (MACER, 2004, p. 8).

In our previous work (see Smith and Lynch, 2010 and Lynch, 2012, Smith and Lynch, 2012) a new and disruptive model of schooling and various proposed regimes for school teacher training have been outlined. We are by no means alone in promulgating such 'new' or 'different' teacher training regimes and approaches to teaching. What is troubling in all this for us, as experienced educational researchers, is the apparent universal acceptance of the dominant teaching metaphor based on 'creatively telling people' things. In this sense, teaching work is more attuned to the metaphor of 'broadcasting'.

The analysis in this paper will not consider every Education metaphor ever suggested nor is it current in policy. Instead, it will concentrate on the metaphor of 'teaching', the one most likely to influence regulative decisions, the future of schooling and fate of countless students and their families in particular. Our purpose is to illustrate how 'teaching' has become a victim of its own socio-political history. 'Teaching' has been shielded from gaze beyond the profession by ongoing exponential social change, teaching remaining a 'private' practice in the confines of teacher's own classrooms and the industrial situation of 'teaching' as work. Teaching is organised so that the workforce is contained within standardized professional development tied to the needs of a command bureaucracy with high levels of union membership, industrial agreements and strong hierarchies. Paradoxically in the 21st Century, teachers act, and are treated as if they belong to the industrial working class of the mid-20th century. A culture of low trust and high control produces low autonomy, risk-averse and time-serving behaviour, especially at the regional and school levels. The requirement for predictability at the system level produces targets and indicators that ensure continuing system performance in the very elements that need to change (MACER, 2004, p. 8). On their part, teachers find themselves with inadequate initial professional preparation and over-arching professional and reward cultures that resist and deny the ever strengthening signals and cues for pedagogic change (Smith and Lynch, 2010).

We now turn to a discussion of the metaphor 'knowledge broadcasting' by contrasting it with what empirical evidence tells us about 'effective teaching'. Our position is that these terms help to delineate 'teaching' from the processes of 'broadcasting'. In more simple terms, we seek to begin the signing off process from the past and begin a dialogue about what teaching should be about.

Broadcasting: A metaphor for teaching practice that needs to change

To reiterate, metaphors characterize their subjects as having certain properties. They make use of unusual labels outside usual or home use so that there are stark contrasts between the unusual and the usual reality. We suggest that 'broadcasting' is a metaphor for ineffective teaching.

Since early times humans have sought to communicate knowledge and information to others. This desire has been aided by story-telling, symbol systems, the development of the printing press and in more recent times by various audio/visual communication mechanisms. In each case the strategy was to inform others in an efficient and timely manner so that they know, and can do things.

Broadcasting can be defined as spreading a message over a wide area without specific targeting. Its shortcoming is that the intent and substance of the message is controlled by the broadcaster and opportunities for feedback are limited to and largely at the behest of the broadcaster. There is an obvious one-sidedness to this approach to knowledge dissemination. In modern radio and television broadcasts, various polls and surveys, together with the opportunity for 'audience' participation, have been engineered to maintain audience attention and thus enable the broadcaster to make necessary adjustments and to stay in favour. Despite such opportunities the broadcaster is in control and their overall strategy belies a series of alternative motives (Harcup, 2009). It is not difficult to invoke a host of 'teaching' culture terms to draw the parallels with text-based teaching using voice and print mediums to cover the curriculum and complete assessment in behaviourally controlled situations. On their part, students 'tune in' and 'tune out', absorb, reframe or reject the messages and comply with the transmission processes.

What they cannot do is 'turn it off'. This is long recognised in yet another metaphor of the school as 'mass schooling' - an efficient Taylorist 'production line' for filtering 'less able' students for work, and others for increasing levels of education. Mass production 'class teaching' methods such as chanting, rote-learning, monitor systems, textbook dependence, 'chalk and talk' (the 'dawk with the chalk') sessions, lectures, quasi-military parades and other ceremonials became standard 'teaching' fare to instil and reinforce capitalist values. These metaphors reinforced the belief that not all people could learn but all teachers could teach. 'Born to teach' and teaching as an 'art or craft' became core values in professional teaching culture (Berry, 2011; Kanigel, 1997).

The 1960s-70s saw a strong reaction to schooling along these lines as metaphors of 'individualisation', 'learning', 'freedom', 'discovery', 'inquiry' and 'process' amongst others, contested the Taylorist legacy. Research about social class effects on school and student outcomes ignited strong 'equality' and 'social justice' approaches to education policy and in-school cultures, especially from the Vietnam generation of teachers. 'Traditional' teaching approaches and school organisation came under attack as policy swung to 'constructivist' approaches that championed 'construction of reality', 'learning' minimal intervention over 'instruction', and 'knowledge'. Today's Education policy arena is one of intense contestation as empirical evidence about what works best in teaching, global comparisons and the advent of the Internet appear as game-changer metaphors.

To this point we have highlighted and explained the notion of knowledge broadcasting to draw a parallel to current views of 'teaching' reflected in the work of teachers. This approach to teaching we term traditional teaching. We attempted to characterise how teaching lost traction as a means of instruction by placing emphasis on personal characteristics of students, erroneously labelled as

'learners'. The emerging world of the learning sciences has put pressure on the credibility of this metaphor of teaching (Lynch, 2012; Lynch and Smith, 2012).

However, our critique is ambivalent. If you think that our article is yet another attempt to malign the many hard working teachers who, like other professionals, struggle with ongoing social change and intractable political agendas, then it is best to stop here. For others perhaps it begs the question: 'So what: what's the issue?' Recovery and renewal of "teaching" is the issue and we welcome the opportunity to create a new reference point for reaching a settlement on the contents of "teaching".

"Teaching"

It is well documented that in a changing world, the teaching profession has struggled with the metaphor 'teaching' (see Lynch, 2012; Smith & Lynch, 2010; Lynch and Smith, 2012; Madden, 2012; Sell, 2012; Fullan, 2007; MACER, 2004; Hargreaves, 2003; Marzano, 2003). The increasing push from Australian governments, at both the state and federal level, for improved school outcomes has increased the need to clarify 'teaching' (see for example Hattie, 2011; Jensen, 2011; Ferrari, 2007). Further to our earlier explanations of teaching, the literature is also saturated with definitions of teaching. In order to contribute to this debate, we propose that the beginning point for clarity is the literal meaning of the term 'teaching'.

Clearly, in this sense, the connotation is that of imparting knowledge and skills from a teacher to another individual or group, where the former performs an instructional act or creates an experience that has a formative effect on the mind, character or physical ability of such an individual or group. The formative effect is called 'learning'. In the Education industry, 'teaching' generally is the promotion of learning for all individuals in the category of 'students'. It follows then that the 'field of learning' is a critical element in 'teaching'. It also follows that instructional acts and experiences performed by teachers, underpinned by justifiable 'codes of practice', are also key reference points. Table 1 further assists us in unravelling these components.

Having established two core reference points, we can locate the field in which 'teaching' work resides. While the traditionalist view would no doubt champion teacher creativity and other teacher characteristics, the science view is more interested in learning and the multiplicity of understandings about how people learn things, irrespective of the characteristics of teachers. This emphasis is important: it shifts the focus of teacher's work, 'teaching', to achieving learning outcomes in students, without ignoring or wishing away the current realities of schools, education policy and the role that teachers currently play in these. Thus, the professional work of 'teaching' is about student learning outcomes whether the context is the conventional classroom or varieties of online settings. An important auxiliary aspect of 'teaching' is that teachers should do it as their main responsibility, leaving the myriad of other tasks loaded onto teachers for others.

Who will do the 'other' things is a mute management issue in our minds. Our contrast case is that medical doctors who practise medicine in hospitals or medical practices are concerned with

the systems of the human body and not the operational work of hospitals. Their professional preparation is geared to the application of knowledge and skill bases that make such work possible and effective. They can practise medicine almost anywhere, suggesting that the work potential for teaching is not just school teaching, but wherever specialised assistance for learning is required.

Accordingly, we signal that the current teacher education regime is best described as redundant as a means for preparing teachers for 'teaching'. In some respects, the present system seems to prepare teachers for anything but 'teaching' and is far too myopic in its focus on 'schooling'. We seek a rethink of 'teaching' and the whole business of 'teacher education' post-2013.

In addition, a striking feature of all established professions is the strict adherence to codified ways of doing things. For some in the Education field, 'codified' is code for the suppression of the human spirit and should be resisted. Nevertheless, creative individuals have always entered professions such as medicine, nursing, physiotherapy, architecture and engineering knowing that their knowledge and skill bases provide both authority and effective means for reaching expected professional performance outcomes. In high skill human service professions accountable outcomes are what the work entails and because the stakes are high, the work is bounded by strict professional practice requirements. Individual 'creativity' and personal preferences have no place in the applied practice of the profession except in such cases as innovative research undertaken under strict ethical and professional over-sight.

All of this is anathema to the conventional teacher education programs and indeed, for the teaching profession. In that respect, to take but one instance of common 'prac' period practice, requiring student teachers to do *ad hoc* tasks where the knowledge and skill bases are fuzzy, the outcomes are 'hit and miss' and where alibis are invoked for failure, is tantamount to malpractice. Malpractice, where it refers to failing to conform to research findings on effective 'teaching', has no currency in current teacher preparation programs. It is a 'canary' signal of how far 'teaching' has to develop if it is to be a mature profession.

The move to a codified way of achieving learning outcomes--- what we call 'teaching' --- is part of the developing science of learning. This knowledge and skill base neither relies on a student teacher's innate broadcasting abilities, nor does it accommodate variations outside the established codes. To work as a professional within such a codified profession means giving up some favourite ways of thinking about and doing 'teaching' in favour of what is known about effective teaching. It also means a strong commitment to achieving the expected learning outcomes using the knowledge and skills developed in the pre-service years. In this way, learning and teaching are complex intertwined fields that have to be fully understood, practised under controlled conditions of mentoring and coaching and the capacity to perform at the required standards must be demonstrated in various circumstances.

Taken together, the science approach to teaching is akin to the nightmare that blacksmiths experienced in the Nineteenth Century when automobiles displaced horse drawn carriages. By this we mean that without reform, 'teaching' will find itself competing with the multitude of

broadcast mediums that all have 'hit and miss' outcomes, no matter how entertaining and flexible they become.

In summary then, our position is that there are decisions with associated action for the teaching profession to make if Teaching-as-a-Profession is to mature. Crucially, the profession must adopt and prioritise "teaching" as its motif, its reason for being, as the core metaphor of the profession. All else is commentary for teachers. Second, the profession must face up to the ineffectiveness of 'broadcasting' as a means for declaring and sustaining its position in the 21st C world of expertness and capability. We advocate a far greater interest in and development of capabilities to perform "teaching" that has a clearly targeted audience and decisive outcomes. We envisage a profession that eschews scatter-gun personalised approaches and hoists its colours on a coherent research-based, codified language of instruction.

Table 1. Knowledge Broadcasting and Effective Teaching

Knowledge Broadcasting	Effective Teaching
Knowledge Base for Work	
Creativity	The science of learning Malpractice Codified practices with strict adherence
Overt Strategies	
Knowledge imparted chiefly through oral communications reinforced through textbooks, on-line resources and various work sheets	Teaching strategies systematically aligned to the specific knowledge to be learnt and the context for its application
Teaching activities occurring within various long established and accepted 'confines' and 'norms' (eg: classrooms, start and finish times, school terms, age related class assignments)	Teaching and learning activities located and occurring in situations that enable the desired learning outcomes to be achieved by students
Telling, reading, retelling as a check on progress	Instructional cycles based on research confirmed strategies
Policies and procedures used to establish and maintain the student's attention and engagement	Agreed terms and conditions: contracts of engagement
A focus on classroom management techniques	
A mono-directional feedback mechanism	Omni-directional feedback mechanisms
Teachers as sole operators	Teachers as key members in multi-disciplinary teams
Covert Strategies	
Learning targets systemically calibrated to time and sequence factors	Pre-established learning targets focused through an amalgam of individual student performance profiles
Student performance based on assigned assessment tasks and corresponding grades	Teacher and student performance evaluated on a basis of individual student learning outcomes evidence in reference to established performance benchmarks??
Regime of performance classifications and remediation programs	Regime of diagnostic processes to ascertain and remedy learning failure
Smart / dumb performance binary	A multitude of student learning profiles
Established norms and traditions inform approaches to teaching	An evidence base informs teaching decisions
Teachers as artisans, who make up their teaching activities according to the teachers innate abilities	Teachers as scientists who have developed a variety of commensurate teaching skills

Reference List

Berry, B. (2011). *Teaching 2030: What we must do for our students and our public schools now and into the future.* New York: Columbia University Teachers College Press.

Bosmajian, H. (1992). *Metaphor and Reason in Judicial Opinions.* Carbondale: Southern Illinois University Press.

Ferrari, J. (2007), Poor Teaching Adds to Maths Crisis, The Australian, July 31, 2011. Retrieved July 31, 2011 from: http://www.theaustralian.com.au/news/nation/poor-teaching-adds-to-maths-crisis/story-e6frg6nf-1111114074131

Fullan, M. (2007). *The New Meaning of Educational Changes*, Teachers College Press: New York

Harcup, T., (2009). *Journalism: Principles and practices*. Sage Publications. California.

Hattie, J. (2011). Challenge of Focusing Education Reform. *The Australian*: June 7, Retrieved June 7, 2011 from: http://www.theaustralian.com.au/business/news/rethinking-education-the-challenge-of-focusing-reform/story-fn8ex0p1-1226069556190

Hattie, J. (2009). *Visible Learning: A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.

Henley, B. (1975). Penumbra: The roots of a legal metaphor. *Hastings Constitutional Law Quarterly*, 15, cited in *Gunkel*, D. J. (1998) The Rule of Metaphor: Prolegomena to Any Future Internet Regulation. *The Electronic Journal of Communication*, 8: 2, pp. 78-92.

Hibbitts, B. J. (1994). Making sense of metaphors: Visuality, aurality, and the reconfiguration of American legal discourse. In *Cardozo Law Review*, 229. Available on-line at <http://www.law.pitt.edu/hibbitts/ meta_int.htm#intro>.

Ithiel de Sola Pool (1983). *Technologies of Freedom.* Cambridge, MA: Harvard University Press.

Jensen, B. (2011). Deafening Silence from Pollies about Declining Student Performance, *The Australian*, July 5th 2011, p. 12
Lakoff, G & Johnson, M. (1980). *Metaphors We Live By.* Chicago: University of Chicago Press.

Kalantzis, M. And Cope, B., (2012) *New Learning: Elements of a science of education*. 2nd Edition. Cambridge: Cambridge University Press.

Kangiel, R. (1997). *The One Best Way.* New York: Viking Penguin.

Lynch, D., (2012). Preparing Teachers in Times of Change: Teaching schools, standards, new content and evidence. Primrose Hall: Brisbane.

Lynch, D.,& Smith, R. (2012). Teacher Education Partnerships: An Australian Research-Based Perspective. *Australian Journal of Teacher Education, 37*(11). http://dx.doi.org/10.14221/ajte.2012v37n11.7

Lynch and Smith, (2013) Teachers for the Future: An unmet need. International Journal of Innovation, Creativity and Change. Vol. 1 Iss. 1, March, located at http://www.ijicc.net/images/issue1volume1/lynch%20and%20smith%20v1i1%20final.pdf

Madden, J. (2012). *The School Improvement Challenge: How the principal can harness teacher leadership to improve student learning.* Primrose Hall: Brisbane.

Ministerial Advisory Committee for Educational Renewal (2004) *A Creative Workforce for a Smart State. Professional Development for Teachers in an Era of Innovation.* Brisbane: Government Printer, p. 8. http://education.qld.gov.au/publication/production/reports/pdfs/creativewforce.pdf

Sell, K. (2012). *Receptive Accountability: Supporting a system approach to an international school reform.* In Smith and Lynch (2012) Case Studies in Education: Leadership and Innovation. Primrose Hall: Brisbane.

Smith, R. and Lynch, D., (2010) *Rethinking Teacher Education: Teacher education in the Knowledge Age.* AACLM Press: Sydney.