Title Community of practice for teachers: Sensemaking or critical reflective

learning?

Author(s) Pak Tee Ng & Charlene Tan

Source Reflective Practice: International and Multidisciplinary Perspectives, 10(1),

37-44. http://dx.doi.org/10.1080/14623940802652730

Published by Taylor & Francis (Routledge)

This is an Accepted Manuscript of an article published by Taylor & Francis in *Reflective Practice: International and Multidisciplinary Perspectives* on 12/02/2009, available online: http://www.tandfonline.com/10.1080/14623940802652730

Notice: Changes introduced as a result of publishing processes such as copy-editing and formatting may not be reflected in this document. For a definitive version of this work, please refer to the published source.

Citation: Ng, P. T., & Tan, C. (2009). Community of practice for teachers: Sensemaking or critical reflective learning? *Reflective Practice: International and Multidisciplinary Perspectives*, *10*(1), 37-44. http://dx.doi.org/10.1080/14623940802652730

Ng, P. T. & Tan, C. (2009). Community of practice for teachers: Sensemaking or critical reflective learning?. *Reflective Practice*, 10(1), 37-44.

DRAFT

Community of Practice for Teachers: Sensemaking or Critical Reflective Learning?

Pak Tee Ng & Charlene Tan

Abstract

While collaborative learning among teachers is encouraged and practised in many schools today, the process of learning through 'communities of practice' may involve 'sensemaking' rather than critical reflective learning. This paper argues that sensemaking in a community of practice utilises a restricted form of reflective learning that is largely technical in nature and confined to immediate practice concerns. It is further argued that the quality of learning will be significantly enhanced by encouraging practitioners to engage in critical reflective learning where reflection is implicit and intuitive in nature, and general and contextual in scope and object.

Keywords: Community of Practice; critical reflective learning; sensemaking; teachers

Introduction

Schools in the past had operated predominantly on the premise that learning took place through a process of 'knowledge delivery' from a knowledgeable source to a target lacking that information (Eckert, 1993). Learning therefore was a quest on the part of the learners to acquire a body of information from a storage source in order to store it into the proper recesses of his or her brain for future use or reference as and when required. In this traditional paradigm, teacher learning and development were confined to training courses and professional programmes.

However, policymakers and school leaders are increasingly aware that this view of 'training' or 'upgrading' does not give a full picture of how teachers learn to function at their school. Teachers do not learn solely from formal organised 'learning activities' through in-service workshops, taking a course or watching an instructional video. Instead teachers learn a lot through other everyday activities and experience as well. A teacher picks up the most relevant know-how in a school from day to day by watching and talking with fellow teachers, by doing and asking at the same time. Everyone participates and contributes to a world, which is socially and culturally structured and constantly reconstituted by the activities of all those who are involved in it. In such a world, to know is to be capable of participating with a certain level of competence in the complex web of relationships among people and activities. Learning is to discover and give a reasonable account of the why, what, when, where and how of doing things in this world (Gherardi, 1995). Learning for people therefore takes place among and through people. Knowledge is a property of relationships and

it is created and transformed through networks of human interaction through complex responsive processes (Stacey, 2001). In other words, new knowledge and learning are properly conceived as being located in "communities of practice" (Tennant, 1997). However, the process of learning through 'communities of practice' may involve 'sensemaking'.

This paper argues that sensemaking in a community of practice utilises a restricted form of reflective learning that is largely technical in nature and confined to immediate practice concerns. It is further argued that the quality of learning will be significantly enhanced by encouraging teachers to engage in *critical* reflective learning where reflection is implicit and intuitive in nature, and general and contextual in scope and object.

Sensemaking in a Community of Practice

A community of practice

Before a discussion of sensemaking and critical reflective learning, it is helpful to understand the concept of a community of practice. A community of practice is a set of people who "share a concern, a set of problems, or a passion about a topic, who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott, & Snyder, 2002, p. 4). It is an informal aggregation defined not only by its members but by the shared manner in which they do things and interpret events (Lave & Wenger, 1991; Brown & Duguid, 1991; Eckert, 1993). According to Lave and Wenger (1991, p. 98), a community of practice is "an intrinsic condition for the existence of knowledge, not least because it provides the interpretive support necessary for making sense of its heritage". This interpretive support includes dimensions of culture, technology, economy and politics. The idea of a community of practice helps us to understand the processes by which the transmission of tacit knowledge and of knowledge-in-action take place, by stressing that these processes are simultaneously social and cognitive. Reminding us that "knowledge, expressed in words and numbers, only represents the tip of the iceberg", Nonaka and Takeuchi (1995, p. 21) point us that "human knowledge is created through social interaction between the tacit and explicit". Communities are useful vehicles for creating shared narratives that can be used to transfer tacit knowledge. According to Nahapiet and Ghoshal, "myths, stories and metaphors also provide powerful means in communities for creating, exchanging and preserving rich sets of meanings - a view long held by some social anthropologists" (1998, p. 253).

A community of practice is not a new way to organise learning within the organisation. It is a way of viewing how learning takes place and it emphasises that every practice is dependent on social processes through which it is sustained and perpetuated, and that learning takes place through the engagement in that practice. It underscores the link between the emergence of relations which are created around activities, and the activities that are shaped through social relations, so that specific skills and experiences become part of the individual identity and can be perpetuated in time (Lave & Wenger, 1991; Eckert, 1993). Knowledge in a community of practice is best understood as a custom or 'habitus' sustained collectively by the members, rather than a cognitive structure (Bourdieu, 1980). The habitus is a product of history and is embedded subtly in the culture of the community. It is a set of 'unspoken' and almost 'unconscious' system of principles which generate and organise practices and representations within the community. Its influence on thought and behaviour is more

powerful than formal rules and explicit instructions. To become full members of this community, learners need to absorb in and be absorbed by the habitus and this includes knowing who is who, what they do, how to talk, work, and generally conduct their lives. Because knowledge is a habitus in a community of practice, much of the learning processes in such communities may be sensemaking in nature, as the next section will describe.

Sensemaking

Sensemaking is a process that assigns meaning to new information through an association with prior knowledge, facilitated by emplacing information into sensemaking frameworks, which are existing schemata or knowledge structures (<u>Huff et al., 2000</u>; Sackmann, 1992; <u>Walsh, 1995</u>; <u>Weick, 1995</u>). This process reduces the complexity of the information, thus 'making sense' of the information (Starbuck & Milliken, 1988; <u>Weick, 1995</u>). According to <u>Habermas (1987</u>), an organisation has both a lifeworld and a systemworld. Therefore, the sensemaking process involves both the cognitive and emotional aspects of the human experience in his interaction with the environment.

Sensemaking is not just an individual-level process. It can refer to a collective level process as a dynamic interface between what is happening in the organization and its environment. At both levels, it is a continuous and reciprocal interaction between entity and environment of seeking information, assigning meaning and making appropriate response (Gioia & Chittipeddi, 1991; Thomas, Clark, & Gioia, 1993). Meaning emerges not just from the interpretation of information but rather the continuous interaction with information using a coherent knowledge structure. Therefore, sensemaking process entails information triggers from one's environment that signify that meaning is required, a knowledge framework or structure that serves as a guide to understanding, and a mapping relationship that links the new information to the framework. This continuous connecting and re-connecting of information with existing knowledge frameworks reduce environmental equivocality and complexity for a person, bringing his or her world into cognitive and emotive 'control'.

Sensemaking looks for plausible interpretation rather than accurate one. It is driven by plausibility, pragmatics, coherence, reasonableness, creation, invention, and instrumentality (Weick, 1995). Both in routine and highly critical situations, sensemaking allows a person to operate quickly in settings characterised by poor communication, lack of a clear direction, lack of knowledge, lack of trust, lack of skills, fear of admitting failure and individual adherence to strong cultural norms (Weick, 1993, 1995). However, precisely because of its significant emphasis on the immediacy of meaning making, reflectivity is low on the agenda. In sensemaking, one hardly examines one's assumption or engages in meta-cognitive processes. Sensemaking is not a predictive theory of cognition and response. Rather, sensemaking as a theory focuses our attention on subjective interaction, multiple socially constructed realities, and how the process is embedded in its context (power, culture and social structures). Sensemaking is a powerful process in individual lives and human interactions. It also influences organisational identity, image (eg. Gioia & Thomas, 1996; Gioia et al, 2000) and performance (Thomas et al., 1993).

As people come together in a community of practice, they cluster together because they have a common practice and are passionate about it. They meet to exchange tips and stories. When they meet problems, others with superior knowledge and experiences will offer advice based on their own existing sensemaking

frameworks. The exchange processes create a habitus that is absorbed by the members. In other words, people come together to 'make sense' of their problems, with a view to solving them by tapping on the knowledge of others. This is a powerful mode of learning, but it is usually limited to fact-finding, sharing tips and trading stories. It is simply is an extension of a habitual response to cover additional situations or learning how to implement habitual responses more efficiently without reflecting whether such responses are still appropriate. In other words, it is single loop learning, rather than double or triple loop learning (Argyris, C. & Schön, D., 1974, 1978, 1996).

Sensemaking frameworks grounded in an objective and rational worldview are useful for making meaning in a work environment. However, with increasing complexity in the working world (Wheatley, 1994, 2007), professional work now poses more intellectual challenges than what technical and procedural sensemaking models can handle (Weick et al., 1999). Such challenges include real-time knowledge creation, transformational change, and moral choices in ambiguous environments. If professionals do not update their traditional sensemaking frames, they may respond to new situations using their dominant logic and force an inappropriate application to conditions (Prahalad & Bettis, 1986). Without critical reflective learning, sensemaking processes confines learning to fine-tuning and adapting knowledge that is formulated elsewhere. Such processes favour specific and proximate matters within the immediate practice arena, while endorsing current sensemaking frameworks and weakening the capacity for paradigm shifts. Because sensemaking is such a powerful and 'natural' cognitive process, it dominates many social learning processes. It perpetuates current thinking frameworks, unless critical reflective learning, which the next section describes, is consciously structured into the learning process.

Critical Reflective Learning in a Community of Practice

Critical reflective learning

Critical reflective learning promotes a form of reflection that is implicit and intuitive in nature, and general and contextual in scope and object (Tan, 2008). The idea of critical reflective learning that is implicit and intuitive in nature is linked to Aristotle's praxis that "involves the engagement of persons in activity with others which is noninstrumental in that it is not intended to realise goods 'external' to the persons involved but rather excellences characteristic of a worthwhile form of life" (McLaughlin, 1999, pp. 14-15). Praxis requires "a kind of knowledge that was more personal and experiential, more supple and less formulable than the knowledge conferred by techne" (Dunne, 1993, p. 10, cited in McLaughlin, 1999, p. 15). Aristotle describes the knowledge of *praxis* as *phronesis* (or practical wisdom) which is a major ordering agency in our lives. Critical reflective learning is contrasted with sensemaking that stresses on the explicit and the systematic. As mentioned, sensemaking largely involves fact-finding, sharing tips and trading stories. The type of reflection is single loop learning confined to fine-tuning and adaptation of present knowledge. The focus is also on the specific and proximate matters within the immediate practice arena based on current paradigms. Under this notion, a learner is seen as one who possesses the technical knowledge and skills who applies routinisable and pre-specifiable procedures and strategies. This form of reflection is technical and rationalist as it emphasises applying scientific theory and external

research to solve the problems faced by teachers in their practice. McLaughlin (1999) associates this to Aristotle's notion of *techne* which is "an activity of making or production (*poesis*), aimed at a pre-specifiable and durable outcome (a product or state of affairs) which constitutes its purpose (*telos*)" (p. 12).

Another key characteristic of critical reflective learning is that it involves general and contextual maters (McLaughlin, 1999, Tan, 2008). Such reflections are concerned with matters relating to the educational enterprise viewed from a broader and less immediate perspective. These include "the overall aims and purposes of the educational enterprise, the nature of 'ability', the functions and effects of processes of teaching and schooling and the significance of wider influences on the educational system as a whole, which in turn involve questions of a philosophical, psychological, social and political kind" (McLaughlin, 1999). On the other hand, sensemaking tends to involve involves specific and proximate matters, focussing on the present and particular concerns of the teacher, especially within the classroom. McLaughlin (1999) explains that these include all the interactions and judgements in the classroom related to student achievement.

Given that teachers face many issues and challenges that are unique, uncertain and value-conflicted, critical reflective learning becomes even more important. Existing solutions, which could be propagated through sensemaking processes in a community of teachers, may no longer be solutions in time to come. Teachers need to move beyond sensemaking and technical concerns (Elliot, 1993; van Manen, 1977, 2002; Louden, 1991) and critically reflect on practical interests and examine broad issues in teaching and learning. Bateson (1972) suggests that critical reflection may involve a corrective change in the set of alternatives from which choice is made, or a change in how the sequence of experience is punctuated. Alternatively, it may require a perspective transformation involving a change in the whole assumptive frame of reference within which our habits of expectation have been formed.

Towards critical reflective learning in a community of practice for teachers

Teachers should be encouraged to include critical reflections that help them, within a community of practice, to challenge assumptions, create knowledge, and deal with larger issues in ambiguous environment (Tan, 2006, 2008). In order to go beyond sensemaking to reflect on issues that are general and contextual so as to maintain a broad vision about their work and not just look inwardly at their own practices (Zeichner & Liston, 1996), critical reflective learning processes should be deliberately structured in many teacher communities. For example, in action research groups, the emphasis should shift from a scientific method of logical and systematic problemsolving, towards building "a critique of schooling, from the perspective of education, and to improve education in schools" (Zeichner & Liston, 1996, p. 27). Teachers should actively reflect collectively on the educational goals and values to which they are committed, and issues of equity and social justice (Zeichner, 1993). They could also develop new forms of organisation in education systems, schools and classrooms (Kemmis & McTaggart, 1998). Such an expanded view of reflection for teachers would require the removal of the impediment of the culture of taking directive and initiative from the top. The political and school leaders should also be willing to adopt a more consultative and democratic approach in governance and school management. Lasley (1992, as cited in York-Barr et al, 1996) suggests the following questions

which are useful to facilitate critical reflection in a community of practice for teachers:

- Is the philosophy of the teacher consistent with the needs of the students?
- What teacher practices enhance or diminish student growth?
- What student needs are not addressed by current teacher and school practices?
- How should schools be reordered and restructured?
- And what must teachers do to facilitate such restructuring?

Conclusion

This paper has argued that communities of practice should move from sensemaking processes, which are too technical and narrow to enable and empower teachers to become creators of new knowledge and teaching practices, to critical reflective learning. If we want sensemaking frameworks to be flexible, then schools also need to replace the attempt to pre-specify correct behavioural responses or performance indicators with qualitative indicators which emphasise "qualities of judgement and decision-making which are indicative of capacities to make wise and intelligent responses in novel and unpredicatable situations" (Elliot, 1991, p. 313). This is particularly important in an era of school management where marketisation and performativity of education have "subjected teachers to the micro-management of ever-tightening regulations and controls that are the very antithesis of any kind of professionalism" (Hargreaves, 2000, p. 169). To achieve a real education transformation, teachers need multiple and diverse sensemaking frameworks and the ability to create and recreate different types of sensemaking frames through critical reflective learning in communities. Such processes do not reduce tensions - rather, they allow the teachers to go beyond sensemaking to challenge existing thinking and bring change out of the tension.

References

- Argyris, C. and Schön, D. (1974) Theory in practice: Increasing professional effectiveness, San Francisco: Jossey-Bass.
- Argyris, C. and Schön, D. (1996) Organizational learning II: Theory, method and practice, Reading, Mass: Addison Wesley.
- Argyris, C., & Schön, D. (1978) Organizational learning: A theory of action perspective, Reading, Mass: Addison Wesley.
- Bateson, G. (1972). Steps to an ecology of mind. New York: Ballentine Books.
- Bourdieu, P. (1980). Le Sens. Paris: Le Minuit.
- Brown, J. S. & Duguid, P. (1991). Organisational learning and communities of practice: toward a unified view of working, learning and innovation. *Organisation Science*, 2(1), 40-57.
- Deng, Z. Y. (2005). Teacher education. In J. Tan, P.T. Ng (Eds.), *Shaping Singapore's Future: Thinking Schools, Learning Nation* (pp. 123-136). Singapore: Pearson Prentice Hall.
- Dunne, J. (1993). Back to the Rough Ground: 'Pronesis' and 'Techne' in Modern Philosophy and in Aristotle. Nortre Dame, I.N.: University of Notre Dame Press.

- Eckert, P. (1993). *The Organisation as a Community of Engaged Learners*. Palo Alto, CA: IRL working paper.
- Elliot, J. (1991). A model of professionalism and its implication for teacher education. *British Educational Research Journal*, 17(4), 309-318.
- Elliott, J. (1993). The relationship between 'understanding' and 'developing' teachers' thinking. In J. Elliott (Ed.) *Reconstructing teacher education: Teacher development*. London: The Falmer Press.
- Gherardi, S. (1995). Organisational Learning. In H. Warner, *International Encyclopaedia of Business and Management*. London: Routledge & Kegan Paul.
- Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12(6): 433–448.
- Gioia, D. A., & Thomas, J. B. (1996). Identity, image, and issue interpretation:

 Sensemaking during strategic change in academia. *Administrative Science Quarterly*, 41, 370–403.
- Gioia, D. A., Schultz, M., & Corley, K. G. (2000). Organizational identity, image, and adaptive instability. *Academy of Management Review*, 25(1): 63–81.
- Grant, S. G. (1996). Local authority over content and pedagogy: cross-current influences on teachers' thinking and practice. *Theories and Research in Social Education*, 24, 237–272.
- Habermas, J. (1987). Lifeworld and system: A critique of functionalist reason (T. McCarthy, Trans.) (Vol. 2). Boston: Beacon Press.
- Hairon, S. (2006). Action research in Singapore education: Constraints and sustainability. *Educational Action Research*, 14(4), 513-523.
- Hargreaves, A. (2000). Four ages of professionalism and professional learning. *Teachers and Teaching*, 6(2), 151-182.
- Huff, A. S., Huff, J. Q., & Barr, P. S. (2000). When firms change direction. New York: Oxford University Press.
- Kemmis, S. & McTaggart, R. (1998). *The Action Research Planner*. Geelong: Deakin University Press.
- Lasley, T.J. (1992). Promoting teacher reflection. *Journal of Staff Development*, 13, 24-29.
- Lave, J. & Wenger, E. (1991). Situated Learning: Legitimate Peripheral Participation. Cambridge, UK: Cambridge University Press.
- Louden, W. (1991). *Understanding teaching: Continuity and change in teachers' knowledge*. London: Cassell.
- McLaughlin, T.H. (1999). Beyond the reflective teacher. *Educational Philosophy and Theory*, 31(1), 1999, 9-25.
- Ministry of Education (2006). *Teacher network*. Retrieved October 12, 2007, from http://sam11.moe.gov.sg/tn/aboutus.html
- Nahapiet, J. & Ghoshal, S. (1998). Social capital, intellectual capital and the organizational advantage. *Academy of Management Review*, 23(2), 242-266.
- Ng, C. & Tan, C. (2006). Investigating Singapore pre-service teachers' ill-structured problem-solving processes in an asynchronous online environment: implications for reflective thinking. *New Horizon in Education*, 54, 53-70.
- Ng, P. T. (2005a). Students' perception of change in the Singapore education system. *Educational Research for Policy and Practice*, 3(1), 77 92.
- Ng, P. T. (2005b). Innovation and Enterprise in Singapore schools. *Educational Research for Policy and Practice*, 3(3), 183 198.

- Ng, P. T. (2007). Quality assurance in the Singapore education system in an era of diversity and innovation. *Educational Research for Policy and Practice*, 6(3), 235 247.
- Ng, P. T. (2008a). Educational reform in Singapore: from quantity to quality. *Educational Research for Policy and Practice*, 7(1), 5 – 15.
- Ng, P. T. (2008b). Quality assurance in the Singapore education system: phases and paradoxes. *Quality Assurance in Education*, 16(2), 112 125.
- Nonaka, I. & Takeuchi, H. (1995). *The Knowledge Creating Company*. New York, NY: Oxford University Press.
- Prahalad, C. K. & Bettis, R. A. (1986). The dominant logic: a new linkage between diversity and performance. Strategic Management Journal, 7, 485-501.
- Sackmann, S. A. (1992). Culture and subcultures: An analysis of organizational knowledge. *Administrative Science Quarterly*, 37, 140–161.
- Stacey, R. D. (2001). Complex Responsive Processes in Organisations: Learning and Knowledge Creation. New York: Routledge.
- Starbuck, W. H. & Milliken, F. J. (1988). Executives' perceptual filters: What they notice and how they make sense. In D. C. Hambrick (Ed.), *The executive effect: Concepts and methods for studying top managers* (p.35–65). Greenwich, CT: JAI.
- Tan, C. & Ng, P. T. (2007). The dynamics of change: the decentralized centralism of education in Singapore. Journal of Educational Change, 8(2), 155 168.
- Tan, C. (2006). Philosophical reflections from the silver screen: using films to promote reflection in pre-service teachers. *Reflective Practice*, 7(4), 483–497.
- Tan, C. (2008). Improving schools through reflection for teachers: lessons from Singapore. School Effectiveness and School Improvement, 19(2), 225-238.
- Tennant, M. (1997). Psychology and Adult Learning. London: Routledge.
- Tharman, S. (2005). Achieving Quality: Bottom Up Initiative, Top Down Support. Speech by Mr Tharman Shanmugaratnam, Minister for Education, at the MOE Work Plan Seminar 2005 at the Ngee Ann Polytechnic Convention Centre, Singapore, 22 September.
- Thomas, J. B., Clark, S. M., & Gioia, D. A. (1993). Strategic sensemaking and organizational performance: Linkage among scanning, interpretation, action, and outcomes. Academy of Management Journal, 36(2): 239–270.
- van Manen, M. (2002). The pathic principle of pedagogical language. *Teaching and Teacher Education*, 18, 215-224.
- van Manen, M. (1977). Linking ways of knowing with ways of being practical. Curriculum Inquiry, 6, 205-228.
- Walsh, J. P. (1995). Managerial and organizational cognition: Notes from a trip down memory lane. *Organization Science*, 6(3): 280–321.
- Weick, K. E. (1993). Sensemaking in organizations: Small structures with large consequences. In J. K. Murnighan (Ed.), *Social psychology in organizations: Advances in theory and research* (p.10–37). Englewood Cliffs, NJ: Prentice Hall.
- Weick, K. E. (1995). Sensemaking in organizations. Thousand Oaks, CA: Sage.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. 1999. Organizing for high reliability:

 Process of collective mindfulness. In R. I. Sutton (Ed.), Research in organizational behavior (Vol. 21: 81–123). Greeenwich, CT: JAI Press.
- Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating Communities of Practice: A Guide to Managing Knowledge*. Boston, MA: Harvard Business School Press.

- Wheatley, M. J. (1994), *Leadership and the New Science*. Berrett-Koeher, San Francisco, CA.
- Wheatley, M. J. (2007), "Leadership of self-organized networks: lessons from the war on terror", *Performance Improvement Quarterly*, 20(2), 59-66.
- York-Barr, J., Sommers, W.A., Ghere, G.S., & Montie, J. (1996). *Reflective practice to improve schools: An action guide for educators*. (2nd ed.). Thousand Oaks, California: Corwin Press.
- Zeichner, K.M. & Liston, D.P. (1996). *Reflective Teaching: An Introduction*. New Jersey: Lawrence Erlbaum Associates.
- Zeichner, K.M. (1993). Connecting genuine teacher development to the struggle for social justice. *Journal of Education for Teaching*, 19(1), 5-20.