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Initial teacher induction in Hong Kong: what needs changing?

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Abstract

The current practice of Initial Teacher Education in Hong Kong is reported following a sample (n= 14) survey of new Hong Kong teachers of Chinese and English during their initial year of full-time teaching (AY 2005-06). Their experiential record comprised a pre- and post-questionnaire and four sequential in-depth interviews. Findings reflect individuals struggling within a less than supportive context – reported here in three clusters: Forging a Teaching Identity; Reflections on ITE Support and thirdly, Patterns of Individual Practice. Discussion of these findings considers two alternative perspectives. Firstly, our understanding of professional formation which highlights confusion and dichotomies and argues for the provision of mandatory mentoring and secondly, a communities of practice perspective which highlights a case for non-intervention, that becoming a ‘teacher’ is an individual process and that professional acceptance is not a right that can be granted but an accolade, earned by the individual. Within the Hong Kong context, the stronger argument appears to support the current *laissez faire* practice which accords greater individual freedom.

Keywords: teacher development, education, learning, communities of practice

Introduction

Worldwide, there are reported increasing expectations that to be a professional teacher involves personal commitment to continuous improvement [1, 2, 3, 4]. The burden of such

expectations is illustrated by Leithwood *et al*'s [5] analysis of both changing school contexts and changing learning models which combine to create learning that is more situated, less dis-embedded and their summative conclusion that schools and teachers need to do their work differently. These expectations and analysis place teachers not only "*at the heart of the educational improvement*" [2], but at a heart that, to work differently, apparently needs to be transformed.

Such radical thinking, in part, has led to critiques of the provision of beginning teacher's professional development. In Scotland, before the introduction of the Scottish Teacher Induction Scheme in August 2002, McCrone [6] reported the prevailing teaching conditions to be "*little short of scandalous*" and that it was "*no way to treat a new entrant to any profession, let alone one as demanding and of such public importance as teaching.*" Systemic interventions in both Scotland and England have since sought to further support the provision of beginning teachers' formation by providing enhanced professional scaffolding.

Such radical changes to professional development in both Scotland and England have attracted critiques – in particular the introduction of extended professional scaffolding [7]. In Scotland, concerns have been raised that scaffolding stifles individual initiatives [8]. In England, Harrison [9] reports little evidence of "*induction processes that produce challenge and deeper reflection on professional practice*", while another study [10] found that although overall quality of provisions for beginning teachers had improved, twenty per cent were still experiencing less than satisfactory provision. Kyriacou and O'Connor [11] have since noted that the speedy implementation of the new arrangements in England has meant that the intentions of the new provisions have not been fully realized.

Literature Review

To understand why such radical thinking and extended professional scaffolding may not fully realize its intentions, it is helpful to review the nature of teachers' professional formation as revealed first in terms of its theories and related processes and second, how it has been conceptualized.

Theories and their related processes for promoting teachers' professional formation reflect diversity in our educational priorities. Where education is seen as a system, training takes as its focus the 'teacher-as-employee' [12] and sees merit in developing professionalism via linear processes such as Berliner's [13] five-stage career. Where education is seen as being person-centred [1], this view finds informative Mevarech's [14] periodic sequence where professional formation first involves a negative decline countered by Schön's [15] professional reflection that then leads to a 'stable state' where teaching eventually becomes manageable, understandable, unproblematic. A third view perceives education as serving the needs of a knowledge-based economy which renders professionalism as a 'social-cultural production' [16]. This view finds strength in Fessler and Christensen's *Teacher Career Cycle* [17], with its dynamic interaction between the three cycles of personal, career and organization, an interaction that eventually seeks a stasis [18] through socialization [19] and a harmonization between the 'head and heart' of the individual teacher [20].

Such diversity both in educational priorities, supporting theories and their processes add weight to the argument for an expanded view of professional learning [21]. This expanded view acknowledges not only that teachers' professional formation takes place in settings that

are formal and informal, but also that their formation is largely private and unaided [1]. This expanded view explains, in part, why systemic changes - such as extended professional scaffolding - may risk failure where they ignore those influences that operate beyond the formal system. However the complexity of this extended view may appear to confound those seeking to structure professional formation – a situation not resolved by seeking to control the complex input of formal and informal influences, but rather on mediating their combined effect, in particular on mediating teachers' self-efficacy [22].

Conceptualisations of teachers' professional formation point to a key role for teachers' self-efficacy. For Hargreaves and Fullan [23], teacher development combines knowledge and skill development, self-understanding and ecological change. Newer models have been informed by thinking on reflective practice [24], Lave and Wenger's situated learning and the social constructivist ideas of Vygotsky and Bruner and their later development into activity theory [25]. Such models conceptualise that, rather than absorbing understanding wholly from others or from 'systemic scaffolds', teachers are actively involved in transforming their own understanding. An example of what might be involved in this transformation process is offered by Cooper et al [26] who report that:

“when teachers learned new ideas and practices, they had to unlearn previous information, perceptions or misconceptions . . . a risky business.” (p. 24).

The above review serves to illustrate not only the considerable diversity in educational priorities, but also that professional formation involves a complex of inputs that largely confounds – as in Scotland and England – the good intentions of structural or systemic interventions. In contrast, Hong Kong beginning teachers have no formal standard against which they are assessed or may assess themselves while their initial school employment receives no prescribed professional scaffold. This Hong Kong model has been explained as being “influenced by the craft-orientated British model of teacher education” [2], while the absence of post craft-training scaffolding itself has been subjected to criticism as “an educational opportunity that previous generations in the service have failed to grasp” [27]. Where teachers are both ‘at the heart’ of educational improvement yet receive only ‘craft-orientated’ training, it is intriguing to understand the interaction in Hong Kong between professional formation and beginning teachers' professional training.

Research Methodology

To capture an experiential record of beginning teachers' experiences of their first year of teaching, randomly selected sector volunteers (total: $n=14$) were enlisted from the 2005-06 cohorts of newly trained teachers of Chinese (C) and English (E) from three of Hong Kong's Initial Teacher Education (ITE) providers - Baptist University (BU), the Hong Kong Institute of Education (HKIED) and Hong Kong University (HKU). Details of the sample are displayed in Table 1.

To overcome the marked disparity in the size of the HKU cohort ($n=160$), the sample size here was reduced to 5% - compared with a 10% sample size for both BU and HKIED. Care was taken to ensure that the sector sampling was also representative of gender (m4:f10) and teaching-subject (C6:E8) across the three ITE providers.

Table 1. Research Sampling of the 2005-06 Cohort.

Teachers of Chinese & English	BU	HKIED	HKU
Cohort size	n=20	n=35	n=160
Sampling %	10%	10%	5%
Sample Total	n=2	n=4	n=8
Sample by			
Gender	n=2f	n=2f / 2m	n=6f / 2m
Teaching Subject			
Chinese	n=1f	n=1m	n=2f / 2m
English	n=1f	n=2f / 1m	n=4f

Participants

The subjects of this research are new teachers from the Post Graduate Diploma in Education (ITE) full-time Chinese and English programs of three Hong Kong providers of Initial Teacher Education (ITE). These three ITE providers are the Hong Kong Baptist University (BU), the Hong Kong Institutes of Education (HKIED) and the Hong Kong University (HKU). As may be anticipated for programs that lead to the same professional qualification, the three ITE programs display structural similarities. All provide a thirty-two week program comprising 'Taught subjects'; 'Field Experience' and 'Practicum': all provide both 'core', 'elective' and 'professional' subjects - followed by 'school experience' and 'teaching practice'; all three programs make no formal provision for post-program mentoring.

Where subtle differences emerge these tend to obfuscate cross-institute comparisons – where one program is measured in study 'units', another uses 'credit points' while a third 'course hours'; comparisons across 'core' and 'elective' subjects remain unclear as does that across 'professional studies' and the requirements of 'Field Experience' and 'Practicum'. Such subtle variances across a common program structure suggests that here, as in other countries, 'professional training' celebrates institutional diversity within an overall uniform structure.

Instruments

Recognising that classroom teaching comprises both unexpected and expected experiences, this research is informed by a mixed qualitative and quantitative research methodology, collecting data from reflective interviews and focussed questionnaires completed across one Secondary School teaching year (September to June 2005-06). Each respondent completed four, sequential, one-to-one reflective interviews – the first at the beginning of the school year (September, 2005), then at the end of each of the school terms (December 2005, April 2006 and June 2006). In this way, our four sequential interviews sought to capture reflections throughout their first teaching year (AY 2005-06).

Procedure

One independent interviewer conducted all interviews, employing standard interview protocols. Where interviews were conducted in Cantonese, verified translations were made available in English. Findings from these ($n=56$) interviews were verified employing standard protocols including independent parallel analysis. To protect respondents' identities, all quotations are cited free of personal identifiers. Two parallel questionnaires were also employed to further inform and provide a contextual background. The first questionnaire was administered in September 2005, at the beginning of the school year. A parallel second questionnaire was then administered in June 2006 at the end of the school year. The two parallel questionnaires (total: $n = 28$) were derived from an earlier study [28, 29]. Questions related to teaching duties, views on their progression as teachers, their school support systems, their experience of securing a teaching post and their commitment to, and satisfaction with, the teaching profession.

Limitations

Being randomly selected sector volunteers from their respective graduate cohorts, the reported experiences are held only to be indicative and, as the findings are of individual experiences, any generalised conclusions are subject to further investigation. Since the questionnaire data is small ($n = 28$) this is not explored in statistical depth, and the results reported as only being indicative of the contextual background at pre and post event times.

Findings

All respondents were employed on short-term contracts - most commonly a one-year fixed term contract with a minority ($n=2$: 12.5%) on a half time basis. All were assigned full teaching loads across both ability bands and school forms and all were also required to provide extra-curricular activities. In summation, as is the practice in Hong Kong, new teachers receive both a full-salary and are expected to undertake a full-workload from their first day of employment. Given this early experience, how did these new recruits respond?

For clarity, the findings are reported and then discussed in three clusters – Forging a Teaching Identity; Reflections on ITE Support and thirdly, Patterns of Individual Practice.

Forging a Teaching Identity

A significant proportion ($n=12$; 86%) of these new teachers report being enthusiastic about teaching, with a majority (78%) expressing uniform aspirations both of wishing to continue in teaching and of seeking further professional training such as a Master of Education. These seemingly positive views however masked individual challenges delineated here by gender, subject-taught and school-academic-level.

Gender delineated findings display that female respondents focus most frequently on 'being passionate about teaching', male respondents on being 'professionally trained'. Subject-taught delineation reveals that teachers of Chinese self-rate on ad hoc evidence; in contrast, teachers of English appear to self-rate using largely objective criteria. Delineation across four differing academic school settings indicates that teaching in high academic (Band 1) schools most frequently focuses attention on being 'professionally trained': teaching in medium academic (Band 2) schools evokes a joint focus on being both 'emotionally strong'

and 'passionate about teaching'; teaching in low academic (Band 3) schools appear to induce a focus on being both 'professionally trained' and 'emotionally strong', while teaching in new, as yet academically un-banded, schools appears to focus attention on being both 'passionate about teaching' and 'flexible'.

Of interest in the above results is the spectrum of needs – differentiated both by individual personality, gender, subject-taught and school academic level. To expect ITE providers to adequately address such a spectrum of needs within a mandatory thirty-two week ITE program suggests something of their broad responsibilities. Given this crucible from which is forged the Hong Kong teacher-identity, how do these new teachers view the support offered by the education community? To address this question, two facets of their education community are reported – the support offered by their ITE programs and then, their school-based support.

Reflections on ITE support

Two features are highlighted. Firstly, these new teachers treasure their ITE friendships. Second, they display initially low (33%), then – at the end of their first school year – even lower (12.5%) evaluations of their ITE program balance between Theory and Practice.

These combined findings suggest teachers value their friendships with ITE professionals (e.g. as a school mentor or ITE tutor) as a means of resolving gaps the individual new teacher inevitably finds in their ITE programs' balance between Theory and Practice.

Reflections on School-based Support

A significant proportion (n=9; 64%) of these new teachers reported having neither a formal mentor nor the basic guidance and information they needed in order to perform effectively in the teaching role. School-based guidance - in such areas as discovering 'what is important to do well' and 'the school policies' - appears to differentiate by school subject. For example teachers of Chinese mainly obtain knowledge from their colleagues; in contrast many (50%) of the teachers of English obtained information about 'school practice' from self-discovery.

These findings are both formative and perhaps predictable, given that in Hong Kong, school mentoring is not centrally funded but a matter for individual school initiative.

Interview Analysis

To explore how school-experiences impacted on respondents' patterns of individual practice it was accepted as one indicator of a teacher's individual practice the quality of professional reflection [24]. A six-point scale was then constructed against which to measure respondent's reflections to the 1st interview prompt '*what are the challenges of teaching?*' This six-point scale ranged from '0' denoting 'single-topic with surface comment' to a '6' denoting 'four or more topics with in-depth comments'. Subsequent 2nd, 3rd and 4th interview responses to the same prompt were then mapped using the 1st interview results as a baseline.

Patterns of Individual Practice

The results of the scaling applied indicate four significant findings. First, these new teachers' learning patterns are essentially individual - commencing at different levels and proceeding in different directions. Second, these individual learning patterns do not appear to be delimited by specific markers - neither by teaching-subject; nor ITE provider, nor employing-school's

academic level nor respondent's gender. Third, the 1st interview results indicate that of these new teachers, on completion of their ITE, 42.5% have minimal or less than a professionally desirable reflectivity. As respondents then move through their first teaching-year, their school-based experience appears to further mitigate against their use of Schön's quality professional reflection. Fourth, the data indicates individual variations which would appear to confound 'standardised' interventions. Rather than indicating a need for a common structured-support-system, these patterns suggest that successful mentoring in Hong Kong needs to be individual-based and flexible.

Results and Discussion

The findings show new teachers expressing future uncertainties both about employment and their paths of professional and career development – perceptions not dissimilar to those reported in other contexts [2, 8, 10, 30, 31]. Highlighting the significance of the first teaching year, Tickle [27] notes that induction should prepare for future development, however, in these reported settings these new teachers' immediate future developments are unscripted. For these respondents there is little in the way of further steps for some time ahead and those that exist – e.g. study for a Master of Education, and relate more to perceived career steps than to Continuing Professional Development (CPD). For these Hong Kong teachers their next career steps are to promoted posts, usually some years away and this is likely to mean that those who complete their first year feel they have completed, rather than having begun a journey.

In Hong Kong there is no specific provision for newly qualified teachers thus leaving respondents dependent upon the voluntary helpfulness of colleagues and the vagaries of helpful staff for key information. Whereas some found themselves in supportive settings, others found themselves developing tools for independent coping. Given this setting Hong Kong's new teachers are left to independently identify and suggest areas in which they seek support, even if that support is not then guaranteed. In other contexts, it has been argued that teachers' autonomy has reduced significantly over the last two decades [1, 32, 33, 34] and this has been seen as a threat to professionalism. Arguments supporting teacher-autonomy stress its value in maintaining collegial as against bureaucratic control over practice and professional standards [1]. However collegial control is not without its own problems – as reported in *Forging a Teaching Identity* – for, lacking clear guidance, new teachers can be seen as being socialised into Lacey's [35] strategic compliance strategy ('being seen to be good') a compliance that supports neither risk-taking experimental teaching, nor egalitarian collaboration. Further confounding this desire to promote autonomous teaching – as reported in *Patterns of Individual Practice* – is that the individual needs of new teachers vary and that any standardised effective system for professional development needs enough flexibility to respond to these varying needs.

The question thus arises whether the support offered by Hong Kong's 'craft model' for ITE with its subsequent *laissez faire* school mentoring system is likely to meet these development needs both in the first year and beyond? For this first year is not only a time of development in itself but lays the groundwork for subsequent attitudes to, and expectations of, professional development. In Hong Kong the absence of organised support for new teachers is a realistic preparation for what lies beyond the first year of teaching and accordingly the challenge appears to be to know what might best prepare teachers for an uncertain future. Studies of highly structured systems that emphasize accountability to a standard rather than to a more

open ended CPD path have been criticized for socializing teachers into compliance rather than into innovation and understanding [10, 36]. Adding to this apparent confound is that teacher-induction, by definition, is a transition-phase where the individual engages with practice-based learning experience and thereby learns to face and overcome difficulties – a pattern illustrated by the research findings which consistently display new teachers' interactions with an array of individually-perceived difficulties. Respondents express such difficulties – e.g. their perceived dichotomy between 'Practice' and 'Theory', between ITE and CPD – as an apparent confound that may be resolved by considering the same findings from the perspective of the literature on 'community of practice' (CoP).

Initially, communities of practice received attention in the early 1990's when it was observed that learning takes place through informal social interaction anchored in the context of problem solving [37]. This observation places the formation of communities of practice as a pragmatic social response or shared need to 'problem solve' – such as respondents' reported adjustments to their differing school communities. Subsequent research indicates that communities of practice address their 'problem solving' in a variety of informal ways [38, 39] and – frequently motivated by perceived needs to increase their performance [40] and competitive advantage [41, 42] – keenly value 'friendships' that involve sharing of knowledge [43]. Of particular relevance to understanding the problems facing new teachers' integration is an observation [44] where the development of social relationships or trust is seen to underpin effective knowledge sharing, because the shared infrastructure of cooperation within a given community may impede close collaboration with outsiders.

The reported findings display - in broad terms - new teachers facing these twin challenges of 'developing social relationships' and of grasping their school's particular 'infrastructure of cooperation', twin challenges which combine to form a 'barrier to close collaboration'. From this perspective, respondents' reported 'problems' and 'challenges' appear as symptoms of a dysfunctional community of practice. Practical solutions to resolving this dysfunctional community of practice may be guided by considering these same findings but now from the perspective of what constitutes a functional community of practice. Three elements are held to cultivate a community of practice - namely 1) the domain; 2) the community and 3) the practice [45].

The domain – Forging a Teaching Identity

There is a clear distinction in the findings between new teachers being appointed and being accepted. From their first day of appointment respondents undertake a full workload whose discharge extends across one academic year. Given this extended time-frame it is perhaps not surprising that professional acceptance may seem slow, that individual differences – such as personality, gender, teaching-subject and school academic ability – have time and space to make their contribution towards forging an individual teacher's identity. Respondents' perceptions during their first full teaching year have been characterized as like being in a 'crucible'; by the end of their first teaching year as having completed rather than having begun a journey, and, taken in isolation, such perceptions may be cause for professional concern. However, for those who stay on, the teaching domain extends to involve being re-appointed and being professionally accepted – achievements that may well vindicate past hardships by placing them within a broader perspective.

The community – Reflections on ITE and School-based Support

Reported findings indicate that new teachers negotiate their identities across multi-communities - including ITE staff, peers, pupils, teachers and school administrative staff. Given this potential array and the ‘crucible’-like experiences of first-year teaching, it is perhaps not surprising that respondents tend to focus on a community that combines willingness to inform with valuable information. Given the classroom-bound nature of ‘teaching’ it is also perhaps not surprising that the least accessible CoP is that of fellow teachers – with every teacher bearing a full-work-load and the vagaries of school-timetabling, timely access to fellow teachers can seem problematic - leading some new teachers, particularly of English, to overly depend on the vagaries of ‘self-discovery’. Although the professional merits of such narrow-based information-sources may be questioned, respondents value and acknowledge them for they serve that individual’s school-context needs, and accordingly it is hard to see how a systemic ‘mentoring’ could improve matters. From this perspective, the community of practice that evolves to meet individual needs is held superior to any ‘imposed’ community.

The practice – Patterns of Individual Practice

For Wenger [45], the notion of practice represents a level of social structure that indicates a shared learning amongst CoP members of experiences and ways of dealing with recurring problems. From the reported findings, respondents’ first teaching-year presents a different notion – where the individual, with limited ‘experiences’ and therefore ill-equipped to identify ‘recurring problems’ is positioned as likely to contribute little to any established school-based CoP. Rather than focusing on accessing a CoP, new teachers’ focus on themselves, on developing their own patterns of individual practice. This myopic view perhaps explains why – as reported in *Patterns of Individual Practice* – new teachers apparently ‘fail’ to display Schön’s professional reflection, why a uniform structured-support-system of mentoring may not be helpful. From this perspective, new teachers’ first teaching-year takes as its focus developing one’s own patterns of individual practice. In subsequent years this early experience forms a context in which to locate ‘experiences’ and so enable the identification of ‘recurring problems’. Perhaps only in this later stage of development, does a ‘new’ teacher become equipped to join a community of practice.

In summation, from a community of practice perspective, respondents reported hardships and challenges are part of a process, extending at least one school year, by which they may become a ‘teacher’. The intensity and extended nature of this process appears to invite mitigating external interventions, however these may be misguided for, from a community of practice perspective, to be a community of practice member is not a right that can be granted but an accolade, earned by the individual.

Conclusions

Reporting an experiential record of new teachers during their initial year of full-time teaching (AY 2005-06) a research question - *Initial Teacher Induction in Hong Kong: what needs changing?* - was addressed from the two perspectives of professional formation and community of practice.

From a professional formation perspective, the reported findings highlighted a series of confounds commonly reported to comprise new teachers’ induction experiences –

dichotomies between Theory and Practice, prioritizing career paths or professional development, starting or having completed a journey. Such confounds seemingly indicate a need for mitigating external interventions such as funding for formal mentoring. A second, community of practice perspective argues against such external interventions. Instead, respondents' experiences are placed within the larger context of moving from being appointed to being accepted as a teacher and highlighting that such 'acceptance' into a school's community of practice is not externally mandated but rather individually earned.

Given Hong Kong's extensive, post-1997 Education Reforms promoting the concept of fully trained and qualified *professional* teachers, the resilience of the 'craft-model' within ITE may appear to be an anachronism. However, in Hong Kong, the ITE 'craft-model' involves self-development through reflection, and testing Theory by Practice – endeavors which are essentially personal. In this respect, it may be argued that the current *lack* of mandatory school-based mentoring accords new teachers greater personal freedom; how the individual utilizes this freedom is, in practical terms, judged by the school community. From this perspective in answer to the question *Initial Teacher Induction in Hong Kong: what needs changing?* the stronger argument appears to favour the current practice - *if it works, why change it?*

References

1. Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London, Falmer.
2. Morris, P and Williamson, J. (2000). *Teacher Education in the Asia-Pacific Region*. New York, Falmer Press.
3. Sultana , R.G. (2002) (ed.). *Teacher education in the Euro-Mediterranean region*. New York, P. Lang.
4. Britton, E., Paine, L., Pimm, D. & Raizen,S. (2003). *Comprehensive Teacher Induction: Systems for Early Career Learning*. Netherlands, Kluwer Academic Publishers.
5. Leithwood, K., Jantzi, D. & Steinbach, R. (2002). *Changing Leadership for Changing Times*. Buckingham, Open University Press.
6. McCrone Report (2006). *A teaching profession for the 21st century: agreement reached following recommendations made in the McCrone Report*. The Scottish Government. [Online] Available at: www.scotland.gov.uk/library3/education/tp21a-00.asp
7. Downing, K., Kwong, T., Chan, S., Lam, I, & Downing, W.K. (2009). Problem-based learning and the development of metacognition. **Higher Education**, 57 (5), 609-621.
8. Christie, F. Draper, J. & O'Brien, J. (2003). *A study of the induction scheme for beginning secondary teachers in Scotland*. Edinburgh, Centre for Educational Leadership, University of Edinburgh.

9. Harrison, J. K. (2001). The induction of newly qualified teachers. **Journal of Education for Teaching**, 27 (3), 277-279.
10. Totterdell, M., Heilbronn, R., Bubb, S. & Jones, C. (2002). Evaluation of the effectiveness of the statutory arrangements for the induction of newly qualified teachers. Report no. 338. Nottingham: DfES.
11. Kyriacou, C. & O'Connor, A. (2003). Primary newly qualified teachers' experience of the Induction Year in its first year of implementation. **Journal of In-Service Education**, 29 (2), 185-200.
12. Huberman, M. (1995). In T.R. Guskey, and M. Huberman (eds.), Professional development in education: new paradigms and practices. New York, Teachers College Press.
13. Berliner, D. (1987). Ways of thinking about students and classrooms by more and less experienced teachers. In J. Calderhead (ed.), Exploring teachers' thinking. London, Cassell.
14. Mevarech, Z.R.(1995). In T.R. Guskey, and M. Huberman (eds.), Professional development in education: new paradigms and practices. New York: Teachers College Press.
15. Schön, D.A. (1971). Beyond the stable state. London, Temple Smith.
16. Edwards, A., Gilroy, P., and Hartley. D. (2002). Rethinking teacher education: collaborative responses to uncertainty. London, Routledge Falmer.
17. Fessler, R. and Christensen, J. (1992). The teacher career cycle: Understanding and guiding the professional development of teachers. Boston, Allyn & Bacon.
18. Guskey, T.R. and Huberman, M. (eds.) (1995). Professional development in education: new paradigms and practices. New York, Teachers College Press.
19. Argyris, C. and Schön, D.A. (1996). Organizational learning II: theory, method, and practice. Reading, MA, Addison-Wesley.
20. Dadds, M. (1997). Continuing professional development: nurturing the expert within. **British Journal of In-service Education**, 23, 31-38.
21. Lieberman, A. (1996). Practices that support teacher development: transforming conceptions of professional learning. In M.W. McLaughlin and I. Oberman (eds.), Teacher learning: new policies, new practices. New York, Teachers College Press.
22. Bandura, A. (1986). Social foundations of thought and action: a social cognitive theory. New York, Prentice Hall.
23. Hargreaves, A. & Fullan, M. (1992). Understanding teacher development. London, Cassell.

24. Schön, D.A. (1987) *Educating the reflective practitioner*. San Francisco, Jossey-Bass.
25. Engeström, Y. (1987). *Learning by expanding: an activity - theoretical approach to developmental research*. Helsinki, Orienta-Konsultit Oy.
26. Cooper, S.B., Ponticell, J.A. and Thomas, J.A. (2000). Doing math the science way: staff development for integrated teaching and learning. In D.M. Byrd, and D.J. McIntyre (eds.), *Research on effective models for teacher education*. Thousand Oaks, California, Corwin.
27. Tickle, L. (2000). *Teacher induction: the way ahead*. Buckingham, Open University Press.
28. Forrester, V. and Draper, J. (2005) The professional formation and learning of new secondary teachers in Hong Kong: a dim-sum model? **Journal of Teacher Development**, 9(3), 21-55.
29. Forrester, V and Draper J. (2006). Newly qualified teachers in Hong Kong: professional development or meeting one's Fate? In T. Townsend and R. Bates (eds.), *Globalization, standards and professionalism: teacher education in times of change*. Kluwer-Springer Press. 27.
30. Day, C. Stobart, G., Sammons, P. and Kington, A. (2006). Variations in the work and lives of teachers: relative and relational effectiveness. **Teachers and Teaching**. 12(2), 169-192.
31. Forrester, V. (2005). Professional Formation in Hong Kong: ying & yang in a free market-economy? **Journal of Teacher Development**, 2, 128-150.
32. Ozga, J. (1995). Deskillling a profession. In H. Busher & R. Saran (eds.), *Managing teachers as professionals in schools* (pp.21-37). London, Kogan Page.
33. Talbert, J.E. & McLaughlin, M. (1994). Teacher professionalism in local school contexts. **American Journal of Education**, 102, 123-153.
34. Hargreaves, A. (1994). *Changing teachers, changing times*. London, Falmer.
35. Lacey, C. (1977). *The socialisation of teachers*. London, Methuen.
36. Draper, J. and O'Brien, J. (2006). *Induction: fostering career development as all stages*. Scotland, Dunedin Academic Press.
37. Brown, J.S. and Duguid, P. (1991). Organisational learning and communities of practice: towards a unified view of working, learning and innovation. **Organization Science**, 2, 40-57.
38. Orr, J.E. (1996). *Talking about machine: an ethnography of a modern job*. New York, Cornell University Press.

39. Wenger, E. (1998). *Communities of practice: learning, meaning, and identity*. Cambridge, U.K, Cambridge University Press.
40. Lesser, E. and Storck, J. (2001). Communities of practice and organizational performance. **IBM Systems Journal**, 40(4), 831-841.
41. Teigland, R. (2000). Communities of practice as an internet firm: netovation vs. on-time performance. In E.L. Lesser, M.A. Fontaine and J.A. Slusher (eds.), *Knowledge and Communities* (pp.151-178). Butterworth-Heinemann.
42. Liedtka, J. (2000). Linking competitive advantage with communities of practice. In E.L. Lesser, M.A. Fontaine and J.A. Slusher (eds.). *Knowledge and communities* (pp.133-150). Butterworth-Heinemann.
43. Fontaine, M.A. and Millen, D.R. (2002). Understanding the value of communities: a look at both sides of the cost/benefit equation. **Knowledge Management Review**, 5 (3), 24-27.
44. Blacker, F., Crump, N., and McDonald, S. (2000). Organizing processes in complex activity networks. **Organization**, 7(2), 277-300.
45. Wenger, E. (2007). Community of practice, [Online] Available at: <http://www.ewenger.com>