

CHARACTERISTICS OF COMMUNITIES OF PRACTICE

Would The Real Community Of Practice Please Stand Up!

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1 Introduction

This paper presents findings of research into teachers' experience of professional development in two schools in Darwin, Northern Territory. Part of the Northern Territory government's 'Building better schools' initiative is about establishing 'Professional Learning Communities' (PLCs). According to NT DEET (2005):

The project aims to establish Professional Learning Communities for teachers to develop and share models of best practice. Networks of communities will be established across the Territory to support teachers.

This project, funded by Charles Darwin University, explores teachers' perceptions of professional development (PD) in terms of what is effective for them. It attempts to determine whether these professional learning experiences include elements of professional learning communities. It therefore informs the discussion around the implementation of the 'Building better schools' initiative by providing an indication of the breadth of PD experiences of staff and their likely acceptance of PLC models. It also provides characteristics that differentiate traditional models from PLC models, which may then be used as benchmarks for assessing the 'fit' of programs that may be recommended for funding.

An important component of this project is the literature review, which is deliberately designed to be extensive and forms a major component of the paper. The literature is used as a starting point for identifying practices and characteristics of effective professional learning programs of all types. These characteristics are then divided into those that apply to PLCs and those that apply to traditional learning models. This division of characteristics is then used to inform the coding and analysis framework.

2 Literature review

The literature presented here reviews several aspects of professional development with a particular focus on professional learning communities. It begins with consideration of the nature of effective professional development generally and proceeds with an assessment of the benefits and drawbacks of traditional models of PD. The literature review then explores what is understood by PLC models and what characterises them. The section concludes with a comparison of traditional and PLC models.

2.1 The nature of effective professional development

Drawing on the findings of Fullan (1991), Little (1993), Cook (1996), Connolly (1998), and Hawley and Valli (1999), Downes et al. (2001) found that ‘professional development needs to be integrated with a comprehensive change process that deals with the full range of impediments to and facilitators of student and teacher learning’ (p. 19). To be effective, professional development must be sustained, ongoing and supported by modelling coaching and collective problem solving in specific areas of practice (Kinnaman, 1990; CERI 1998; Downes et al. 2001). As it is directed

towards teachers' intellectual development and leadership, it needs to be designed and directed by teachers, incorporating the best principles of adult learning and involving shared decisions designed to improve the school (Inservice Teacher Education Project Committee, 1988; Hawley & Valli 1999; Downes et al. 2001). It needs to be participant-driven, to engage teachers in actual tasks of teaching, assessment, observation and reflection (CERI 1998), and collaborative and interactional (Palinscar & Brown, 1984; Scardamalia & Bereiter, 1989; Greeno 1998; Hawley & Valli 1999; Bransford, Brown & Cocking 2000).

The literature claims evidence of a positive correlation between teacher professionalism (including the teacher as learner role) and improved student learning outcomes (Groundwater-Smith 1998; Smith 1999; Delannoy 2000; Mitchell & Cubey 2003; Borko 2004). Guskey and Sparks (1996) emphasise the importance of a systemic approach with a clear focus on explicit student learning outcomes (Guskey 2000). Effective professional development is therefore closely linked with teachers' work with their students (Downes et al. 2001), and assists teachers to meet the future needs of students with different learning styles and differing socio-cultural and socio-economic backgrounds (Mitchell & Cubey 2003).

There is increasing attention being given to the role of new information and communication technologies in teacher professional development. This includes the use of telecommunications to provide channels of communication for networking and mentoring, facilitation and support, and the use of online professional development courses and online curriculum projects that have professional development embedded within them (Marx, Blumenfeld, Krajcik & Soloway 1998; Downes et al. 2001). However, more evidence is needed to support the claims about the effectiveness of the use of such media (Downes et al. 2001).

There is widespread consensus in the literature about the nature of best practice in teacher professional development. The Inservice Teacher Education Project Committee's 1988 report, *Teachers Learning: Improving Australian schools through in-service teacher training and development*, listed principles of good practice in professional development as incorporating:

- Adult Learning principles, including recognition of prior learning and of contextual and support issues;
- Delivery Modes that recognise the value of 'innovation focused' and 'action research' strategies;
- Setting and Focus, using the school as a pivotal point;
- Leadership by principals in schools and also collaborative leadership;
- Joint planning and collaborative control by stakeholders;
- Support for teacher commitment and for a culture of ongoing learning;
- Applying results of educational research in knowledge fields;
- Assessment of the impact of professional development on students and their learning, on teachers and their teaching, and on the school itself.

These principles were echoed to a large extent by Crowther and Gaffney (1993) and Loudon (1994), also supporting action research, and with more focus on bringing together teams of classroom teachers and on preparation by participants.

Characteristics of effective professional development were summed up by Mitchell and Cubey (2003), researching professional development in an early childhood education context in New Zealand. **Table 1** below, summarises these characteristics. Mitchell and Cubey found that highly

skilled, knowledgeable, and critically aware professional development advisers had a critical role.

These advisers

play key roles in establishing goals, observing teachers/educators, offering knowledge about alternative practice, giving feedback and planning. Intensive input seems necessary at the start of a programme, while at later stages minimal support only may be needed. However, an enduring role is for the professional development adviser to critique and challenge pedagogy. (p. xii)

Table 1. Characteristics of effective professional development linked to enhanced pedagogy and children’s learning in early childhood education settings (adapted from Mitchell & Cubey 2003)

<p>The professional development incorporates participants’ own aspirations, skills, knowledge and understanding into the learning context. Programmes introduce new ideas and provide opportunity for participants to question their experiences and views, and not simply validate them.</p>	<p>The professional development provides theoretical and content knowledge and information about alternative practices. This may be generic or content specific, such as generic areas of co-constructing learning, scaffolding, learning dispositions, and specific areas such as early literacy, mathematical and scientific understanding,</p>	<p>Participants are involved in investigating pedagogy within their own early childhood settings. Investigative methods, such as action research, are useful. An external professional development adviser or researcher engages in the investigation.</p>	<p>Participants analyse data from their own settings. Revelation of discrepant data is a mechanism to invoke revised understanding</p>
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	creativity.		
<p>Critical reflection enabling participants to investigate and challenge assumptions and extend their thinking is a core aspect. Some conditions that encourage critical reflection: 1) collaboration with others and being exposed to their views. These views include views of colleagues, professional development advisers, parents, and children; 2) using deeper or different theoretical understanding; 3) teachers/educators thinking about their own thinking, e.g. through use of journals and diaries.</p>	<p>Professional development supports educational practice that is inclusive of diversity</p>	<p>The professional development helps participants to change educational practice, beliefs, understanding, and/or attitudes</p>	<p>The professional development helps participants to gain awareness of their own thinking, actions, and influence</p>

The key message from the literature may be summed up in the words from a Commonwealth of Australia (2000) document, 'Teachers for the 21st Century: Making a Difference': professional development is effective

where it is identified and implemented within the school context to meet the needs of their teachers and students, for the continuous improvement of professional practice . . . educational systems and schools [need to] embed professional development effectively into conventional work practices. (Commonwealth of Australia 2000, p. 11)

However, as McRae, Ainsworth, Groves, Rowland and Zbar (2001) pointed out, sets of principles do not, by themselves, lead to good teacher professional development. Despite recognition of its importance, and despite its high cost (McRae et al. 2001; Borko 2004), professional development is generally considered inadequate (Borko 2004; Sykes 1996). This is largely because the consensus in the literature that it needs to be integrated and sustained is rarely reflected in practice. Hawley and Valli (1999) noted: 'the bad news is that few of these principles are common to professional development programs in schools and colleges, and the cases where most, much less all, of the principles are being implemented simultaneously are rare indeed' (p. 145).

2.2 Benefits and drawbacks of 'traditional' models

Traditional models of professional development tend to be regarded in terms of formal education activities, such as courses or workshops. School administrators release teachers for a half or full day and hold a PD or in-service program that may or may not be relevant to teachers' professional development needs. The programs may have experts who speak to all teachers on a topic or they may consist of simultaneous workshops offered by trainers recruited from other districts, the university, or the state education department. Teachers listen and leave with some practical tips or

some useful materials. There is seldom any follow-up to the experience and subsequent in-services may address entirely different sets of topics. These factors limit the effectiveness of traditional models (McRae et al. 2001).

However, the literature outlined in previous sections of this review agrees that professional development, in order to be integral to teaching and not ancillary to it, must centre on the classrooms where teaching and learning take place. Moreover, it must provide the 'direct help and support' for teachers' continued learning. Modelling new pedagogies in non-specific and decontextualised ways has been demonstrated not to work (US Department of Education 1999). There is now a trend of moving away from past models of professional development to new models that embed professional development into the daily lives of teachers.

2.3 Communities of practice models

There is a growing body of literature on what is variously termed communities of practice, learning communities, teacher communities, teacher networks, and research circles. Interest in these models has come with recognition of the role of communities to support teacher learning and of the concept that professionals learn best in interaction with their peers (Vygotsky 1978; Lieberman & Miller 1991; Little 1993; Newman & Wehlage 1995; Borke 2004). The models 'profit from synergies' (Kilpatrick, Barrett & Jones 2003, p. 2). Stein, Smith and Silver (1999) have suggested that development of teacher communities of professional practice formed the outlines of a new paradigm for teacher professional development. Downes et al. (2001) described this new paradigm as 'involving a sharing of knowledge among educators and a focus on teachers' communities of practice rather than individual teachers, with support from both inside and outside of setting' (Downes et al. 2001, p. 6).

Models of teacher professional development based on the concept of communities of practice have been developed by Wenger (1998a &b). Lave and Wenger (1991) first proposed that learning in the workplace occurs through enculturation into a community of practice. In schools, informal communities of practice serve as the background to building professional learning communities (Hough, Paine & Austin 1997). Au (2002) describes teachers' professional learning as 'the process of developing and linking communities of practice' (p. 226). By making links between informal staff groupings, a school community has an increased capacity to make better use of resources, build stronger networks, support emerging leaders, and represent community interests with increased confidence and knowledge, and in turn the capacity to influence its own future.

Wenger defines communities of practice as 'groups of people who share a concern or a passion for something they do and who learn to do it better as a result of their ongoing interactions' (2005, para. 3). 'By engaging directly in the production of knowledge with your colleagues, you are deepening your sense of professional identity while at the same time improving your practice' (2005, para. 10). According to Wenger's theory, members of a community of practice, or practitioners, develop a shared repertoire of resources through their sustained interaction over time, and this shared practice is what differentiates them from other communities or groups. The community's collective knowledge is constructed largely through informal narrative discourse between community members. Through interaction the community of practice sustains itself; novices initially engage with mentors and peers in the community as peripheral participants in practice, and later participate as experienced actors (Lave & Wenger 1991).

Site visits are important in the model, allowing practitioners to see how their peers are doing things. 'Enabling this kind of peer-to-peer contact engages practitioners in reflecting about their work, and enriches the repertoire of ideas out there' (Wenger 2005, para. 11). On-site visits are

mixed with online interaction, which ‘enables practitioners to negotiate with each other on a more ongoing basis’ (2005, para.11).

According to Wenger (1998a), communities of practice are characterised by three features. First is mutual engagement: members have in common their work and they define their working practices themselves. Secondly, communities of practice are formed around a joint enterprise. Members share a common mission or objectives, which are continually negotiated. Thirdly, they have a shared repertoire, akin to what Gee (1990) has termed Discourses – a shared set of words, tools, ways of doing things, which are part of their practice. ‘Communities of practice typically are organic, devoid of formal organizational hierarchical structures, and rely on informal leadership from their members’ (Wideman & Owston 2003, Introduction, para. 2). Members fit into several categories and assume various roles: a coordinator, who organizes events and connects community members; a core group of active participants in forums and meetings who assume some leadership roles; an active group of frequent, but not regular participants; and peripheral participants, members who occasional take part and others who learn from observation (Wenger, McDermott, & Snyder 2002).

The development of a community of practice begins with a stage Wenger calls the potential phase, with people facing similar situations seeing the benefit of working with each other (Wenger 1998b). During the coalescing phase, members come to recognize the potential of working together and begin to explore how to accomplish this. At the third stage, called the active phase, the community of practice becomes firmly entrenched as members engage in joint activities, create artifacts, and adapt to changing circumstances. A fourth stage, the dispersed phase, may see members no longer as intensely engaged, but still in touch. Activity wanes during the final stage, called the memorable phase, and participants remember it as a significant part of their identities.

Although communities of practice are viewed primarily as a means to improve learning, there is some evidence to suggest that they promote innovation, risk taking, trying new approaches, and knowledge creation, particularly in business settings (Wenger, McDermott, & Snyder 2002). They are also seen as a way to help members master challenges, gain access to expertise, provide a forum for expanding skills and expertise, help members develop confidence in their approach to problems, enhance meaningfulness of professional activity through the sense of belonging to some meaningful endeavour, develop increased professional identity, and reduce teacher isolation (Wenger et al. 2002).

In the research literature there is ongoing discussion about the nature of communities of practice and the so-called 'learning communities' upon which they are based, and the impact on both teacher professional learning and students' learning outcomes (Boston, 1995; Longworth 1999; Davis & Sumara 2001; Rogoff, Turkanis & Bartlett 2001; CRLRA 2002; Wenger, McDermott & Snyder 2002). Downes et al. (2001) noted that professional learning communities are: easy to set up but difficult to sustain (Lieberman 2000); need particular conditions if they are to operate effectively (Hough & Paine 1997; Grossman, Wineburg & Woolworth 2001); work best at the local level (site-based communities); and are less likely to succeed when dispersed and virtual (Schlager, Fusco & Schank 2000). Elmore, Peterson, and McCarthy (1996), Fullan (2001), and Wideman and Owston (2003) found evidence providing strong support for Wenger's assertion that communities of practice are vital to sustaining and expanding the momentum for change. Wixson and Yochum (2004) found consistent evidence of improved instruction and student literacy learning in communities of practice contexts. Computer-mediated conversation provides a tool by which teachers can extend their support network and deepen their reflection (Johanson, Norland,

Olson, Huth, & Bodensteiner 1999; Pennington & Graham 2002; Wilkinson & Pennington 2002; Singer & Zeni 2004; Hung, Chee, Hedberg & Seng 2005).

In practice, many communities are work-group ones (Borko 2004), focused on a limited number of subject areas and grade levels. The Community of Teacher Learners project (Grossman, Wineburg, & Woolworth 2001) brought together English and history teachers at an American urban high school with university-based educators to read books, discuss teaching and learning, and design an interdisciplinary humanities curriculum. The QUASAR (Quantitative Understanding: Amplifying Student Achievement and Reasoning) project funded and studied site-based professional development programs in mathematics teaching in economically disadvantaged neighbourhoods (Borko 2004). At each QUASAR school, the mathematics teachers worked with resource partners (usually mathematics educators from a local university) to develop and implement innovative curricula and instructional practices. The QUASAR project staff who studied these programs concluded that professional learning communities were central to fostering teacher change and student learning (Borko 2004).

2.4 Traditional models compared to Communities of practice models

There is to date no body of research comparing professional learning communities with traditional professional development learning approaches. One reason for this may be that the evolving nature of professional learning practices means that there is some blurring of models. This discussion makes an assumption that there are elements of models, which are discrete and that these discrete differences are what differentiate traditional from professional learning community models. It is acknowledged that there may be other non-traditional models that cannot be described under a framework of a PLC. These other models are not the focus of this research.

It can be stated, however, that traditional models, especially if they include modules from independent providers, are seen as expensive (Zbar 1999; McRae et al. 2001) and largely inadequate because they are piecemeal and not integrated and systemic (US Department of Education 1999; Guskey 2000; Downes et al. 2001; McRae et al. 2001).

On the other hand, communities of practice models are believed to work more effectively because of the synergies of interaction among peers (Wenger et al. 2002; Kilpatrick et al. 2003), and because they are localised (Borko 2004). But the development of teacher communities can be difficult and time-consuming work (Stein et al. 1999; Lieberman 2000; Grossman et al. 2001).

Retallick (1997) distinguishes between a traditional models which involve attending courses, seminars or training programs ... and a workplace learning concept of professional development as building a learning organisation. In the latter sense, professional development is integral to the job, it is part of work and it derives its meaning and rationale from the nature of the occupation. (p. 21)

The implications of the view that schools are learning communities are profound for teacher professional development. One of the most important of these is that learning can, and must, be part of all teachers' daily activity (McRae et al. 2001).

While there is no doubt some overlap between the characteristics of both traditional and professional learning community types of professional development the literature points to some differences. These differences, discussed in the sections above, are summarised in **Table 2**. The methodology draws on this list as a starting point for identifying aspects of teachers' experiences that are both positive and negative.

Table 2. Summary of professional development characteristics for both traditional and PLC types

<i>Characteristics of traditional PD</i>	<i>Characteristics of PLCs</i>
Seen to be expensive	Synergies of interaction among peers
'piecemeal', not integrated	Localised
Integral to the job, extension of work	Time consuming
Formal activities, workshops	Focus of shared knowledge rather than individuals
Seldom follow-up	Increased capacity to make better use of resources
Need for focus on classroom practices	Build networks
May or may not be relevant to professional learning needs	Support emerging leaders
	Capacity to influence community's own future
	People who share a concern or passion
	Deepening sense of professional identity
	Shared repertoire of resources
	Site visits, enriching repertoire of ideas
	Mutual engagement
	Joint enterprise
	Organic, no formal organisation, informal leadership

3 Methodology

This research uses storying and narrative analysis in conjunction with a semi-structured interview approach as the main strategy of qualitative inquiry (Creswell 2003:183; Fontana & Frey 2000; Patton 2002:115). Interviews were conducted at two primary schools in the Darwin region with six teachers involved from each school. The interviews were conducted during August and September 2005.

Using a purposeful sampling technique (Creswell 2003:185) schools were selected by negotiation with the Northern Territory Department of Employment, Education and Training (DEET) and schools that were known to the project team. Participants were selected by principals after an invitation to participate was given to staff at both schools. The interview questions were designed to be open-ended with as much opportunity as possible for full and broad exploration of the topics. The purpose of the questions was to elicit responses that would demonstrate the range of professional development experiences encountered by teaching staff. Staff were asked to describe their ideal model of professional development with examples and to compare these examples with others that were less than ideal. A focus of the questions was to explore the impact of the professional development experiences on relationships. The significant limitation of the research is the small number of schools and interviewees involved. The generaliseability of the findings needs to be viewed on this basis.

Consistent with the narrative approach, interviews were audio recorded and later transcribed. The transcriptions were offered to staff involved for error checking as part of the validation process (Creswell 2003:196). The resulting texts were then added to an NVivo™ project, which was then used to code, thematise and analyse responses according to standard text and content analysis

techniques (Bernard 2000:444-455; Silverman 2000). Coding was structured around two main groups: ‘what works’ and ‘what does not work’. Essentially these were positive and negative professional development experiences—ideal and less than ideal. Coding patterns were categorised according to emerging themes as they arose out of the data. Where possible these themes were matched to characteristics of professional development identified in the literature. Analysis was carried out primarily using tools available within Nvivo™ qualitative analysis software. Some additional analysis was carried out using chi-squared statistical tests in Microsoft Excel™.

4 Findings and discussion

This section firstly tabulates the results of the research according to the coding framework developed for programs that ‘work’ and those that ‘do not work’. Secondly, it goes on to compare the results for programs that were closer to a PLC type of learning with those that were more traditional. Finally, the section discusses these results, with a selection of quotes from interviews and points to several implications that arise from the findings.

4.1 Results

Respondents described 15 different programs as examples of their ideal model of professional development and 11 programs as less than ideal. Some programs were identified by more than one respondent. **Table 3** represents a summary of responses related to teachers’ ideal PD programs. The largest number of responses related to the ‘practical, hands on’ nature of PD programs with 18 per cent of all coding references. Those characteristics identified in the literature as elements of professional learning communities are marked with an asterisk (*). In this group the largest single group of responses relates to the development of professional identity with 8 per cent of all

responses. Overall, 55 per cent of coding references were aligned to professional learning community characteristics identified in the literature.

Table 3. Coding categories: ‘what works’ for teaching staff in professional development

<i>Coding categories, what works</i>	<i>Total coding references</i>	<i>Per cent of all coding references</i>
PD builds professional identity, is seen to be valued and builds confidence*	20	8%
Sharing of knowledge among staff within school*	17	7%
Interaction among staff within PD session*	19	8%
Working together, collaborating in PD*	15	6%
Opportunity for relationship building*	15	6%
Visiting other sites, seeing what other schools are doing*	8	3%
PD promotes innovation, new ideas*	4	2%
Networking among colleagues within and outside the school*	16	6%
PD is driven by teachers*	5	2%
PD is offered on a voluntary basis*	6	2%
Learning happens informally*	11	4%
Staff are interested, passionate about topic	12	5%
PD offered depends on needs	6	2%

PD is fun and enjoyable	8	3%
PD is adequately funded, relief staff are provided	6	2%
PD makes good use of time, doesn't interfere with family, is at an appropriate time	12	5%
School leadership supports and directs PD	24	10%
Practical, hands on and relevant to the classroom	44	18%
Total	248	100%
<i>PLC model characteristics*</i>	<i>136</i>	<i>55%</i>

Table 4 shows characteristics of professional development that made experiences of programs less than ideal. More than half of all responses relate to the first four of the 13 categories shown. The largest group of teachers (20 per cent) described programs negatively in terms of 'sitting and listening'. Almost as many references (19 per cent) were made to programs that were run at the wrong time or were overly lengthy in duration. Being 'told to go' and a lack of relevance to the classroom or school were highlighted in another 20 per cent of responses. Respondents described these programs as typically 'chalk and talk' with PowerPoint slides and little or no opportunity for interaction.

Table 4. Coding categories: 'what does not work for teaching staff in professional development

<i>Coding categories, what does not work</i>	<i>Number of coding references</i>	<i>Per cent of all coding references</i>
Sitting and listening	14	20%
The timing of PD does not suit or is inappropriate	13	19%
PD is mandatory, being told to go	7	10%
PD has little or no application to the school or classroom	7	10%
The quality of the presenter was poor	5	7%
There was too much information, could not take it all in	5	7%
PD interferes with classroom activities/programming	4	6%
The PD was of no interest, boring	4	6%
The PD did not offer opportunities for building relationships	3	4%
Content that is forgettable	2	3%
PD interferes with personal or family life	2	3%
Resources are not available to implement learnings	2	3%
The venue for PD was not suitable	1	1%
<i>Total</i>	<i>69</i>	<i>100%</i>

Table 5 divides the results shown in **Table 3** into three groups. The first group is a summary of those responses where the majority of characteristics described as attributes of a program matched those identified as PLC characteristics in the literature. The second group is a summary of those responses where up to half of characteristics described did not match those identified in the

literature as PLC types. These have been labelled 'traditional'. The third group is a summary of responses about ideal models of PD that were not tied to a specific program.

Table 5. Breakdown of PD characteristics by type of program, together with generic responses

<i>Characteristic of 'ideal' PD</i>	<i>PLC type responses</i>	<i>Per cent of all PLC type responses</i>	<i>Traditional type responses</i>	<i>Per cent of all traditional type responses</i>	<i>Generic responses</i>	<i>Per cent of all generic responses</i>
PD builds professional identity	7	5%	7	10%	6	15%
Sharing of knowledge among staff	12	9%	1	1%	4	10%
Interaction among staff within PD	11	8%	6	9%	2	5%
Working together, collaborating in PD	14	10%	1	1%	0	0%
Opportunity for relationship building	11	8%	2	3%	2	5%
Visiting other sites	6	4%	2	3%	0	0%
PD promotes	2	1%	1	1%	1	2%

innovation						
Networking among colleagues	16	12%	0	0%	0	0%
PD is driven by teachers	3	2%	2	3%	0	0%
PD is offered on a voluntary basis	2	1%	3	4%	1	2%
Learning happens informally	5	4%	2	3%	4	10%
Staff are interested, passionate about topic	6	4%	3	4%	3	7%
PD offered depends on needs	2	1%	3	4%	1	2%
PD is fun and enjoyable	3	2%	5	7%	0	0%
PD is funded	4	3%	1	1%	1	2%
PD makes good use of time	2	1%	5	7%	5	12%
School leadership supports and directs PD	11	8%	6	9%	7	17%
Practical, hands on and relevant to the	20	15%	20	29%	4	10%

classroom						
Total	137		70		41	
<i>PLC model</i>	89	65%	27	39%	20	49%
<i>characteristics</i>						

Chi-squared analysis reveals that for this sample of teachers there is a significant difference between the ‘traditional type’ and the ‘PLC type’ of program such that those describing a PLC type are more likely to report the range of associated characteristics found in the literature than those who described a traditional PD ($p < .05$). A closer examination of the individual components of the ‘PLC type’ shows that there are four elements that contribute to the significant difference:

- Sharing of knowledge among staff within the school;
- Working together, collaborating in PD;
- Opportunity for relationship building; and
- Networking among colleagues within and outside the school.

4.2 Discussion and implications

The results of this research demonstrate a diverse array of professional learning experiences. While none of those experiences could be described as professional learning communities according the full range of characteristics found in the literature, elements of professional learning communities were described by respondents to varying degrees. The teachers that were interviewed drew from their professional learning experiences and while they all understood the terminology associated with professional learning communities their experience was dominated by a range of traditional

type professional development workshops. In other words their frame of reference in most cases was restricted by their experience, which to a large extent excluded PLC experiences. The results suggest that before PLCs are more widely promoted and introduced into a strategic professional development framework, they must be first explained and modelled before the value of such learning can be fully appreciated. The danger if this does not occur, is that PLCs will be seen to be just another way of doing PD workshops.

Those programs that were described as being less than ideal were largely dismissed for their professional development value because they were mandatory, 'boring', lacked interactivity and were organised at inappropriate times. The failure of these programs is less to do with their nature as either 'traditional' or 'PLC' types and more to do with their failure to address basic adult learning principles. The following three quotes are typical of comments that reflect these views.

I5: [I didn't like it because] you are told 'we are going', we are not given the choice. You might end up going to a PD that you don't find interesting or that you don't find a benefit for yourself... but there was a behaviour management one where [the principal] knew would be really good for me and I was in denial about and it was very good for me because it was something that I needed to work on, [but] the style of how it was presented didn't suit me, it was very much stand at the front preach, preach, preach, bang, bang, bang, no interaction, no networking, nothing.

I8: I walked out and I wondered why I go to these things. It was the same deal and there are so many; the same chalk and talk business.

I4: I have been to one where we sat on a Friday afternoon and the person basically talked at us and we felt very tired and this person was trying to get responses out of us and nobody wanted to contribute and they were looking away when they were trying to get people to be involved. We were told that we had to go.

These findings, though not directly related to the study of PLCs, point to the need for better quality assurance for traditional PD workshops. This could take the form of post workshop participant assessment of presenters and presentations. It may also require a re-think of the timing and delivery mode of workshops in order to avoid problems associated with after-school PD sessions.

Many aspects of the 'traditional' type of PD were appreciated and valued by the teachers. In particular PDs that were practical, hands on and had direct application to the classroom or school were considered most effective. This characteristic was valued regardless of the mode of delivery or level of interactivity. The analysis shown in **Table 5** shows that while in this sample of teachers a larger proportion of teachers describing traditional types of PD identified 'practical, hands on' as a factor that contributed to effective PD compared to those describing PLC types, the difference was not statistically significant. The following quote typifies this view:

I12: What works for me is practical basically at the end of the day. Anything that is related directly to teaching in the classroom and practical hands-on type experience is probably the two best that I have been involved in. One... relates to classroom assessment, the common writing tasks where we actually had to do the assessment and it was all day writing assessments and that is hands-on and you've got a real good feel of what you've got to do. So anything that directly relates to my classroom practice is what I consider to be valuable PD experiences.

Other aspects of PD that were appreciated by all respondents similarly, regardless of the type were: support and direction from school leaders; good timing of PD; interactivity; and the way the program contributed to teachers' confidence and value as a staff member. The direction that the principal provided, especially to newer and younger teachers was particularly appreciated. The

following quote from a relatively new teacher highlights the value placed on this kind of support and direction:

I9: When [the principal] put that information in my pigeonhole I took it straight out I said 'sorry I don't want to do this'. He just looked at me like 'thanks a lot!'. But I'm so glad I didn't, I left it a week and I saw someone who had done it and they said no, if [principal's name] has given it to you, you take it, it's really good and I said 'is it too late?' and he said 'no, no that's good, you're in'.

The above results suggest that there is an important role for traditional approaches to PD where there is practical application and where the approach is top-down, rather than self-directed or teacher driven. This is not to say that learning that takes place in PLCs is not practical, but it may require a longer time frame to organise. Further, the need for particular learnings may not be immediately obvious to a work team at the school level but it may be critically important in the eyes of more senior staff within the education system.

In terms of the principal's role in leading a school's professional development strategies, a PLC approach will necessarily require a different style of leadership than the traditional approach. A PLC approach arguably requires a more facilitative, supportive role than might be demanded in a traditional PD environment. Principals, assistant principals and school administrators, unfamiliar with a PLC approach to may need to be provided with specific skills and training in order for staff to more fully take advantage of a PLC model. Apart from leadership development skills, administrators and principals may need to reorient their thinking about PD participation and outcomes from short term, one-off workshops, to year long programs.

The findings shown in **Table 5** demonstrate that the key differences in types of professional development were related to: *relationship building*; *collaborative learning*; *sharing of knowledge*;

and *networking among colleagues* within and outside the school. One teacher for example, described a PD day organised by a literacy committee at her school:

I9: There were people doing reading, listening, speaking we divided it into groups and we had little program and we just went with that. It was only like 20 minutes at a time, are two of us got together to do it... I had to go away and look at what I was doing and learn about it and present it but I found that I got to understand what I was doing that way. Reading, comprehension.

Q: Where did you go to for information?

I9: We accessed all sorts of information, support books, so it was good and I was working with another teacher who was into this stuff as well and we talked about it as well so when I had all my information together and I saw her she said 'yes that's right' and worked out which one we were going to do and what angle we were going to take.

This illustration highlights the collaborative, knowledge sharing nature of the PLC type. Several respondents describing PLC type programs indicated that the programs were good because they could 'bounce' ideas off each other. For example one respondent who described learning that was facilitated through a professional association described it as follows:

I7: ...there's not people working at the same year level that you can have that conversation with so having the [professional association] you get together and there is a lot of the general chitchat that you might have in the staff room. Like how are you going to deal with this child or getting fee payments, we talk about these all the time. How are you organising your committee? All that sort of stuff, because you are it. Because you are limited with who you can bounce off because you are limited to the number of people that actually work in [type of schools]. So we get together and do a lot of things like that...

This research suggests that the difference between traditional types and PLC types of PD lies in the four areas described above: *relationship building*; *collaborative learning*; *sharing of knowledge*; and *networking among colleagues*. These may form the basis of benchmark indicators that could be used to assess the fit of a program to a PLC model. The benchmarks could be used to assess proposed PLC learning activities or they might be used as part of an evaluation, during and after a professional development program. These indicators are more process oriented than outcome oriented but in terms of an evaluation of the effectiveness of PD programs it is apparent from the findings presented here that these processes are important for the way many teachers learn. The results suggest that this may be more likely to be the case where PLCs are used as a basis for the professional development.

5 Conclusions

This paper has presented findings from research conducted in two primary schools in the Darwin region about 12 teachers' perception of their professional development experiences. The study is therefore limited by the small number of schools and interviewees involved, especially in terms of generalisability. In one sense it collates a collection of experiences to determine what works and what does not work for these teachers. However, this research is important for an understanding of factors that contribute to the effectiveness of programs in an environment where professional learning communities are being considered as a way to 'build better schools'. It points to the readiness of teachers to adopt a PLC model of learning.

In terms of this readiness, it is apparent from the findings presented here that teachers in the two schools had a range of PD experiences which were dominated by traditional models, as opposed to PLC models. However, within these experiences many teachers identified aspects that, according to the literature reviewed, could be considered to be attributes of PLC models. They also identified

several attributes of more traditional models of PD, which they felt were effective. Because their experiences were dominated by traditional models of professional learning it could be argued that the majority of teachers have little idea what a PLC looks like. They therefore need to have PLCs modelled to them before they can fully conceive or take advantage of them. This is a major task for proponents of the 'building better schools' strategy.

The many examples of effective programs given, which fitted more traditional models of PD, point to their continuing suitability for many applications, particularly where the learning is directly related to classroom activities. These shorter, directly applicable programs were reported to be of great value to teachers, many of whom resented being taken unnecessarily out of their classrooms for programs that were not relevant to the school or their teaching. The role of the school's leadership in directing and supporting these 'practical, hands-on' activities was found to be important for teaching staff, especially for those who were newer, less experienced teachers.

Finally, this research contributes to an understanding of what differentiates more traditional types of PD from PLCs. The positive PD experiences of teachers interviewed for this research was compared to a list of characteristics found in the literature according to their fit with either a PLC or traditional model of professional learning. When these positive characteristics were analysed it was evident that the main points of difference between effective programs with higher proportions of PLC attributes and more traditional programs, lay in four areas: 1) Sharing of knowledge among staff within the school; 2) working together, collaborating in PD; 3) having an opportunity for relationship building; and 4) networking among colleagues within and outside the school. These four characteristics then may form the basis of a set of benchmarks or indicators that can be used to a) assess the likely fit of a proposed program according to a PLC model or b) evaluate the process aspects of learning that go on in a PLC learning environment.

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