

Characteristics of communities of practice: Would the real community of practice please stand up!

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Abstract

This paper presents findings of research into teachers' vocational learning using professional development experiences in two schools in Darwin, Northern Territory. Part of the Northern Territory government's 'Building better schools' initiative is about establishing Communities of Practice they call 'Professional Learning Communities' (PLCs) to enable teachers to develop and share models of best practice through Territory-wide communities of practice. The paper 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 and for the theory and practice of the research about communities of practice by providing an indication of the breadth of PD experiences of staff and their likely acceptance of PLC models. For perhaps the first time ever, evidence is presented for the scope and nature of the 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. There are implications for the professional development of VET staff as well as for national and state policy bodies concerned with the effectiveness of PD in enabling change.

Introduction

This paper presents findings of research into teachers' experience of professional development in two primary schools in Darwin, Northern Territory. In recent times there have been calls for the development of professional learning communities or 'communities of practice' as a better way of doing professional development among teaching staff in a variety of educational contexts, from schools, through vocational education and training (VET) to higher education institutions (Herrington & Herrington 2004; Mitchell 2002; NT DEET 2005; Young & Mitchell 2003). Regardless of the context, the focus here is the vocational learning that goes on among educators.

The research, 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 (PLCs). It therefore informs the discussion about building communities of practice 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.

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 consideration of the PLCs in the Australian VET system. It then provides an assessment of the benefits and drawbacks of traditional models of PD before exploring what is understood by PLC models and what characterises them. The section concludes with a comparison of traditional and PLC models.

The nature of effective professional development

Downes et al. (2001:19) 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’. To be effective, professional development must be sustained, ongoing and supported by modelling, coaching and collective problem-solving in specific areas of practice (CERI 1998; Downes et al. 2001). As it is directed towards teachers’ intellectual development and leadership, it needs to be designed and directed by the teachers themselves, incorporating the best principles of adult learning and involving shared decisions designed to improve the school (Inservice Teacher Education Project Committee 1988). It needs to be participant-driven, to engage teachers in actual tasks of teaching, assessment, observation and reflection (CERI 1998), and collaborative and interactional (Bransford et al. 2000). 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. They found that highly skilled and critically aware professional development advisers had a critical role.

Professional development in the Australian VET system

Many of the principles identified above could be described as generic to a number of ‘teacher’ professional development contexts, including the Australian VET context. For example, the Australian Flexible Learning Framework (2004) found a set of eight enablers that contributed to effective professional development, which align quite closely with the principles outlined in the previous section. However, this section will draw on Australian literature that describes emerging practice in professional development within the VET system. There has been an evolution of the language, theory and practice around professional development in the VET system in the last 15 years: from work-based learning, action learning, staff development, professional development through to communities of practice (Henry, Mitchell & Young 2001; Mitchell & Young 2001; Reframing the Future 2005).

The VET context is different from other teaching institutional contexts however because of the casual/sessional nature of much teaching that occurs, which is identified as a major barrier to professional development of VET assessors and trainers (NCVER 2004; Stehlik 2003) along with remoteness (Harris et al. 2001). This means that while teachers may align their values to professional ideals they may not align with organisational values (Mitchell 2002:81). Within existing VET teaching structures however a full range of practices clearly do exist, mirroring many of the principles outlined in the previous section (Skippington 2002). But questions remain about the

extent to which staff development is seen as an integral part of VET practice. Harris et al. (2001:64) observe that:

A significant barrier appears to be the view that staff development is a ‘bolt-on’ activity—part of a communication strategy rather than an integral component of the strategic responsibilities of organisations.

The language of PD in the VET literature seems to turn to ‘communities of practice’ with the advent of the ANTA funded initiative, *Reframing the Future*. It is in this context that Mitchell (2002:8) suggests that communities of practice have ‘profound’ potential for the Australian VET system.

Communities of Practice are powerful mechanisms to assist VET practitioners implement the National Training Framework (NTF), particularly in terms of developing new relationships between practitioners and industry.

Mitchell also acknowledges that communities of practice do have limitations. He observes that ‘they need to be well supported’, a point that Wenger (2004:8) concurs with. In particular, he notes that ‘they are difficult to establish and maintain; they can easily develop flaws or experience pitfalls; they add to the complexity of modern organisations more than any other knowledge-based approaches; and they increase the difficulties of managing organisations’.

The discussion about approaches to develop communities of practice among VET teachers has begun to focus on online or ‘virtual’ communities or networks (Lewanski 2004) in recent years. The ACT Department of Education and Training (2005:19) observes that ‘The use of online professional development will increase in acceptance as a flexible learning tool as teacher/tutor confidence and engagement with ICTs improves’.

While this abridged review of Australian literature on VET professional development indicates that a good deal of research has been conducted on the various forms and demonstrations of good practice in professional development, there is little evidence to suggest that the barriers to VET practitioners accessing professional development have been overcome. Most of the studies reviewed here have been conducted in the context of a funded research or project interventions. There is little evidence to suggest that beyond these intentional projects that the ‘good practice’ is sustained, regardless of the form. Many of the studies reviewed here also appear to presume a pre-existing institutional structure, which may or may not exist, particularly for the many casual/sessional staff who work in the VET system. This is perhaps the most significant point of divergence between the VET system and other education systems (primary, secondary or tertiary), which operate in Australia.

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).

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 (Borko 2004; Lieberman & Miller 1991). Models of teacher professional development based on the concept of communities of practice have been developed by Wenger (1998a, 1998b). Lave and Wenger (1991) first proposed that learning in the workplace occurs through enculturation into a community of practice.

Wenger (2005) 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'. He goes on to say: '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'. 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).

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. 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 (McRae et al. 2001; Zbar 1999) and largely inadequate because they are piecemeal and not integrated and systemic (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), and because they are localised (Borko 2004). But the development of teacher communities can be difficult and time-consuming work (Lieberman 2000). The implications of the view that educational institutions 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).

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; 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) from 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. 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. 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 NVivo2™ project, which was then used to code, thematise and analyse responses according to standard text and content analysis techniques (Bernard 2000:444–455). 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. Consistent with Silverman’s (2000:823–824) suggestions for the use of this kind of software in narrative analysis, the themes were ‘quantized’ (Tashakkori & Teddlie 1998:19) in order to identify the predominant themes and the linkages that existed between the groups of data. Table 1, shown on the following page, reflects part of this process. Some additional analysis was carried out using chi-squared statistical tests in Microsoft Excel™.

Findings and discussion

This section first compares the results for programs that were closer to a PLC type of learning with those that were more traditional. The section then discusses these results and points to several implications that arise from the findings.

Results

Respondents described 15 different programs as examples of their ideal model of professional development. Table 1 divides the programs described 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 more than half of characteristics described did not match those identified in the literature as PLC

types. The third group is a summary of responses about ideal models of PD that were not tied to a specific program.

Table 1. Breakdown of PD characteristics by type of program, together with generic responses

	Group 1: Programs where the majority of responses reflect PLC type responses	Group 2: Programs where the majority of responses reflect traditional type responses	Group 3: Generic responses (not tied to a particular program)
Characteristic of 'ideal' PD: data summary			
Total 'ideal' characteristics identified	137	70	41
PLC model characteristics identified	89	27	20
Per cent of 'ideal' characteristics that fit PLC model	65%	39%	49%
Characteristic of 'ideal' PD: detail			
Practical, hands on and relevant to the classroom	20	20	4
Networking among colleagues*	16	0	0
Working together, collaborating in PD*	14	1	0
Sharing of knowledge among staff*	12	1	4
Interaction among staff within PD	11	6	2
Opportunity for relationship building*	11	2	2
School leadership supports and directs PD	11	6	7
PD builds professional identity	7	7	6
Visiting other sites	6	2	0
Staff are interested, passionate about topic	6	3	3
Learning happens informally	5	2	4
PD is funded	4	1	1
PD is driven by teachers	3	2	0
PD is fun and enjoyable	3	5	0
PD promotes innovation	2	1	1
PD is offered on a voluntary basis	2	3	1
PD offered depends on needs	2	3	1
PD makes good use of time	2	5	5

* items where there is a significant difference between Group 1 and Group 2

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: 1) Sharing of knowledge among staff within the school; 2) Working together, collaborating in PD; 3) Opportunity for relationship building; and 4) Networking among colleagues within and outside the school.

Other characteristics, such as 'practical, hands on and relevant to the classroom' and 'interaction among staff within PD' showed no statistical significant differences between Group 1 and Group 2. It should be noted that teachers also identified aspects of PD that were less than ideal. However, the focus of this paper is limited to PD characteristics that were considered positively by teachers. The findings shown in Table 1 therefore demonstrate that the key differences in types of professional development are related to: *relationship building*; *collaborative learning*; *sharing of knowledge*; and *networking among colleagues* within and outside the school.

Discussion and implications

The results of this research demonstrate a diverse array of professional learning experiences in the schools where the research was conducted. While none of those experiences could be described as professional learning communities according to 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'.

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 1 demonstrates 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. 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 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.

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 possible 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 to determine the extent to which professional learning incorporated PLC characteristics. 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.

Implications for VET and professional learning communities

While this research project was conducted at two primary schools in Darwin, the focus was on teachers' professional—and therefore vocational—learning experiences. Application to the VET environment therefore should not present too much of a quantum leap in its translation, even though teacher PD and 'vocational education and training' are not often regarded as the same fields. However, it is important to take into account the fact that (a) teacher professional development *is* a form of vocational education with defined 'training' experiences embedded in it, since it is to do with the vocational learning that these adults engage in (or not) in pursuit of career development, and (b) the research was conducted in an institutional environment with an established professional development system in place, which as has been noted was driven to a large extent by the leadership within the schools. The characteristics of PLCs identified here may well apply regardless of the institutional context. That is, regardless of whether the teacher is a primary school teacher, a TAFE lecturer or a part time assessor with a private RTO, aspects of PLC learning such as *relationship building; collaborative learning; sharing of knowledge; and networking among colleagues* can be built into professional development strategies. Indeed the evidence from this research suggests that many of the experiences described in this way by teachers, took place outside the institutional context.

If, as Mitchell (2002:8) suggests, communities of practice (or professional learning communities) are to be promoted as a 'a useful vehicle for underpinning the implementation of the [National Training Framework]', then the findings here point to key processes that should be built into the development of such communities. Given the institutional context of this research, the application of these process principles would be better suited to a structure institutional environment. It is important to recognise that this research does not offer PLCs as a cure-all for overcoming the barriers that exist for part-time or casual VET practitioners or those in private RTOs, or those in regional and remote areas, who need to access appropriate professional development. What it does offer, is a process framework that allows VET leaders and policy-makers to develop and test programs that are more likely to succeed as PLCs as opposed to more traditional models of practitioner professional development.

Conclusions

This paper has presented findings from research conducted in two primary schools in the Darwin region about 12 teachers' perceptions 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 promoted. It points to the readiness of teachers to adopt a PLC model of learning.

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.

In the VET context this research has perhaps greater immediate application to a structured, institutional environment, such as a TAFE or established Registered Training Organisation (RTO) with staff who readily align their values with those of the organisation. For these organisations, the findings offer a set of key processes that will guide the formation and development of PLCs.

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 adult learning program according to a PLC model or b) evaluate the process aspects of adult learning that go on in a PLC learning environment.

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